

PLANNING THE PUBLIC REALM:  
A PUBLIC SPACE FRAMEWORK AND STRATEGY FOR  
DOWNTOWN NEW WESTMINSTER

by

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## ABSTRACT

Public space is an integral part of every downtown centre. It forms the connective tissue which binds the downtown together and allows for human exchange and activity to occur. Successful public spaces attract potential users and keep them there. They do so by satisfying the most significant of human needs.

Downtown New Westminster possesses a collection of public spaces which do not function well within the urban environment. Not only are they underused but they lack identity and linkages to one another and the surrounding community. To create a successful public realm, the Downtown requires a comprehensive public space plan. The purpose of this thesis is to present the appropriate tools necessary to accomplish this task. These tools include a public space planning framework, a series of practical guiding principles, and a planning strategy.

The planning framework outlines the most significant user needs and the methods with which to achieve them. The human needs addressed include community, democratic, physical, psychological, ecological, functional and economic needs. In addition, a systems/ecological planning approach and an implementation and monitoring strategy provide the basis from which the planning strategy is developed.

The practical guiding principles are derived from an analysis of the public space planning practices of San Francisco, California, Portland, Oregon and Victoria, British Columbia. They focus primarily on the approach, content and presentation of public space plans which facilitate the development of a successful public realm. Specifically, the guiding principles promote the use of a holistic planning approach, the creation of specific yet flexible directives, the need to keep public space

planning active in downtown centres, and the easy interpretation and implementation of public space planning initiatives.

The public space planning strategy is a plan of action designed to guide the creation of a public space plan for Downtown New Westminster. Based on the planning framework, the practical guiding principles, and the review of the Downtown and its public space planning efforts, the strategy outlines each consecutive step of the process, the tasks involved, and the agencies responsible for carrying them out. The twenty steps involved range from obtaining City support to conduct a public space plan for the Downtown to the creation and implementation of the plan itself.

Together, these public space planning tools - the planning framework, the guiding principles and the strategy - form the foundation of a public space plan for the Downtown neighbourhood. If these tools are implemented in the proposed manner, it is likely that a successful public realm may be achieved.



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## **CHAPTER ONE: INTRODUCTION**

Public space in urban environments is the stage upon which human exchange and activity occur. It is the place where people gather to socialize, watch others, eat lunch, perform commercial transactions, move from one place to another or simply relax. Without public space, public life would cease to exist.

The provision of good public space is integral to the livability of any downtown core. Good public spaces are attractive and inviting human-scaled environments. They are easily accessible and provide a variety of amenities for their users. Being well managed, good public spaces provide meaningful and memorable experiences for their users. At the same time, they contribute to the ecological and economic survival of the world around them. Although they take on a variety of forms, not all public spaces achieve a high degree of success. Those that are successful satisfy the most basic of human needs.

The purpose of this chapter is to introduce the thesis at hand. It begins with a rationale of why the issue of public space planning is important to New Westminster's Downtown Neighbourhood. The purpose and objectives of the thesis are then outlined. This is followed by a review of the methodology used and assumptions made to produce a usable product for the City of New Westminster. Finally, an organizational outline of the thesis is presented.

### **1.1. Rationale**

The issue of public space in New Westminster is long-standing. It dates back to 1861, when the original City plan laid out a system of city parks, and spans over one hundred years of public space planning in the form of public parks, private land development, street enhancement and downtown revitalization efforts. These

initiatives have resulted in a diverse collection of green and paved public spaces scattered throughout the Downtown.

Upon careful observation, the existing public space system in the Downtown is far from adequate. Not only are there a small number of usable public spaces within the Downtown, but they lack cohesion and identity. Although some public spaces such as the Waterfront Esplanade and Begbie Square are well used, the majority of them generally do not function well within the urban environment.

One of the prime reasons public spaces in the Downtown do not function well is that the City has never had a multi-faceted community-wide approach to public space planning. Although well-intentioned, public spaces have always been planned in a piecemeal fashion. In the absence of a comprehensive approach, many of the public spaces which have been developed do not satisfy the needs of their users. For instance, Hyack Square had the potential of becoming a successful public space in the heart of Downtown New Westminster. Instead, poor design and lack of pedestrian amenities dissuades people from stopping and lingering in the space. Consequently, Hyack Square has become a lifeless pedestrian thoroughfare.

To create a successful public realm, Downtown New Westminster requires a comprehensive public space plan which is based on a detailed public space planning framework and strategy. The framework should identify the primary needs of public space users while the strategy should be a plan of action devised to achieve these needs. By providing such mechanisms, the creation of successful public spaces in the Downtown neighbourhood may be realized.

As a social, cultural and economic centre, the Downtown is the heart of New Westminster. Its historic presence and strategic hillside location render it a symbolic venue amongst all its inhabitants. To reflect the symbolic importance of the

Downtown, it should be complemented by a public realm which shares its prestige and lively nature. It should be a place where the life of the Downtown flows freely and reflects the needs of those who use it.

In recent years, the City Planning Department and the Downtown Business Improvement Association (BIA) recognized that a problem with the downtown's public space system exists. Upon further investigation it became apparent that these difficulties were part of a much larger problem, that of a declining downtown core.

To address the declining urban core, a joint effort by the Planning Department and the BIA in the fall of 1994 set in motion a "visioning" process. This was an extensive community planning process aimed at affecting revitalization efforts and improving business in the area. The difference between this process and previous revitalization efforts was that it identified and attempted to address each issue as part of the larger whole, recognizing the important relationship amongst all components of a declining downtown.

From this process grew the Downtown Action Plan, a strategic planning document which outlines the community's visions, goals, objectives, and strategic directives regarding a number of issues, including downtown and waterfront development. Within this framework, the plan calls for the creation of a public space plan to enhance the downtown environment. This thesis is a response to that request.

Complementing the Downtown Visioning Process and its public space component is the timely revision of New Westminster's Official Community Plan. Commencing over a year ago, this process provides a unique opportunity for the City to address a number of important issues, including public space planning in the downtown core. The provision of a public space planning framework and implementation strategy aimed at generating a public space plan may have an important impact on the future



livability of the Downtown. If incorporated into the OCP, it may guide development in a way that will enhance the social, economic, ecological, physical and psychological well-being of the residents, business owners, workers and visitors in the area, as well as set a precedence for public space planning in other parts of New Westminster and the lower mainland.

## **1.2. Purpose**

The purpose of this thesis is to present a public space planning framework, practical guiding principles and a strategy to guide the creation and management of a public space plan for Downtown New Westminster. The planning framework is based on satisfying the majority of public space user needs within a downtown setting. The needs addressed in the framework include the community, democratic, physical, psychological, ecological, functional and economic needs of public space users. The practical guiding principles are the lessons learned from an analysis of the public space planning practices of three West coast cities. The public space strategy, on the other hand, is a step-by-step procedure of how to generate a public space plan and manage it appropriately. It consists of twenty strategic steps and involves the input from a host of interested agencies along the way. Together, the framework, the guiding principles and the strategy are designed to direct the creation of a successful public realm in Downtown New Westminster.

## **1.3. Objectives**

- To review contemporary public space literature and generate a planning framework for guiding the creation of a successful public realm in urban centres;

- To analyze and learn from the public space planning approaches and frameworks of three West Coast urban centres, namely San Francisco, California, Portland, Oregon and Victoria, British Columbia;
- To develop a practical and usable strategy to direct the creation of a public space plan for Downtown New Westminster using the planning framework, lessons learned and the review of public space planning efforts in the Downtown neighbourhood; and
- To emphasize the importance of creating a successful public realm in Downtown New Westminster and the role a well-developed, logical and systematic public space plan may play in it.

#### **1.4. Methodology**

In order to generate a public space planning framework and implementation strategy for Downtown New Westminster, both primary and secondary research methods were used. The primary research component involved an informal interview process with two groups of people. To determine the factors influencing public space planning in the Downtown, interviews were undertaken with several planners from the City of New Westminster Planning Department. To gain a clear understanding of the experiences of public space planning in three West coast urban centres, planners from San Francisco, Portland and Victoria were interviewed.

The secondary research component involved a review of public space literature, three public space plans and background information from the City of New Westminster. The literature review covered a wide assortment of contemporary public space literature based primarily on the North American experience, although some European examples were reviewed.

To gain an understanding of the practice of public space planning in a downtown environment, the public space plans of downtowns in San Francisco, Portland and Victoria were reviewed and their content analyzed. The public space policy frameworks and strategies employed were of particular interest. In regards to background information and policies affecting public space development in the downtown, various publications were reviewed. These include the Zoning Bylaw No. 1743 (1940; Revised 1992), Downtown New Westminster Community Plan (1987), the Subdivision Control Bylaw (1988), Columbia Street H.A.R.P. Guidelines (1990), and the New Westminster Downtown Action Plan (1996).

### **1.5. Assumptions**

To minimize the scope of such a broad subject area and create a practical document, this thesis makes a number of assumptions. These assumptions include the following:

- The purpose is to generate a planning framework and strategy to guide the creation of a public space plan, not to create the plan itself;
- The intent of this thesis is to focus on the demand side of public space planning, not on the practical application of the public space planning framework and strategy presented;
- The thesis does not deal with specific approaches for determining the most suitable amount, the actual amounts or the types of public space required in urban centres;
- The thesis does not deal with the enforcement of the public space planning framework and strategy; and
- The thesis is to be a document which is usable by the City of New Westminster.

## **1.6. Thesis Organization**

This thesis is organized into five separate chapters. Chapter One is the introductory chapter and outlines the purpose, objectives, rationale, methodology and assumptions of the thesis project as a whole. Chapter Two is the theoretical component of the thesis. It gives a brief definition and history of public space development in North America in addition to a detailed discussion of the needs of public space users. Most importantly, Chapter Two presents the public space planning framework which is applied to the case studies in Chapter Three and is incorporated into the strategy presented in Chapter Four.

In Chapter Three, the public space plans of San Francisco, Portland and Victoria are analyzed and the useful lessons learned are documented. Chapter Four begins with an overview of Downtown New Westminster and the factors which influence public space planning today. A public space strategy designed to facilitate the creation of a public space plan for the Downtown neighbourhood is then presented. This strategy provides a step-by-step method of how to create a public space plan and the agencies which should be involved in the process.

Chapter Five is a summary of the primary findings of the thesis. It discusses the importance of the public space planning framework, the lessons learned from the case study analysis as well as the strategy designed for Downtown New Westminster. It then presents the implications of creating and implementing a public space plan for the Downtown, the contribution this thesis has made to the field of planning and provides direction for further research.

## CHAPTER TWO: THE THEORY OF PUBLIC SPACE PLANNING

Chapter Two is the result of an extensive literature review on the issue of public space, its meaning and development in modern times, and the various cultural values and societal norms entrenched in it. The purpose of this chapter is to present a conceptual planning framework to guide the creation of a "successful" public realm.

To set the context, the chapter begins by defining the term public space and providing a brief overview of the history of public spaces in urban environments. To describe the medley of public spaces found in downtown cores, two public space typologies are used, one on a regional scale and the other on a downtown scale. A discussion of the new forms of public space and emerging opportunities then follows.

The majority of Chapter Two examines the characteristics of public space which are integral to its creation, existence and continued success. It identifies seven general public space user needs and discusses their general criteria in terms of current public space theory and practice. These factors include community needs, democratic needs, physical needs, psychological needs, ecological needs, functional needs and economic needs. The second component of this section is a review of the process and implementation strategies involved in public space planning initiatives. Together, these elements form the planning framework which may be used to guide the creation of a "successful" public realm in any urban environment. In Chapter Three, this framework is used to assess the case studies of San Francisco, Portland and Victoria. In Chapter Four, the framework is incorporated into a community-wide strategy to direct the development of a public space plan specifically for Downtown New Westminster.

## 2.1. Public Space and Public Life

*Urban public space is the single most important element in establishing a city's livability* (Crowhurst Lennard and Lennard 1995, 25).

For over two hundred years, public spaces have been an integral part of the North American urban experience. Although many public spaces have been created, few have achieved a high degree of success. Successful public spaces are those spaces which attract the attention of potential users and encourage them to frequently visit the site. They accomplish this by providing various opportunities in which user needs may be satisfied. Since women are the most discriminating of all public space users, the presence of high proportions of women in public spaces generally indicates the existence of a successful space (Whyte 1980, 18).

Successful public spaces are popular places where people can always be found socializing, observing the activities of everyday life or simply resting. They evolve slowly over time. As successful public spaces respond to societal changes, they encourage human growth and contribute to the survival of a culture. They are usually situated in a central location often near main circulation paths or the crossing of such routes and are well used by local residents and visitors.

Surrounded by human scaled buildings and friendly facades, good public spaces tend to instill a sense of comfort and personal significance in the user. Visual openness and a smooth physical transition between the street and the site invites people in to use the space. Similarly, the existence of residential, commercial and service uses in the surrounding area as well as active programming of public events directly supports public life in such spaces (Crowhurst Lennard and Lennard 1990a, 3). The most successful spaces are multifunctional spaces which serve the needs of a variety of users.

The term "public space" is the place where public life is "accommodated, supported and celebrated" (Watson 1990, 1). It is the stage upon which human exchange and activity occur in urban environments. Public spaces accommodate a multitude of uses in either a spontaneous or habitual fashion. A collection of public spaces is a reflection of city life and culture. The amount of public space in a city is "unique to each culture and tends to shift as a result of cultural exchange, technology, political and economic systems and the ethos of the time" (Carr et al. 1990, 3). Their form, number, pattern of use and existence are expressions of the values a society has placed on public life and the medium in which it is played out.

Public spaces take on a variety of forms. While some public spaces have evolved all on their own, most have been planned. For the purpose of this thesis, public spaces are defined as *all indoor and outdoor spaces which are open for public use and enjoyment*. Streets, pedestrian walkways, plazas, roof-top gardens, and vest-pocket parks are all examples of outdoor public spaces. Indoor public spaces, on the other hand, include such spaces as atriums, gallerias, arcades, and shopping mall walkways. Apart from the indoor/outdoor component, two sub-categories of public space are utilized in this thesis - open spaces and streetscape spaces. Open spaces are public spaces which are distinctly separate from the streetscape such as vest-pocket parks, urban plazas and view terraces. Streetscape spaces are public spaces which are part of the public right-of-way and are characterized by the common right of passage such as widened sidewalks, corner sun pockets, and building forecourts. Although some so-called public spaces are privately owned, they are still used to accommodate the public and public activities. In urban environments, a collection of indoor, outdoor, open and streetscape spaces primarily in public ownership is referred to as the public realm.

Public spaces satisfy a number of important societal goals. First and foremost, public spaces contribute to personal growth and development. They are a type of learning ground where people can learn about other behaviors, other groups and other cultures, as well as test new behaviors out themselves. At the same time, public spaces contribute visually, aesthetically and experientially to the urban environment. For example, a usable space between two high rise towers which receives sunlight during peak hours, has adequate seating and is designed with trees and vegetation greatly enhances the urban experience. Public spaces designed to facilitate ecological functions, on the other hand, not only improve our understanding of ecological processes but perform a valuable function in the urban ecological system.

Public spaces support social interaction amongst people. They provide arenas for human exchange, entertainment and other pleasurable activities. On the other hand, public spaces facilitate economic development of the land adjacent to and surrounding the site. By attracting people, public spaces support local merchants and vendors, and if their numbers are great enough, they also encourage the establishment of new commercial activities. In some cases, public spaces are even used to enhance the image of a local business or international corporation (Carr et al. 1992, 12). This may be accomplished by providing an impressive setting or amenities such as seating for both their customers and the local community.

In general, public spaces share a number of similarities. Using Downtown New Westminster as an example, public spaces contain amenities such as benches, movement corridors in the form of paths or walkways, and litter containers. They usually provide views of the water, of interesting building facades or of local activities. At the same time, public spaces contain physical amenities such as interesting paving schemes, and natural vegetation in the form of trees, shrubs or



beautiful hanging baskets. Further, public spaces are, for the most part, freely accessible to the public and may be used during the day or night hours (Carr et al. 1992, 50). However, some privately owned indoor spaces, such as Douglas College or Westminster Quay Public Market, are only open during certain daytime hours.

According to Lynch, there are two ways of conceptualizing public space. Public space may be series of small, interrelated spaces which are integral to daily urban life and are not physically separated from the urban sphere, or they may be large continuous expanses of land which totally removes the user from everyday city life (Lynch 1981, 436). In practice, these approaches often overlap. If designed well, for instance, a small public space linked to the larger public realm may perform just the same function as a large tract of wild land in the heart of the city. Nevertheless, a good public space is one which promotes the social life and well being of the people who use it. It is a place “. . . which, in some way appropriate to the person and her culture, makes her aware of her community, her past, the web of life, and the universe of time and space in which these are contained” (ibid., 140).

## **2.2. The History of Public Space Development in North America**

In order to generate a framework with which to guide the creation of a successful public realm in downtown New Westminster, an understanding of the historical development of public space and rationale behind it is a useful endeavor. Public space has undergone a number of transformations since its first inception in North America. These transformations have been influenced by the evolving ideals as to what public life is and the type of spaces best suited to accommodate it. The writings of Cranz (1982) and Platt (1994) provide a useful framework to explore the evolution of public space ideals and their physical expression over the past three hundred years. The periods discussed include the commons, the urban park, urban plazas and

squares, public space diversity of use and type, recreational expansion, the resurgence of public open space, ecological awakening and public spaces today.

### **2.2.1. Commons**

The first order of public spaces to emerge in North America was the commons. Brought over from England during colonial times, the commons was a large expanse of land usually located near the centre of a settlement. It's primary role was to accommodate agricultural and civic uses (Platt 1994, 22). As with most public spaces, the commons outgrew their usefulness. Over time, they were divided into smaller portions of land which either continued to function as public space or were sold to private interests (ibid.).

### **2.2.2. Urban Parks**

As the fever of the industrial revolution spread to North America, urban centres began to grow at a rapid pace. By the mid-1800's, many cities had reached a threshold of livability. Urban conditions had become cramped and unbearable. Filth littered the streets and public hygiene had become a serious concern. Safety in public places was also a problem with the frequent outbreak of violence and fighting in the streets. For the average working person, obtaining refuge in the country-side was not a viable option. In order to continue living in such conditions, people required a place of refuge and an escape from public health problems.

To address the anti-urban sentiment that had developed, new public spaces in the form of parks were created. These parks were envisioned as country-like refuges within the confines of urban development. They were to contain all the attributes of country living including fresh air, access to sunlight and open space for exercise (Cranz 1982, 5). In addition to providing an escape for urban dwellers, urban parks

were heavily influenced by the Picturesque Movement (Platt 1994, 23). Unlike the commons, these parks were designed as extravagant gardens which were more for viewing than actual use. Cregan argues that urban parks did not focus on the needs of the public and the values instilled through appropriate urban design. Instead, they emphasized plant displays, site management, and size and distribution standards of open spaces (Cregan 1990, 12).

Although the purpose of the urban park movement was to provide both a natural refuge and an attractive view for urban dwellers, park use grew along a different path. By the late 1800's, parks became known as "pleasure grounds" according to Cranz. Recreation and outdoor activity became paramount and park design, policies and programming facilitated their rise in popularity. Urban parks became a recreational haven where people could do anything from play grass tennis to stroll along trails surrounded by nature. In time, other types of activities such as museums, zoos, and botanical gardens became integrated into the park experience (Cranz 1982, 14). As a consequence, the function of the park as a natural refuge became secondary to the desire for recreational and social activities (ibid., 15).

### **2.2.3. Urban Plazas and Squares**

By the late 1800's, public space in urban centres came under the influence of the City Beautiful Movement. Planners of this era created grand plazas and squares within numerous city centres. Decorated with enormous statues, water features and lavish vegetation, these spaces were designed to impress the populace and instill a sense of civic pride (Platt 1994, 27). Public spaces of this type usually complemented public buildings of equal size and scale. Although their success varied, impressive public plazas and squares in city centres were popular well into the mid 20th century.

#### 2.2.4. Public Space Diversity of Use and Type

By the early 1900's, increased leisure time and the lack of sufficient space to accommodate all urban dwellers in recreational pursuits, as well as the spread of the Garden City notion, led to the emergence of a new approach to parks planning. Referred to as "the reform park" era by Cranz, this new approach set out to accomplish two things: to organize park activities for its users and to diversify the public space portfolio (Cranz 1982).

According to reform ideology, people were "incapable of undertaking their own recreation" as they had in the pleasure grounds era and had to be guided through the organization of structured activities (ibid., 61). By occupying people's time, the reform approach was an attempt to prevent people from participating in what was considered undesirable activities. The overall intent was to make better people out of their users and in so doing, avoid social unrest (ibid., 62). Knowledgeable park organizers with strong leadership skills were integral to this process.

As the reform approach took effect, the range of activities in urban parks increased dramatically. Park leaders not only organized physical activities for park users but introduced social, educational and cultural activities as well. Due to the rising demands placed on park use, the hours of park operation and the space allocated for park activities had to be extended. In effect, the reform park era generated a park system that mimicked the active lifestyles of their users (ibid., 68-69).

At the same time, the Garden City Movement played an important part in defining the term public space (Platt 1994). It sought to bring park spaces closer to its users by distributing them throughout residential neighbourhoods. In addition to an inventory of urban parks, the Garden City Movement encouraged the creation of a

variety of public space sizes and types. During this time, ideas such as the permanent closure of streets, the use of space around buildings and schools, and the use of vacant or underutilized lands in residential neighbourhoods were explored. Further, guidelines to determine appropriate sizes and locations for potential parks were also examined (Cranz 1982, 81-82).

#### **2.2.5. Recreational Facilities Expansion**

From the early 1930's to the mid 1960's public space planning had taken yet another route. Parks planners adopted a demand-oriented approach to parks and facilities planning as a method of accommodating the demands for recreation from a growing population. Expanding the inventory of parks and recreational facilities became the primary goal (Cranz 1982, 103). With this expansion came an increase in programmed activities. As in the reform movement era, more leisure activities were used to keep people busy and, consequently, prevent social strife.

The emphasis of the demand approach to parks planning was placed not on the needs of the users but on the feverish desire to acquire more park space and establish new facilities. Parks departments themselves grew considerably during this time by taking on more and more technical responsibilities. In time, they had become so concerned with their internal functions that there was "a general loss of interest in the purpose of parks and park services" (ibid., 107).

Despite the downside of this era, a number of important things were achieved. The delivery of services offered to the public was improved. Inter-community participation in recreational activities and special events increased through more efficient program organization. Further, numerous usable parks and recreational

facilities were created, including many small parks in relatively dense urban areas (Cranz 1982).

#### **2.2.6. Resurgence of Public Open Space**

By the mid 1960's, public spaces in many American cities were perceived as unsafe, particularly by the middle class. Flight to the suburbs had left public spaces in a state of disrepair and uncertainty (Cranz 1982, 137). Recreational services delivered by parks departments had become unreliable, making them and their facilities unattractive to potential users (ibid.). As the number of people taking part in public life declined, the need to bring life back into public spaces became increasingly apparent.

Public space planners adopted a socially-oriented approach which focused on user needs and public space as opposed to expansionist ideals of the previous era. To entice people back into the public realm, an unprecedented range of activities and behaviors were permitted in public spaces. Cranz refers to this time as "anything goes" when new types of cultural and athletic activities such as political demonstrations, "love-ins" and cycling were not only allowed but encouraged (ibid., 138).

To accommodate the resurgence of public life, existing public spaces were retrofitted and new public spaces were discovered. Since the competition for land in urban areas was so great, planners had to be innovative in generating new public spaces (ibid., 143). As a result, public space manifested itself in a variety of forms. These spaces include the use of vacant or underutilized lands, left-over spaces from development, right of ways, streets, plazas, pedestrian malls, promenades, beaches,

commercial spaces, and industrial spaces. Even indoor spaces such as atriums or gallerias were viewed as potential public spaces (ibid., 144).

At the same time, new ways of using spaces emerged. Temporary use of sites for recreation or commercial activities such as the closure of streets and parking lots, for instance, broadened the definition of public space. Similarly, the idea of linking public spaces into an interconnected web of spaces throughout urban areas also became popular (ibid.). Today, the emphasis on neighbourhood conservation, the unwillingness to accept radical changes to urban design schemes and greater public participation in planning processes indicate a definite resurgence in the health and welfare of public spaces and their users (Cregan 1990, 12).

#### **2.2.7. Ecological Awakening**

By the late 1970's, a more holistic approach to public space planning emerged. Unlike previous eras, people and planners alike began to realize the ecological value of public space (Platt 1994). Ecologically sensitive public spaces function not only as recreational and social centres but as integral parts of the physical biosphere. Public space is a regulator of urban climate. It can contribute to plant and species diversity, the hydrological cycle, community health and the alleviation of the urban heat island effect (Cook 1991). Similarly, public space enhance the urban experience by providing comfortable and pleasant environments for its users through the provision of shade, wind protection and interesting views. The ecological approach has brought a new understanding of the biosphere to the average person. It emphasizes the need to preserve and enhance public spaces as valuable natural resources for all to enjoy (ibid.).

### 2.2.8. Public Spaces Today

Public space planning today focuses primarily on the social and ecological components of public spaces in terms of satisfying user needs and preferences. The economic effect public spaces have had on their users and the surrounding businesses has played an increasingly important role in public space planning and programming. Numerous studies show that many public spaces are being well used and are appreciated by their users (Cooper Marcus and Francis 1990; Lennard and Lennard 1984; Carr et al. 1992; and White 1980). Similarly, public space inventories continue to increase and diversify in type and use (Carr et al. 1992, 7). A new attitude toward public life and addressing user needs is being actively embraced by local governments, business owners and residents alike. The benefits of public space have truly been rediscovered.

Nevertheless, public space planning does have its critics who believe that public life is declining. On the design and management side, they refer to ill-designed spaces which do not suit their users needs, poor management techniques and poor design as reasons for the decline of public life and use of public space. Similarly, the shift of activities from the public to the private realm in addition to the privatization of many public spaces has also been a factor. On the physical and economic side of the argument, Crowhurst Lennard and Lennard (1990b) note that the development of more dangerous streets, increased demand for more space by traffic and parking facilities, the segregation of urban functions through zoning bylaws, and the decline in street level store and service activity have also played a role to discourage vibrant public life in public spaces.



Despite these arguments, prominent public space theorists such as Brill (1989) and Carr et al. (1992) argue that public life is not necessarily declining but is undergoing a process of transformation or transition. The public realm is evolving in a variety of new ways to accommodate the changing expressions of public life. Oosterman (1992) believes they are taking on a fresh attitude, one of "play and entertainment" as seen in the emergence of outdoor cafes, leisure shopping, and street entertainment. Brill, on the other hand, refers to the new mediums of public life as spaces which have not traditionally been known as part of the public realm (Brill 1989, 26). Yet, whatever form they take, public spaces have come to the forefront of the field of urban planning.

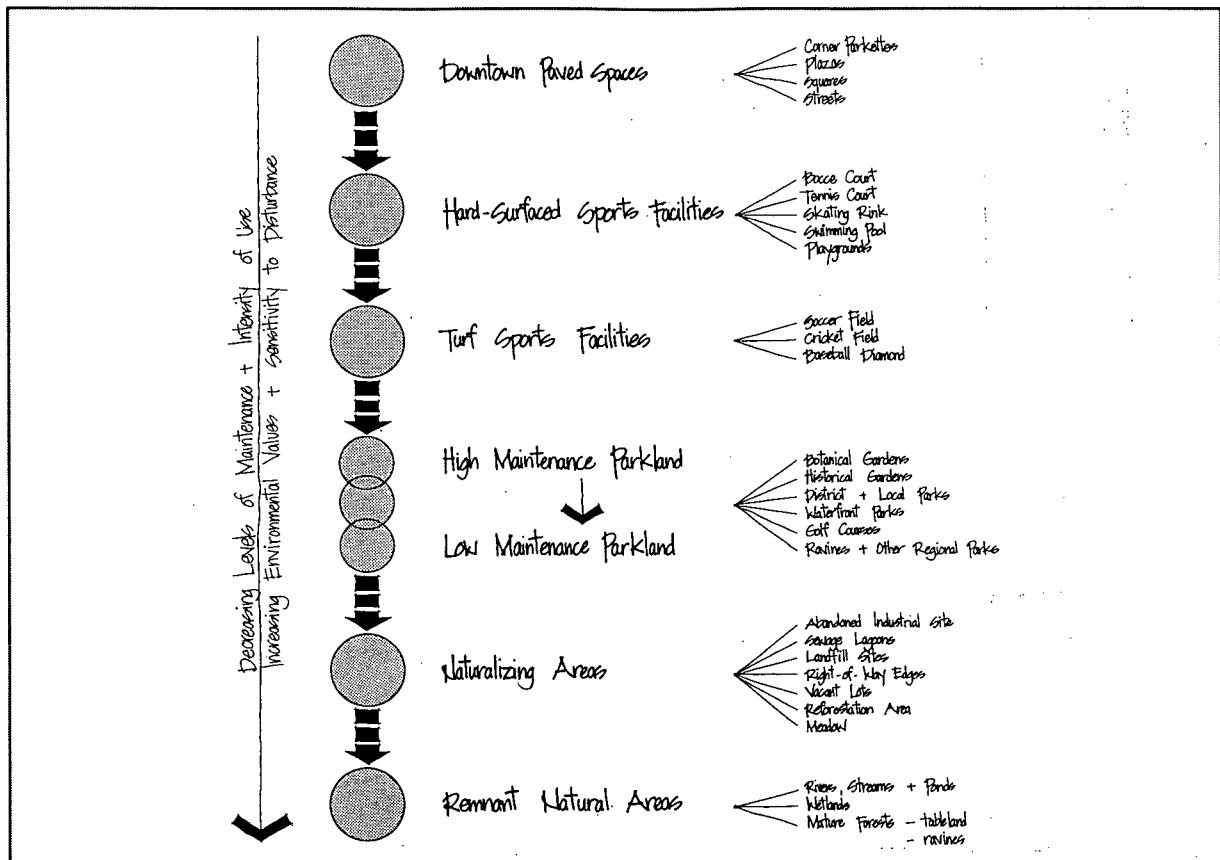
### **2.3. Typology**

Within urban environments, different types of public space exist. The existence of public spaces depends upon the need, the cost and the political will to establish and maintain them. To determine the type of public space created, such factors as the proposed location, the use, the availability of land and the ecological significance of the site come into question. To gain a clear understanding of the types of public space, two classification levels are examined: the regional scale and the downtown scale.

### 2.3.1. Regional Scale

At the regional scale, several large-scale categories of public space exist. These include natural areas, park land, sports facilities and downtown paved spaces.

**Table 2.1.**  
**Regional Public Space Classification Scheme**



Source: Hough 1984

### 2.3.2. Downtown Scale

At the downtown scale, public spaces can be classified into a number of sub-categories.

**Table 2.2.**  
**A Typology of Downtown Public Spaces**

<b>OUTDOOR SPACES</b>	
<b><i>Street Spaces</i></b>	
seating edge	-a wall or stepped edge adjacent to a sidewalk
bus-waiting place	-usually an extension of the sidewalk and contains a bench, shelter and garbage container
corner sun pocket	-located at the corner of an intersection on a building lot; receives sunlight during peak lunch time hours
widened sidewalk	-usually accompanied by seating opportunities
right-of-way triangle	-raised triangular spaces within a street grid system which perform a decorative and traffic-guiding functions
residual space	-green or paved space left over from land expropriation procedures
<b><i>Corporate Spaces</i> (privately-owned but publicly accessible)</b>	
small entryway	-decorative entryway to a building which often contains seating and a water feature
large entry plaza	-large space decorated with impressive materials
large corporate plaza	-a large plaza adjacent to a high rise building usually designed as a backdrop to building
<b><i>Green Spaces</i></b>	
outdoor lunch plaza	-separated from street by an elevation change or pierced wall; furnished with seating and vegetation, sometimes incorporating a cafe or restaurant
urban garden	-a small plaza which is heavily planted and secluded from the street; provides variety of seating
snippet	-small sunny sitting space
view or sun terrace	-wind sheltered area on upper level which allows for sitting, walking and viewing
urban park	-large open space with predominantly natural elements
community garden	-a community organized space which is used for socializing and growing food crops
garden walkway	-a green path with abundant vegetation, landscaping, sitting areas and pedestrian-oriented features such as lighting
found space	-publicly accessible space which people claim and use such as stairs, street corners, vacant or underutilized space
<b><i>Linear Spaces</i></b>	
boardwalk	-an elevated walkway over water, manicured gardens, etc. often constructed of wood and located along a waterfront; sometimes includes a commercial component
esplanade	-a linear walkway adjacent to commercial facilities or vehicular traffic on one side and a waterfront on the other
pedestrian link	-a walkway between buildings that connects two blocks or two public spaces
urban trails	-a series of trails designed for walking, cycling or horseback-riding through urban wilderness
greenways	-a public corridor that connects parks, nature reserves, cultural features, historic sites, neighbourhoods, and retail along either a natural corridor like a river or ocean front or along a right-of-way or street shared for transportation use

Table 2.2. (cont.)

public ways	-hard-surfaced pedestrian walkways along urban streets or throughways
<b>Transit Spaces</b>	
transit entry space	-a heavily used space at a transit junction for passing through, waiting, meeting and watching
bus terminal	-a point of arrival and departure primarily used as a throughway
<b>Paved Lot Spaces</b>	
pocket park	-a break in the built form usually the size of a small building lot; mostly paved with limited greenery; may be linked into a grid, radial or linear pattern
city plaza	-a centrally located and highly visible space used for large-scale events such as concerts, protests and celebrations
city square	-a centrally located, often historically significant space where major thoroughfares intersect; usually bounded by streets on all sides, encompasses more than one city block and contains a visual amenity such as a monument or fountain; sometimes designed to incorporate underground parking
temporary space	-parks, streets or parking lots used temporarily for special events such as art displays, farmers' markets, etc.
<b>Civic Spaces</b>	
civic space	-space surrounding civic institutions such as city hall, city museums; used as an area of protest, hang-out and throughway to site
<b>Recreation Space</b>	
urban park	-large open space which provides for recreational activities such as softball, running, tennis and cycling
sports turf	-space allocated specifically for the playing of a particular sport
playground space	-space allocated primarily for the play of children; often includes play stations
<b>INDOOR/SEMI-INDOOR SPACES</b>	
galleria	-glass-covered pedestrian throughway lined with retail shops and restaurants
atrium	-glass-covered space in the interior of a building or a block
arcade	-covered pedestrian walkway at street level defined by a building set back on one side and a row of columns along the front lot line
greenhouse	-partially or fully enclosed by glass and fully landscaped
indoor park	-interior space with at least one wall glass facing a pedestrian walkway or outdoor public space

Sources: Cooper Marcus and Francis, 1990; San Francisco Downtown Plan 1985; Hough 1984; Carr et al. 1992.

## 2.4. New Forms of Public Space and Emerging Opportunities

While society evolves into a new and seemingly more complex entity, so to is the concept of public space. High land costs, restrictive zoning bylaws and the lack of readily available land for public space conversion in urban areas have led to the search for new types of public space and public life. Public space has taken on a new meaning for people and in so doing it has evolved into a variety of new forms.

Previously unutilized or underutilized land such as railway lands, rights-of-way, industrial lands, institutional lands, cemeteries, vacant lands, streets or parts of streets, waterfronts, left-over space, road medians, and parking lots are now being seen as usable public space opportunities. Areas which were once deemed private spaces such as shopping malls and indoor atriums have become contenders in public space development. At the same time, parking lots and streets are now being temporarily blocked off to accommodate community events such as farmers markets. Accompanying these new forms of public space has been the reemergence of sidewalk cafes, street entertainment and street vending. These activities have become commonplace in many underutilized public spaces such as the sidewalk areas and plazas, increasing their attractiveness to the general public.

## **2.5. Public Space Planning and General Criteria**

Over the years, public space planning has undergone numerous changes which have shaped and reshaped the public realm. These changes are largely based upon prevailing cultural values and societal norms. As our society evolves, so too does our way of planning public spaces and the public realm itself. During the recreational facilities expansion era, for instance, public space planning focused on expanding the public space inventory. Today, however, satisfying user needs has become the predominant role of public space planning efforts.

Based on current public space planning theory and practice, the following section begins with the presentation of the conceptual framework which is a summary of user needs and general criteria for public spaces in urban centres. It then provides a more detailed overview of the predominant needs public space users have and the general criteria used to satisfy these needs. This is accompanied by a review of the

planning process and implementation strategies commonly employed in public space planning initiatives.

### 2.5.1. Conceptual Framework

The conceptual framework presented below has several functions. First it presents a product-oriented framework that identifies primary user needs and general criteria with which to satisfy them. Then it provides a practical process-oriented framework which may be used to analyze the approach, structure, process, implementation, maintenance and monitoring strategies of any public space plan. Finally, the conceptual framework is an effective method for extracting the most useful performance standards, in addition to process and implementation strategies of any public space plan.

In Chapter Three, the conceptual framework is used to analyze the public space plans and planning processes of three downtown case studies and to draw useful conclusions from them. In Chapter Four, the conceptual framework is used to guide an examination of public space planning efforts in Downtown New Westminster and to develop a strategy to direct the creation of a public space plan for the neighbourhood.

**Table 2.3.**  
**Conceptual Framework**

***Product:***

HUMAN NEEDS	GENERAL CRITERIA
<b>Community Needs</b>	
<i>Neighbourhood Needs:</i>	attractive and inviting human-scaled environment
	central location and reasonable walking distance for open spaces
	close relationship between open space and street
	linked system of public spaces and public ways

Table 2.3. (cont.)

	good local fit
	good regional fit
	variety of surrounding land uses
	variety of spaces
<i>Site-Specific Needs:</i>	accommodates a variety of activities and uses
	visual interest
	internal variety
	adequate size
	responsive to change
<i>Social Needs</i>	facilitates active and passive social contact
<b>Democratic Needs</b>	
	freedom of access
	freedom of use
	right to claim
	user choice
	user control
<b>Physical Needs</b>	
<i>Access</i>	visually and physically accessible public space
<i>Comfort</i>	variety of amenities
	sunlight enhancement
	wind protection
	comfortable temperature
	safe pedestrian environment
<b>Psychological Needs</b>	
	meaningful
	positive meanings and spatial configuration
	significant
	sense of longevity
	comfortable: safety and security
	relaxing: relief and restoration
	stimulation and learning opportunities
<b>Ecological Needs</b>	
	controls climate (macro and micro level)
	enhance natural processes, nature conservation, biodiversity and community health
<b>Functional Needs</b>	
	well organized and diverse programming
	adequate maintenance
	variety of food/retail outlets
	appropriate signage
<b>Economic Needs</b>	
	contribution to commercial vitality
	enhance property values and rental rates
	provide local employment
	economically responsible

Table 2.3. (cont.)

**Process:**

COMPONENTS	GENERAL CRITERIA
<b>PLANNING PROCESS</b>	
Players Involved	citizens
	staff
	politicians
	planning professionals
	developer
Characteristics	
Finances:	budget
	allocation of budget
	origin of funding/financing structure
Time Frame:	plan creation
	plan implementation
Plan Creation	steps to create plan
Plan Type	comprehensive (general goals/policies and performance standards)
	general (general goals/policies)
	combination of comprehensive and general
<b>DESIGN PROCESS</b>	
Role of the Designer/s	analysis (of the site)
	testing (design criteria tested on certain sites)
	form-giving (are the policies translated into designs?)
<b>IMPLEMENTATION</b>	
Implementing Agencies	city
	planning department
	outside agency
	developer
Implementation Structure	cooperative interaction
	leader-oriented
Implementation	planned incremental
	ad hoc
	private project-oriented
	public project-oriented
	fast-tracked
Communication Strategy	target audience
	plan form
	match between form and target audience
<b>MAINTENANCE</b>	
Maintenance Agencies	Engineering department
	Parks department
	property owner
<b>MONITORING</b>	
Monitoring Agencies	Planning Department
	Parks Department
	Engineering Department

Source: Author



### 2.5.2. Satisfying Human Needs

The needs of public space users are comprised of the experiences people desire or anticipate in public places. These may range from a desire to people-watch, socialize or enjoy the fresh air to an expectation of feeling safe, secure and relaxed in a place. Whatever the purpose, public spaces should strive to satisfy the most significant of user needs.

To satisfy the needs of public space users, planners should ask three important questions when planning for the public realm: Who are the most likely users of the site? What are their needs and expectations? And how can these needs be adequately satisfied? In general, the most common human needs that public spaces should satisfy include community needs, democratic needs, physical needs, psychological needs, ecological needs, functional needs and economic needs. Although successful public spaces may not satisfy every user need described below, they should strive to maintain a balance between the opportunities the site offers and the needs of the local inhabitants. The purpose of this section is to describe these needs and to present useful ways in which to satisfy them.

#### 2.5.2.1. Community Needs

*The quality of a place is due to the joint effect of the place and the society which occupies it (Lynch 1984, 111).*

Community needs are those needs which satisfy the community or neighbourhood as a whole. They focus primarily on the provision, use and design of public spaces. Community needs also address the social aspect of public spaces and their integration into both the local neighbourhood and the larger community or region. Specifically, community needs fall into three distinct categories: neighbourhood needs, site-

specific needs, and social needs. The ideas presented in this section draw upon the works of many well known public space advocates. Some of these advocates include Whyte, Heckscher, Crowhurst Lennard and Lennard, Lynch, Dovey, Cooper Marcus and Francis, Carr et al. and Hollen Lees.

#### **2.5.2.1.1. Neighbourhood Needs**

##### **2.5.2.1.1.1. Attractive and Inviting Human-Scale Environment**

A fundamental aspect of public spaces is their appearance. Good public spaces are attractive and interesting to look at. The design elements used are human-scaled in nature as are the dimensions of the surrounding built form. Buildings which are five or six stories high are most conducive to human comfort levels since they allow easy visual and vocal contact (Crowhurst Lennard and Lennard 1995, 35). At the same time, good public spaces provide a sense of enclosure or protection from the busy urban environment. Yet to accommodate the need for psychological comfort, they are still within visual and physical access of the street. In general, good public spaces make people feel welcome and comfortable enough to stay around for a while.

##### **2.5.2.1.1.2. Central Location and Within a Reasonable Walking Distance**

Location is by far one of the most important characteristics of successful open spaces. They should be centrally located, preferably in the heart of downtown activity, and adjacent to strong pedestrian traffic. Such spaces benefit greatly if they are situated along major streets with slow traffic flows and near people generating activities such as bus stops, subway stations and commercial activities. Places where various paths of movement meet, such as a street corner, are ideal. If the spaces serve an underutilized population, all the better.

At the same time, public spaces should be within reasonable walking distance from their users. The farther away they are, the less likely people are of using them. To determine the best location, potential users should be identified and the average distance they are willing to travel to use a space should be determined (Cooper Marcus and Francis 1990, 25). Based on his studies in New York, Whyte recommends a radius of three blocks from a users place of origin (Whyte 1988, 108). Planners from San Francisco, on the other hand, are striving to achieve a distance of 900 feet or approximately two blocks between potential users and usable public spaces (San Francisco Planning Department 1985, II.1.14). On the whole, a greater distribution of centrally located public spaces throughout the downtown is a necessary goal in order to serve the differing distance requirements of public space users (Mozingo 1989, 47).

#### **2.5.2.1.1.3. Close Relationship Between Open Spaces and Public Rights-of-Way**

Open spaces should be extensions of public rights-of-way. They should not appear as isolated entities in a sea of built form. Open spaces and their adjacent rights-of-way should be almost indistinguishable from one another (Whyte 1988, 130). Together, they should form an integral part of the larger public realm. To achieve such a connection, open spaces should be physically open and visually linked to the street. Physical barriers such as fences, walls and noticeable elevation changes should be avoided since they dissuade potential users from frequenting the space. At the same time, open spaces should have one or more sides physically open to the street. This facilitates easy pedestrian movement into and out of the site. Wide spaces situated close to street corners experience the greatest use outside of public space thoroughfares (Pushkarev and Zupan 1975, 162).

To make the connection even stronger, open spaces should be moved into the public right-of-way by converting parts of the street into pedestrian friendly space (Heckscher 1977, 145). This may be accomplished, for instance, by requiring greater building setbacks or street widening measures at key intervals along the street and supplying them with pedestrian amenities. Visual links, on the other hand, can be achieved by using similar design elements in open spaces and rights-of-way. For example, matching pavement and street furniture visually link public spaces, and, in turn, incorporate them into the larger public realm.

#### **2.5.2.1.1.4. Linked System of Public Spaces and Public Ways**

To build a successful public realm, public spaces should be linked to one another to form a cohesive public space network. Isolated pockets of public space are used primarily by those within close proximity to the site. A linked system of public spaces, however, integrates such spaces into the larger community, making them accessible to a wider variety of potential users. As Lynch noted many years ago, “a network of relatively small spaces, well distributed within the urban system, may be more useful than the large tracts which look so well on land-use maps” (Lynch 1965, 400). If a public space network is designed as the most direct path from one destination to another, it will be well used by its clientele.

A linked system of public spaces benefits the community in a variety of ways. It enhances pedestrian safety, contributes to the health of the community and provides paths of movement in which to experience public life. Most importantly, a network of public spaces facilitates pedestrian access to public spaces and other destinations throughout the downtown. To create such a system, all existing public spaces and potential sites such as underutilized or vacant lands should be clearly identified. Focusing on the natural paths of pedestrian movement through the downtown,

potential pathways should be mapped out. These pathways should incorporate as many different types of space as possible including mid-block pathways, streetscape spaces and alleyways.

#### **2.5.2.1.1.5. Good Local Fit**

Successful public spaces fit well within the local context. Their design and use should reflect not only the surrounding built form, design features and other public spaces, but it should “match the customary behavior of its inhabitants” (Lynch 1981, 151). The presence of public spaces should not create a rift in the urban fabric. Instead, it should be a usable and engaging extension of the area’s physical character and customary human behavior. The more people perceive public spaces as being part of the larger public realm, the more likely they are of using them. Some strategies to encourage the blending of public spaces into the surrounding environment include extending complimentary plantings, paving material or seating into the streetscape space, or incorporating a heritage motif reflected in the built form into the public space design itself.

#### **2.5.2.1.1.6. Good Regional Fit**

To facilitate regular use, public spaces should fit well within the regional context. They should be an extension of the area’s regional identity in terms of the natural and social processes active within the area. Yet, their identity should be specific to that region alone (Hough 1990, 180). Public spaces which fit well within the region may incorporate natural materials, built form and paths of movement which are common throughout the area. In such a manner, a strong connection between the new and the old is established.

#### **2.5.2.1.1.7. Variety of Surrounding Land Uses**

The land uses surrounding a public space are integrally related to its success. Various studies have shown that the most popular public spaces are those which are surrounded by a diverse mix of land uses including commercial, residential and cultural facilities (Crowhurst-Lennard and Lennard 1990a, 3; Cooper Marcus and Francis 1990, 18). Each use generates a particular flow of pedestrian traffic which, in turn, brings new life to the area. While commercial uses generate mainly a daytime flow of shoppers and workers, residential uses produce a relatively steady flow of potential public space users. Use of cultural facilities, on the other hand, fluctuates with the ebb and flow of specific cultural functions usually held on evenings and weekends. All told, the greater the variety of land uses surrounding public spaces, the more likely they are of generating the critical flow of pedestrians necessary to support public spaces and legitimize their existence.

#### **2.5.2.1.1.8. Variety of Spaces**

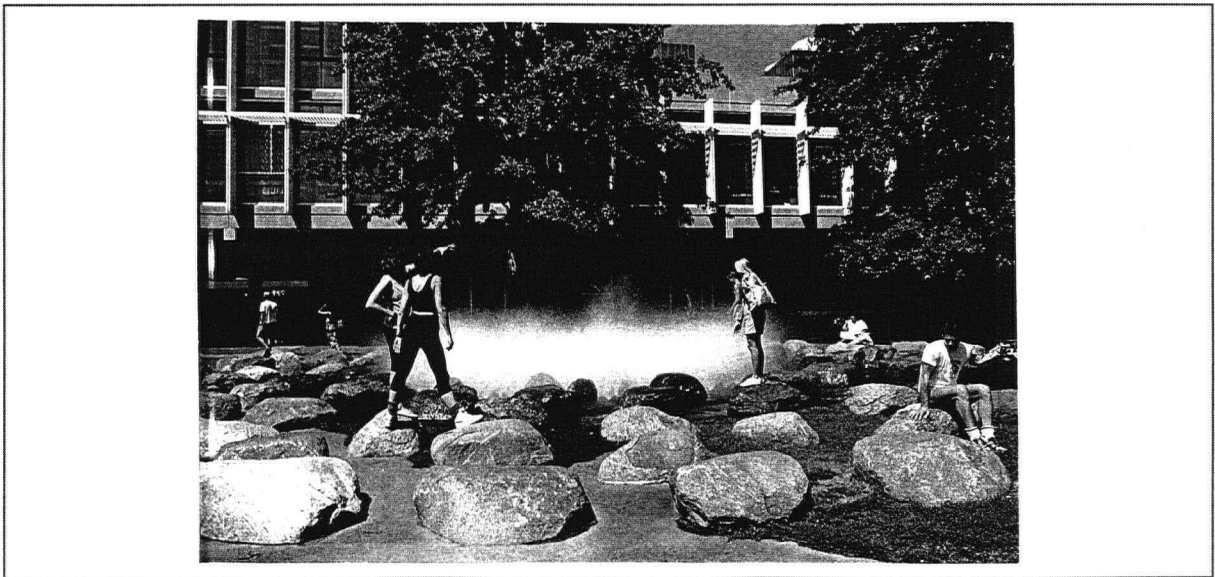
The successful public realm is comprised of a wide variety of public spaces. It may include, for instance, a network of small public spaces which are linked by interconnecting public ways or it may be centred on a large-scale linear esplanade and several smaller corporate plazas (see Table 2.2. A Typology of Downtown Public Spaces). Since each type of space satisfies a particular need, a wide selection of public spaces satisfies a much larger proportion of user needs. Similarly, a wide selection of public spaces provides the user with more choice in the type of space and location chosen. Therefore, a wide variety of public spaces not only increases user choice but increases the likelihood of satisfying the majority of user needs.

#### 2.5.2.1.2. Site-Specific Needs

##### 2.5.2.1.2.1. Accommodates a Variety of Activities and Uses

Successful public spaces “include a great range of possibilities for action” (Lynch 1965, 399). They are not reserved for any one purpose. Instead, their multifunctional nature supports a mix of social interaction, commercial transactions, community celebrations, protests, pedestrian movement, access to adjacent buildings, or seating and viewing opportunities. To satisfy a wide range of users, public space design should “appeal to a diverse clientele and be flexible enough for multiple and changing land uses” (Hollen Lees 1994, 463). For example, a public space which has a mix of hard surfaces and soft surfaces such as grass and plantings provides many more useful opportunities than a space which is reserved solely for plantings.

**Figure 2.1.**  
**Public Space with a Combination of Surfaces**



*Source: Imashita et al. 1988.*

Well differentiated and flexible public spaces not only accommodate the needs of their existing users but provide the means by which new societal needs may be satisfied as they arise. Consequently, such spaces will serve the needs of their users for many years to come.

#### **2.5.2.1.2.2. Visual Interest**

To attract and maintain the attention of its users, public spaces should be visually interesting. Whether it be an articulated building facade, a piece of public art, a busy ground level coffee shop or a beautiful display of native plantings, visually interesting public spaces provide identifiable focal points which grabs the users' attention, anchors them and keeps them involved. Various studies of public spaces indicate that visual variety is highly valued by the user. For instance, Joadar and Neill's survey of public space users in Downtown Vancouver indicated that variety in color, texture, and form in terms of seating, landscape elements, fountains, sculptures, level changes and space organization was preferred over the more monotonous and lifeless landscapes which lacked vegetation, color, articulation and identifiable focal points (Cooper Marcus and Francis 1990, 19).



Figure 2.2.  
Visually Interesting Public Space



Source: Imashita et al. 1988.

Views to surrounding areas and within the space itself also add to the visual complexity of a site. Any opportunity to incorporate view corridors and site lines into the design of public spaces should be utilized, especially if connections between the downtown and natural features such as local mountains or water bodies are involved. Incorporating view corridors, vistas and panoramas within the public realm not only makes the public space experience more interesting, but it also helps to explain the physical and psychological relationships existing within the urban environment.

#### 2.5.2.1.2.3. Internal Variety

To be successful, public spaces should balance the active and passive needs of their users by providing a variety of internal arrangements within a space. Women, for

instance, often seek out secure “back yard” spaces which provide relief from the urban environment. Men, on the other hand, tend to gravitate towards the “front yard” or more intense urban stimuli such as paths of pedestrian movement (Mozingo 1989, 46). To balance these conflicting needs, public spaces should be divided into usable subspaces (except those of course which are specifically designed for large gatherings) (Cooper Marcus and Francis 1990, 29). These subspaces are small territories within larger spaces that offer a feeling of enclosure, “easy access, a position on the edge of something”, and identifiable focal points upon which users can attach themselves (Lynch 1984, 328).

To differentiate public spaces, design features such as a change of level, different planting and seating arrangements and the installation of feature landmarks such as public art or fountains may be incorporated into the site. Well designed subspaces not only create a “pleasing visual appearance when there are few people present to ‘fill up’ the space but also encourages people to find their own enclosed niche and linger for a while” (Cooper Marcus and Francis 1990, 29). Consequently, the more internal variety there is, the greater the likelihood of satisfying the public space needs of both men and women.

#### **2.5.2.1.2.4. Adequate Size**

The optimal size of public spaces varies considerably. It is just as dependent on its location and surrounding context as it is on the social life taking place there. In general, the size of public spaces should accommodate only the busiest of pedestrian activity (Crowhurst Lennard and Lennard 1995, 33). If the space is any larger, the people and their activities will likely not be concentrated enough to attract the attention of potential public space users.

In terms of performance standards, Cooper Marcus and Francis propose a combination of three measurements of optimal public space size. They include a dimension of 40-80 feet to maintain a human scale (Lynch), 230-330 feet to comfortably view events (Gehl) and 65-80 ft to perceive facial expressions (Cooper Marcus and Francis 1990, 19). In public spaces which experience high pedestrian flows, the optimum size is somewhere between 7 sq. ft per person and 12 sq. ft per person (Lynch 1984, 209-210). Anything less would be too constraining and anything larger would limit the concentration of activities. In addition, streetscape spaces such as collector walkways should be a minimum 6 ft wide to accommodate pedestrian demand (ibid., 209).

#### **2.5.2.1.2.5. Responsive to Change**

Successful public spaces serve the needs of their users by being responsive to change. In general, public spaces reflect the values inherent to a society at the time of creation. They are specific to that time, that place and often to the people who use them. However, as society changes and neighbourhoods evolve, people's needs and understanding of public spaces often change too. Places which were once significant in the past may not necessarily be significant to today's user.

To determine if the needs of public space users are being satisfied, periodic checks should be made through observations and user interviews. If it is found that their needs are not being met, public spaces should be adapted to reflect these changes and accommodate the new perceptions of public life. The users themselves should play an integral part in this process for it is their space and they know best how it should be planned. User involvement in the adaptation process often leads to an increased "sense of control, a sense of territoriality over a space that enhances its use and

serves the local residents' needs" (Carr et al. 1992, 160). Those public spaces which are flexibly designed and easily manipulated are most conducive to adaptation efforts.

#### **2.5.2.1.3. Social Needs**

##### **2.5.2.1.3.1. Facilitates Active and Passive Social Contact**

Public spaces are the stages upon which social life is played out. They are gathering places which bring people of different social groups together and encourage social contact. In general, successful public spaces facilitate either active or passive social contact or a mixture of both (Carr et al. 1990).

An active connection involves an active experience with people, the place or the components of the place. A successful place facilitates connections amongst people through the use of certain design features and programming but also allows for natural connections between friends or acquaintances to occur. Design features such as adventure playgrounds, wading pools and fountains offer opportunities for exercise which challenges and stimulates the user. Other, less challenging design features such as movable chairs, stairs and promenades encourage social connections but in a less rigorous fashion. The use of promenades, for instance, allows people to come into close contact with one another, thus increasing opportunities for social interaction. Programming in the form of community celebrations, annual festivals or street performing activities provides another form of active engagement in a gathering place. Participation in programmed activities brings people of different social groups together and facilitates the possibility of new connections being made.

A passive connection, on the other hand, involves experiencing a place or setting without active social contact. The connection is usually a visual one and entails a more personal experience with the place than a public one. Most often passive

connections entail watching people and activities such as the flow of pedestrians, and the activities of street performers or of other formal activities. Through his observations of downtown plazas in New York, Whyte concluded that "what attracts people most (to public spaces) . . . is other people" (Whyte 1980, 13). The best places to watch other people are near busy pedestrian flows. Other passive activities include observing more permanent aspects of the landscape such as public art, monuments, views or natural features.

#### **2.5.2.2. Democratic Needs**

*Spatial rights involve freedom of use, most simply, the feeling that it is possible to use the space in a way that draws on its resources and satisfies personal needs* (Carr et al. 1990, 137).

The democratic needs of public space users are an inherent part of every democratic society. They are those needs which must be satisfied in order for the public realm to function equitably for all users. The democratic needs associated with the public realm include the freedom of access, freedom of use, the right to claim, user choice and user control. If these needs are satisfied, the public realm will truly be a democratic one. The public space advocates who place a great deal of importance in the rights of public space users are Carr et al., Lynch, Cooper Marcus and Francis, and Hough.

##### **2.5.2.2.1. Freedom of Access**

Public spaces should be as accessible to the public as possible. To facilitate such access, physical barriers such as fences, walls and major elevation changes should be absent and the space should be well connected to the pedestrian circulation system (Carr et al. 1992, 144). Special attention should be paid to ensuring that the elderly, persons in wheelchairs, and persons with strollers are able to access public spaces

with ease. At the same time, potential users should have an unobstructed view into the space from the street. This will ensure their ability to feel safe if they choose to enter.

#### **2.5.2.2.2. Freedom of Use**

Good public places allow people to act freely in them. Although people are bound by unspoken rules of publicness, the way a space is used should be up to the user. Despite the need for freedom of use, conflicts often arise amongst competing users expressing different understandings of freedom, particularly when the act of claiming a space is involved. Since the degree of freedom is a product of site design, access, ownership and management, manipulation of one or all of these elements may help alleviate potential conflicts (Lynch and Hack 1984, 325). In terms of design, for example, conflict could be alleviated by internally differentiating a public space through the use of specific design features such as benches, planters and slight variations in elevation. On the other hand, increased pedestrian activity generated by the programming of regular noon-hour events makes those whose freedom is often limited, such as women and seniors, feel comfortable using a space. By employing such measures, a variety of potential users may be accommodated and a balance of freedoms reached.

#### **2.5.2.2.3. Right to Claim**

Good public spaces allow people to claim parts of them as their own. They require design elements which not only attract people to them but are something that they can attach themselves to for a while. Differentiated subspaces within a larger public space facilitate the act of claiming. Similarly, various design features such as seating, water fountains or public art are claimable components of public spaces.

**Figure 2.3.**  
**Claimable Space**



*Source: Cooper Marcus and Francis 1990.*

#### **2.5.2.2.4. User Choice**

To create a successful public realm, users should be presented with a variety of choices. The choice may be in the type of public space or its location in terms of walking distance. For example, while some users may prefer to view passersby without having to walk a long distance, others may prefer the quiet solitude of an urban oasis no matter how far away it is. A collection of public spaces equally dispersed throughout the neighbourhood, each offering an opportunity to the user specific only to the place is one way of providing maximum user choice. At the same time, site design, amenities and potential use should present a number of options for the user. Seating, for instance, should accommodate one or two users as well as small groups of people. By providing users with various choices, their needs will most likely be satisfied.

#### 2.5.2.2.5. User Control

To best accommodate user needs, the users themselves should be involved in the process to create new public spaces or retrofit under-used ones. User participation not only increases the chances of creating spaces which satisfy their specific needs, but it generates a strong sense of community empowerment in terms of shaping or improving their own environment. Places where community input was solicited often show signs that people care for it, respect it and value its presence (Carr et al. 1992, 160). In the case of community gardens, for instance, individual plots as well as the presence of its nurturers indicate that the place is owned and operated by the community. Public spaces where a sense of ownership and stewardship are established may also contribute to increasing the perception of community safety (Francis 1989, 59).

#### 2.5.2.3. Physical Needs

*. . . thoughtful design takes into account existing knowledge and provides a chance for people to express themselves, be effective, and feel empowered* (Cooper Marcus and Francis 1990, 6).

Satisfying the physical needs of public space users is integral to the success of public spaces. Physical needs are the physical components of the human experience which either attracts or deters a person from using the site. These needs focus primarily on user access, comfort and safety. Specifically, physical needs include visual and physical access, variety of amenities, sunlight enhancement, wind protection and pedestrian safety. The most prominent writers on the topic are Whyte, Cooper Marcus and Francis, Crowhurst Lennard and Lennard, Carr et al. and Lynch.



#### **2.5.2.3.1. Access**

##### **2.5.2.3.1.1. Visually and Physically Accessible**

To encourage active use, public space should be physically and visually accessible to the public. They should be free of barriers to entry such as fences or walls and be designed to accommodate the special needs of its users including seniors, people with baby carriages and handicapped persons. Successful public spaces are situated near or adjacent to pedestrian movement paths which encourage participation opportunities and are directly accessible from the surrounding buildings (Crowhurst Lennard and Lennard 1995, 31). At the same time, each area within a public space should be accessible to its users through the implementation of appropriate design techniques.

Public spaces should also be visually accessible to the user. They should be transparent enough to facilitate a direct view into and out of the space from ground level. Similarly, they should be designed to encourage natural surveillance from surrounding offices, residences, streets and passersby. Design features such as balconies, stairways and windows facing the space set the stage for natural surveillance to occur. Visual access in these terms enhances feelings of safety and encourages more active use of public spaces.

#### **2.5.2.3.2. Comfort**

##### **2.5.2.3.2.1. Variety of Amenities**

To create a comfortable environment, public spaces should provide a variety of amenities for its users. These amenities should not only be convenient to use but should satisfy the most basic of human needs. Depending on the type of space and its

location, public spaces should provide a mix of trash containers, telephone booths, food outlets, trees, drinking fountains, restrooms and shelter from adverse weather conditions. Most importantly, public spaces should provide adequate and appropriate seating for its users.

Choice of seating opportunities is a key element of successful public spaces. They may range from the traditional chairs and benches to sittable ledges, stairs, corners, planters and movable chairs. At the same time, they should be oriented to accommodate a variety of seating needs. While some seating should face paths of pedestrian movement or activity centres, others should be oriented toward quieter, less active spaces. Similarly, seating should be arranged to accommodate individuals as well as couples and groups. Since "people tend to sit where there are places to sit," seating should also be physically and socially comfortable for the user (Whyte 1980, 28). Surfaces should be flat not angled, back heights and design should be comfortable and benches or ledges should be at least 36 inches deep to accommodate users on both sides (ibid., 31). If public spaces offer a variety of comfortable seating opportunities as well as a selection of other site amenities, they will likely be well used.

#### **2.5.2.3.2.2. Sunlight Enhancement**

Exposure to direct sunlight is critical to the life of public spaces. Through simple observation, southern facing spaces which receive direct sunlight during the day are usually better used than those which are shaded. To satisfy the need for sunlight, public spaces should be designed to receive as much light as possible, particularly during peak hours of use between 11:00 A.M. and 2:00 P.M. (Cooper Marcus and Francis 1990, 27). Design should take into account the daily and seasonal rotation of the sun as well as the location of surrounding buildings. To ensure public spaces

receive an adequate amount of sunlight, air rights to adjacent buildings may be acquired or reflective materials on adjacent buildings may be utilized to reflect light back into the space. Despite the need for direct sunlight, however, public spaces should also offer protection from the sun. An adequate supply of trees, building overhangs or table umbrellas, for instance, may provide the necessary shading opportunities.

#### **2.5.2.3.2.3. Wind Protection**

Protection from the wind is an important factor of successful public spaces. If a space is too windy, people are not likely to use it. In general, winds should not be greater than 11 MPH for walking and 7 MPH for sitting (San Francisco Downtown Plan 1985, II.1.32). The most problematic urban winds are caused by air blowing down the windward side of high rise buildings. To prevent such winds from occurring in public spaces, adjacent buildings should be designed to use setbacks at various levels and articulated design schemes. Other methods to alleviate winds include enclosing public spaces on three sides or providing wind barriers in the form of medium-scale plantings or building structures.

#### **2.5.2.3.2.4. Comfortable Temperature**

Successful public spaces offer a comfortable temperature range to its users. If temperatures are not comfortable, the sites will not be well used. This is applicable to public spaces which are shaded during a large part of the day, experience uncomfortable winds or wetness. Various studies indicate that a temperature of 55 degrees F or greater is conducive to public space use (Cooper Marcus and Francis 1990, 26). If the temperature in public spaces is uncomfortable or fluctuates considerably, the space should be enclosed in glass and appropriate heating and

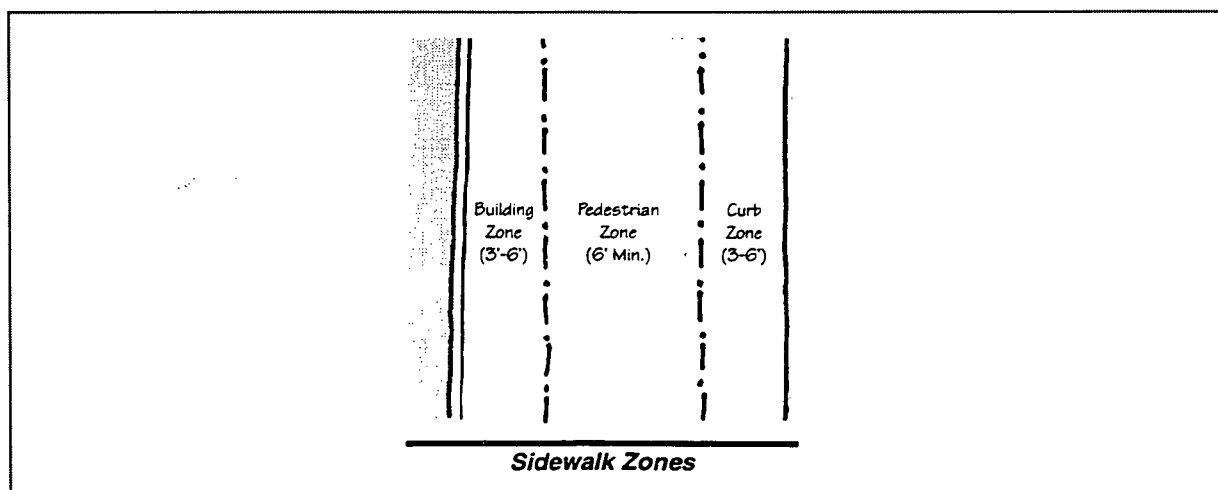
ventilation systems be installed (San Francisco Downtown Plan 1985, II.1.17).

Similarly, if temperatures are only suitable “for less than three months of the year”, the provision of a public space should be reconsidered (Cooper Marcus and Francis 1990, 18).

#### **2.5.2.3.2.5. Safe Pedestrian Environment**

To be successful, public spaces should offer a safe pedestrian environment for its users. They should be clearly separated from vehicular traffic by distance or through the addition of landscaping, design features or parking lanes. Dark and dangerous areas should be well lit. All streetscape spaces including street corners should provide a six foot wide “pedestrian zone” to facilitate pedestrian through movement and a three to six foot wide “curb zone” to house street furniture and other obstacles such as newspaper boxes and street signage (San Francisco Streetscape Plan 1995, 36). This should ensure that obstacles to pedestrian movement are eliminated.

**Figure 2.4.**  
**Diagram of Sidewalk Zones in San Francisco**



*Source: San Francisco Streetscape Plan 1995.*

Pedestrian crosswalks, on the other hand, should be clearly marked and provide adequate pedestrian cueing space. The enforcement of driving and pedestrian laws, particularly at dangerous intersections will further enhance pedestrian safety and enjoyment of public spaces.

#### **2.5.2.4. Psychological Needs**

*Place is the interaction between people and a physical setting together with a set of meanings that both emerge from and inform this experience and interaction (Dovey 1985, 93).*

Psychological needs express themselves on the perceptual and experiential level of human and place interaction. They are those needs which ultimately make people feel good about themselves and comfortable in their surroundings. Just like their tangible counterparts, psychological needs are an integral part of the public space planning framework. Psychological needs encompass positive place meanings and spatial configurations, place significance, sense of longevity, comfort, relaxation and stimulation. If these needs are adequately addressed in public space creation and design, the place is likely to be one step closer to becoming a successful public space. Some of the most prominent public space advocates who have written about these needs include Lynch, Carr, Whyte, Parry-Jones, Crowhurst-Lennard and Lennard, and Dovey.

##### **2.5.2.4.1. Meaningful**

Successful public spaces are full of meaning. They are more than just places where one can eat, rest and play. Meaningful spaces are emotionally and spiritually uplifting places. They introduce the user to a much larger world where conventional thought process are altered. Meaningful places expand people's perceptual horizons and allow them to make sense of the world around them, their own lives and their

inner selves (Carr et al. 1992; Dovey 1985; Lynch 1981). Visual cues are the primary means by which meanings are communicated to the user. These cues encourage emotional connections to occur between the life of public space user and the particular place. Connections may take place on an individual, group, or societal level in addition to an ecological or spiritual level (Carr et al. 1992, 20). The strength of the connections made determines the degree to which a person identifies with a place and shares its meanings. Since each individual experiences a place differently from the next, the sense of place one develops is specific to that person and place.

To create a meaningful place, a variety of design features and programming techniques may be employed. Identifiable features such as mature trees, memorial plaques or public art stimulate emotional connections to take place between the user and the space. For instance, a noisy fountain may bring the user back to a distant memory or may orient the user in time and space. Similarly, distinctive site designs which incorporate the area's local history or preserve historic views, for example, contribute to the development of a strong bond between the user and the place. A vivid memory or a strong familiarity with a place, on the other hand, is another means of generating a strong sense of place. When a visual cue is coupled with a memory or a familiarity with a place, the sense of place is all the more powerful (Lynch 1981, 132). Established special events also contribute to place meaning by creating an anticipated "sense of occasion" year after year. Further, a distinctive "threshold experience" and "sense of visual enclosure" created by, for example, building walls or landscape, frames the potential experience and enhances the sense of place (Crowhurst Lennard and Lennard 1995, 33).

**Figure 2.5.**  
**A Meaningful Space**



*Source: Cooper Marcus and Francis*

#### **2.5.2.4.2. Positive Meanings and Spatial Configuration**

Generating positive feelings amongst users is one of the most important attributes of successful public spaces. When people experience a place they should feel good about doing so. They should not feel physically uncomfortable or that their safety is at risk. Nor should they feel that their democratic rights to use the space are being violated. People should benefit both physically and psychologically from using public spaces. It should be an enriching experience which increases self esteem, personal well-being and ultimately makes users want to come back again and again. Positive public spaces make people feel like they belong. In terms of the site planning, no part should be neglected or left unresolved (UBC Landscape Architecture Program 1995, 97). Every component of the site should be carefully planned and executed in order to satisfy the majority of user needs. At the same time, public spaces should possess positive spatial configurations. They should clearly define their boundaries and the

experiences possible in them. This may be accomplished by using building walls, landscape or paving designs to both enclose and fix the limits of the space.

#### **2.5.2.4.3. Significant**

In order for people to create strong bonds with a public space, the site should be significant to the potential user. The overall design and internal elements should reflect the "basic values, life processes, historic events, fundamental social structure, or the nature of the universe" in which the user is a part (Lynch 1981, 142). For instance, a public space with a waterfall flowing toward the river may be reminiscent of historical streams which once flowed freely to the water's edge. Depicting an historical natural process like this not only reminds people what life was once like but elicits a strong connection amongst individuals and groups through a shared local history.

#### **2.5.2.4.4. Sense of Longevity**

Good public places last a long time and are highly valued by their users. Long lasting construction, versatile design, good fit within the surrounding context as well as adequate maintenance contributes to their longevity. Public spaces which are temporary in nature and are not well cared for have little real value to the user. Only those sites which continue to serve the needs of the user over the long term and give confidence in their future existence will be well used.

#### **2.5.2.4.5. Comfort: Safety and Security**

Successful public spaces are safe and secure places where people feel comfortable leisurely strolling through, sitting and eating lunch, or watching an event. In many urban environments, however, fears of security and vulnerability in public places,



especially for women, are a common concern. While many of these fears are a result of actual crime, they are predominantly associated with the perception of crime and personal safety in public spaces. A blank wall, the presence of undesirables or an unlit area all exacerbate this problem. To enhance the feeling of safety and security in public spaces, a number of strategies may be employed.

The most obvious way to improve public perception of crime and personal safety is to increase police presence in the community. Foot patrols and mounted patrols have worked quite well for many downtowns. Similarly, reorganizing police services to, for instance, target a particular type of crime in an area has also achieved a high degree of success. Of course the most desirable form of police presence depends upon the context of the city and the perceived or actual type of crime. What works for one city may not work in another. The major drawback of such an approach, however, is that it is often quite costly to implement.

Providing intentional visual cues also works to enhance the security of public spaces. Visual cues subtly convey the message that undesirables and undesirable activities are unwanted in a place. Visual cues may take the form of a security guard patrolling the area, electronic surveillance equipment, or a private property sign. A particularly popular visual cue is the provision of an official presence on the street in the form of a "host". The host is "an identifiable person who deals with the day to day operations and events, responds to mini-emergencies, provides information, deals with undesirables, and generally keeps order in the area and makes people feel comfortable" (Projects For Public Space, Inc. 1984, 8). San Francisco, for instance, has proposed to establish a public service ambassador program where ambassadors would answer questions and provide civil support to the police force in the downtown area (San Francisco Streetscape Plan 1985, 41). Whether the host is a hired employee

of the local business association or a concerned store owner, the presence of a host does indeed have a positive effect on the public realm.

The most effective way to discourage undesirables and associated security concerns is to attract legitimate users (Whyte 1980, 63; Cooper Marcus and Francis 1990, 25; Projects For Public Space, Inc. 1984, 13). Equipping public spaces with retail and food outlets along with adequate seating facilities brings more people and activity into the area. So too does activity programming for public spaces. Programming events in areas which are particularly inactive or at times where activity is slow can attract a wide variety of people. The presence of legitimate users tends to deter undesirables such as drug dealers or street people from frequenting the space. Since undesirables thrive in areas which are not directly in the public eye, they and associated security concerns usually move on.

Addressing design features of open spaces is another strategy to enhance personal safety and security. Open spaces should be situated in close proximity to busy pedestrian flows and should provide for clear views within the space and to the surrounding area. This allows for active observation by both users of the space and passers-by. Similarly, open spaces should not contain private corners or concealed spaces which present an obvious safety hazard to their users. Conducting a safety audit is a useful method of determining which spaces people feel unsafe in and generating possible solutions to the problem. For example, the addition of more seating in conjunction with activity programming may attract more legitimate users to the area and thus enhance personal safety and security in the area.

Increasing communication between local merchants, the police department, the city and the public is another method of enhancing personal safety and security in public spaces. Establishing task forces on crime prevention brings all the actors

together collectively to both share information and devise solutions to alleviate criminal activity in their respective neighbourhoods. Task forces are also useful in increasing public awareness of certain undesirable activities and educating them on how to eliminate the problem.

#### **2.5.2.4.6. Relaxing: Relief and Restoration**

Relaxation is the state in which a person's mind and body are at ease in a place (Carr et al. 1990, 98). Public spaces generate such feelings by providing relief from the built environment and restoration from our hectic urban lifestyles. Strategic placement of public spaces to provide a break in the street wall or an escape from the busy flow of pedestrian traffic, for instance, generates opportunities for urban relief. Similarly, distance from noisy traffic flows and enclosure on all three sides contribute to a relaxing and psychologically comfortable environment.

On the other hand, quasi-natural features such as vegetation and waterfalls placed within public spaces contribute to human restoration and well-being. Waterfalls are particularly useful in the restoration process. If they are used, the sound of falling water should be as loud as possible so as to drain out the sound of traffic and seating should be arranged to allow as many people as possible to hear it (Cooper Marcus and Francis 1990, 43). Not only do natural features provide a counter-point to the built environment, they convey the importance of biological life and instill a sense of continuity in the user. Various studies have shown that nature is highly valued by urban dwellers and is believed to enhance personal well-being (Parry-Jones 1990).

#### **2.5.2.4.7. Stimulation and Learning Opportunities**

Public spaces should be environments which stimulate the user either physically or psychologically and provide a variety of learning opportunities. They should be

designed to arouse interest and curiosity, and encourage the exploration and discovery of its parts and those around it. Techniques such as the use of indigenous plant life, noticeable color and textures, or the thoughtful orientation of a series of benches may contribute to the stimulating effect a space has on its users. Public art and natural features such as water fountains are particularly stimulating if they are designed to excite the imagination or memory and be physically manipulated at the same time. Nature is of great importance in public spaces because it depicts the changing of the seasons and the natural cycle of life and death.

Stimulating environments also provide learning opportunities which both expand knowledge and enhance personal growth. They allow people to learn about others and the world around them, test new ideas, play out new social roles, explore architectural and spatial relationships, meet a challenge or master a skill (Lynch 1965, 397).

#### **2.5.2.5. Ecological Needs**

*Public spaces should be designed ecologically to benefit the entire community* (Halprin 1975, 11).

Ecological needs are integral to the survival and well being of the human race. Although they are often neglected in the public space-making equation, "adequate open space is a hard biological necessity essential to life" (ibid.). Ecological needs encompass the natural elements and cycles of life which support human existence, continuity and comfort. In terms of the urban environment, public spaces should satisfy the basic ecological needs of climate control as well as enhance natural processes, nature conservation and biodiversity. Public spaces should be the conduits which lead us toward a more sustainable environment. Instead of working against nature, they should work with nature to enhance existing urban environments and

increase future possibilities for biological life and human survival. The ecological needs are clearly addressed by the works of Hough, Halprin, Cook and Lynch.

#### **2.5.2.5.1. Controls Climate**

To be successful, public spaces should positively impact local, regional and global climatic conditions. Incorporating ecological elements such as trees and plantings into the public realm wherever possible is the primary means of affecting climate. On the local level, trees and plantings shade public space users from the sun and protect them from the wind. Likewise, they moderate the weather through evapotranspiration and retention of soil moisture (Cook 1991). On the regional level, ecological elements may lessen the urban heat island effect and on the global level, it may help alleviate global warming (ibid.).

#### **2.5.2.5.2. Enhance Natural Processes, Nature Conservation, Biodiversity and Community Health**

Good public spaces enhance natural processes, aid in nature conservation efforts, enhance biodiversity and improve community health. Hough provides a useful design strategy to accomplish this. To enhance natural processes, public spaces should be designed as productive landscapes which conserve urban energy and nutrients (Hough 1984, 247). First, they should include a useful selection of ecological elements within the site. Trees and plantings, for instance, may be used to facilitate the hydrological process by acting as drainage corridors and evapotranspiration conduits. Likewise, slopes covered in vegetation may be used to reduce erosion (Cook 1991). Second, public spaces should use the wastes of one natural cycle as a resource for another (Hough 1984, 249). For instance, fallen leaves may be recycled and used as fertilizer for use in green spaces throughout the city. By designing productive

landscapes, public spaces may make a positive contribution to the environment and contribute to community health.

To aid in nature conservation efforts and enhance biodiversity, public spaces should be areas where nature is preserved and enhanced. This may entail preserving what presently exists or reintroducing native species which have been displaced due to development. Nature in public spaces takes on a variety of forms. It may be an interesting rock formation, a patch of wildflowers or a grove of birch trees. If these features can be incorporated into the larger public realm, natural spaces and corridors will open the way for the migration of a variety of plant and animal life within the city. Such an environment not only increases the choices available to potential public space users but it contributes to the stability and diversity of plant species and wildlife habitats (Hough 1984, 250). In essence, it safeguards the biological health and survival of human beings.

In terms of community health, facilitating natural processes and preserving nature in urban environments generates a healthier community in which to live. On the physical side, the air is fresher, the water is cleaner, less noise is heard and much less destructive waste is produced. On the psychological side, the human mind and soul are continually being rejuvenated due to the frequent experience of nature throughout the city. As a result, the body and the mind are healthy and at ease.

#### **2.5.2.6. Functional Needs**

*Comprehensive management integrates these elements to perform several functions at the same time, each aimed at creating a more attractive, lively, and comfortable space* (Projects For Public Spaces, Inc. 1984, x).

In order for public spaces to attract a variety of users, they need to be well managed after their initial creation. Proper management involves ensuring that their functional needs are satisfied. These needs entail providing active programming, appropriate maintenance levels, food and retail/vending outlets, and appropriate signage. The most prominent writings on the functional needs of public spaces and their users are found in the works of Whyte, Projects For Public Spaces, Inc., and Cooper Marcus and Francis.

##### **2.5.2.6.1. Well-Organized and Diverse Programming**

To be successful, public places should provide their users with interesting and memorable experiences. One method of inciting such experiences is through active programming. Although not all sites are conducive to programming efforts, many public spaces can accommodate such activities. Programmed events may take the form of yearly festivals, evening concerts, daytime summer performances, parades, or sidewalk sales. Street performers are another dimension of programmed events. While most events require large amounts of space, street performers can fit into the tiniest of spots and still delight their audiences. The combination of programmed events and public spaces "will reinforce each other to create a vivid present. The result is an active involvement in the immediate, material world and an enlargement of the self" (Lynch 1984, 132).

In addition to generating interesting spectacles for people to take part, programmed events perform several other important functions. By attracting people to the

downtown, programmed events enhance the personal safety in the area. On the other hand, well-coordinated events bring people into public spaces which regularly do not see much activity. These spaces may also be new to the participants and therefore provide new experiences for them to encounter. To successfully organize an event, one person should act as the leader and coordinate the event with other community activities. Good publicity and talent are essential ingredients as are public spaces which satisfy the technical and logistical requirements such as adequate seating and visibility to accommodate special events (Projects For Public Spaces, Inc. 1984, 25-26).

#### **2.5.2.6.2. Adequate Maintenance**

Good public spaces are well-maintained. Regular removal of trash, sweeping of pavement surfaces, snow removal as well as care for plantings and trees create a positive perception of the place. Similarly, replacement of inadequate signage and repair of street furniture contribute to this process. Well-maintained spaces reflect positively on the surrounding businesses and create comfortable environments for public space users. If management cares for a public space, people will also care for it (Cooper Marcus and Francis 1990, 46).

If public space maintenance is inadequate, Projects For Public Spaces Inc. suggest that the business community supplement city services in one of two ways. The low cost method is to solicit a small fee from each business and hire their own maintenance worker. The more expensive route is to obtain funding to, for instance, purchase new trash bins or another trash removal cycle (Projects for Public Spaces, Inc. 1984, 3). The San Francisco Streetscape Plan, on the other hand, requires that local businesses maintain the sidewalk areas in front of their properties to appropriate standards (San Francisco Streetscape Plan 1985, 41).



#### **2.5.2.6.3. Variety of Food/Retail Outlets**

The provision of food and retail outlets within or adjacent to public spaces greatly contributes to their level of success. The presence of food outlets, in particular, attracts many people from the surrounding area who, in turn, attract more people to the site. As the popularity of the public space increases, its existence takes on a whole new meaning. The site not only becomes more lively and entertaining but it becomes a safer place for the user, especially women.

Public spaces which already have a healthy clientele or those spaces which have the potential to become popular are the best places to establish food/retail outlets (Cooper Marcus and Francis 1990, 45). Places which are near heavy pedestrian flows and are close to seating are also good places. The most acceptable types of goods sold differ from the surrounding stores. They include goods such as fruit, vegetables, flowers, crafts and take-out food (ibid.). In terms of space allotments, Whyte suggests that retail and food establishments be given at least 50% of the total ground floor frontage adjacent to public spaces while 20% of open spaces should be given over to outdoor cafe use (Whyte 1980, 57; 53).

#### **2.5.2.6.4. Appropriate Signage**

Good public spaces provide appropriate signage for its users. All streets, alleyways, transit stops, taxi stands and public spaces should be clearly identified. These signs should orient, direct and give general information to pedestrians moving through the area. The symbols and language used should be accessible to all pedestrians. As well, public spaces and how to get to them should be well marked, especially access to terraces and other non-ground level or indoor spaces.

Ideally, public spaces should contain maps outlining downtown destinations and the easiest paths of movement between them. They may even contain a self-guided walking tour route for those interested in exploring the downtown. Further, each downtown destination should be identified by either informational or historic plaques.

#### **2.5.2.7. Economic Needs**

*Open spaces at their best form the heart of contemporary downtown life and are the key to economic development* (Heckscher 1977, 243).

The economic needs of a community are closely related to the success of public spaces. Economic needs are those which contribute to the economic improvement of the community. As individual needs they encompass the contribution to commercial vitality, the enhancement of property values and rental rates, the provision of local employment and economic responsibility. Those public space advocates whose work touches upon the economic needs of public space users include Cook, Heckscher, Fausold and Lileholm, Carr, and Loukaitou-Sideris and Banerjee.

##### **2.5.2.7.1. Contribution to Commercial Vitality**

Successful public spaces provide areas where the exchange of goods and services can take place. Commercial activities may take place in established retail or restaurant spaces adjacent to public spaces or with individual vendors dispersed throughout the area. Whatever form they take, economic activities in public places generate a host of benefits for its users and the business community at large. They benefit the public space user by bringing economic opportunities within close proximity of the user. Similarly, they benefit the business-person in terms of job provision and income.

As more people are attracted into the area to take advantage of the economic opportunities available, the potential customer base increases. An increase in public space users not only makes the space more pleasant to frequent but it also supports businesses in the surrounding area. Although public spaces were once viewed as detrimental to commercial success, merchants now view it as an asset and actively encourage its creation and programming (Heckscher 1977, 258). Consequently, public spaces where commercial activities are permitted usually generate a vibrant activity centre with low vacancy rates.

#### **2.5.2.7.2. Enhance Property Values and Rental Rates**

In general, successful public spaces contribute to enhanced property values and increased rental rates. Numerous studies have shown that preserved open spaces enhance the aesthetic and amenity value of the property and those surrounding it, especially if they are well integrated into the community. As a result, such spaces have a positive effect on property values (Cook 1991; Fausold and Lilieholm 1996, 3).

In terms of the urban environment, successful public spaces increase and protect the value of the buildings adjacent to them (Carr et al. 1992, 12). It not only enhances their corporate image and invites attention but developers believe it increases the profitability of office spaces and helps them attract and retain tenants (Loukaitou-Sideris and Banerjee 1993, 7). If the public space is really successful, it may contribute to slightly higher rental rates as well.

#### **2.5.2.7.3. Provide Local Employment**

Successful public spaces contribute to local employment opportunities. If public spaces are popular and attract a wide assortment of people, street vendors and entertainers have the critical mass which they need to make a positive return.

Similarly, public spaces often generate a need for a “host” to monitor the space and provide assistance or additional maintenance workers to maintain the site. Especially during economic downtimes, public spaces provide local employment opportunities for those in need (Carr et al. 1992)

#### **2.5.2.7.4. Economically Responsible**

Successful public space are those which are created in a fiscally responsible manner. Money should not be wasted on unwanted elements or excessive costs for the simplest items such as a bench. While the bottom line is to achieve the greatest return for the least amount of energy and money spent, the most basic of human needs should not missed. Issues of personal comfort, democratic rights and ecological enhancement, for example, should be carefully addressed in every instance of public space creation. If economic responsibility is adhered to, public spaces will be one step closer to satisfying the needs of their users.

### **2.6. Planning Approach and Implementation and Monitoring Strategy**

#### **2.6.1. Planning Approach**

Since the primary role of public space planning efforts is to satisfy the needs of its users, an approach which responds to these needs is necessary. The systems planning model comes closest to satisfying this requirement. It is defined as “the process of assessing the park, recreation, open space needs of a community and translating that information into a framework for meeting the physical, spatial and facility requirements to satisfy those needs” (Mertes and Hall 1995, 16). What is lacking in process is supplemented by the ecological planning approach. This approach is used primarily for “studying the biophysical and sociocultural systems of a place to reveal where specific land uses may best be practiced” (Steiner 1991, 9).

As a whole, the systems/ecological planning approach provides a useful method of creating a public space plan for an urban centre.

**Table 2.4.**  
**Systems/Ecological Planning Approach**

STEPS	DESCRIPTION
<b>1-Identify Customers</b>	-identify customers needs and how they can be best served
<b>2-Obtain Customer Involvement and Build Relationships</b>	-develop a means to measure and monitor needs such as marketing and opinion research, group process methods and communication theory, and create a lasting relationship with users
<b>3-Assess Needs</b>	-understand issues and concerns of users-identify trends, create a resource inventory and evaluate it, examine participation rates and use patterns, review related plans, and review literature and secondary research
<b>4-Develop Strategic Plan</b>	-develop a benchmark policy document which includes goals, objectives and policies for service delivery; identify the ideas, beliefs and values which define the mission and vision of the park and recreation system
<b>5-Develop System Planning Framework</b>	-identify the parameters and guidelines for establishing a park, open space and pathway system for the area
<b>6-Develop System Plan</b>	-identify the vision, character and direction of the park and recreation system in terms of the existing and proposed system, pathway and individual park parameters and programs
<b>7-Translate Policies into Design</b>	-give form and spatial arrangement to vision, character and direction of the park and recreation system; helps decision makers visualize the consequences of their policies
<b>8-Develop Recreation Services Delivery Plan</b>	-identify programs to be offered, customers to be served and strategies for providing the services
<b>9-Develop Maintenance and Operations Plan</b>	-identify preferred types and levels of maintenance and financial impacts
<b>10-Develop Implementation Plan</b>	-outline the specific tasks required to fulfill goals, policies and objectives, assignment of responsibilities and schedule of preferred completion dates
<b>11-Evaluate and Monitor How the Plan is Implemented on an Ongoing Basis</b>	-survey and interview users to evaluate and monitor overall effectiveness

*Sources: Mertes and Hall 1995; Steiner 1991.*

### 2.6.2. Implementation

The implementation of public space plans is critical to the public space planning process. Without an appropriate implementation strategy, public spaces will not be created according to the needs of their users. The type of public space, its location

and its design are highly dependent upon the chosen implementation strategy. Since no two downtowns are alike, the most appropriate strategy will differ from one downtown to another. They may be individual implementation strategies or they may entail the combination of several strategies to achieve their ultimate goals. Table 2.5 outlines a number of possible implementation strategies used in cities throughout North America.

**Table 2.5.**  
**Implementation Strategies**

STRATEGY	DESCRIPTION	NOTE
<i>Mandatory Standards</i>	-city-oriented zoning standards built into the zoning bylaw; require specific amount of public space per sq ft of building floorspace and/or compliance with design standards, e.g. San Francisco	-to create new public spaces and achieve specified design standards with each new development project
<i>Planned District Ordinances</i>	-districts with specified zoning and public space standards, e.g. Portland	-standards different from district to district
<i>Incentive Zoning</i>	-a density bonus given to the developer in exchange for a public amenity	-preserves city funds
<i>Transfer of Development Rights</i>	-the selling and transferring of development rights from one property to another	-preserves highly valued public spaces -prevents shading of public space -increases densities in other locations
<i>Development Impact Fees</i>	-fee based on specified contribution or amount per square foot of floorspace collected at building permit stage	-increases development costs
<i>Development Agreements</i>	-negotiated agreement between the city and developer for the provision of public amenity; city may provide assistance in exchange for amenity, e.g. Victoria	-case-by-case negotiations
<i>Benefit Assessment District</i>	-annual fee for private property based on value, linear footage, land or building area, and benefit derived	-enhances property value
<i>Tax Increment Financing</i>	-initial city funding of process but recover costs through increased property taxes from private sector	-enhances property value -require city funds up front
<i>City Funds</i>	-public space planning and creation using city funds	-city funds may be limited
<i>Land Trust/Foundation</i>	-the acquisition of land or land interests by conservation associations for conservation purposes	-preserves city funds -enhances value of adjacent properties

Sources: Barnett 1982; San Diego Link Study; Findlay and Hillyer 1994.

### **2.6.3. Monitoring**

To ensure that the objectives of the public space plan are being met, implementation of the plan should be monitored and evaluated on an ongoing basis. Given the evolving nature of the public realm, minor changes to the plan will undoubtedly need to be made at some point in time. Steiner points out that planners should also pay special attention to the steps involved in the regulatory review process and the management of the decision-making process (Steiner 1991, 19). Committees comprised primarily of local citizens and/or city staff should be organized to monitor and evaluate public space plans. In addition, feedback from public space users is also valuable in this process.

### **2.7. Conclusion**

In general, comprehensive public space planning encompasses a broad range of issues and concerns. It deals, on the one hand, with a framework of general criteria for guiding the creation of a public realm which satisfies the most basic of human needs. On the other hand, it involves a strategy comprised of a planning process, implementation, and monitoring and evaluating scheme. Together, these components comprise the theoretical basis upon which a successful public realm may be achieved. Chapter Three uses these components to analyze three West coast case studies and to devise a series of practical guiding principles. Chapter Four draws on the results of the planning framework and the practical analysis to define the steps necessary to create a public space plan for Downtown New Westminster.

### **CHAPTER THREE: THE PRACTICE OF PUBLIC SPACE PLANNING**

This chapter presents an evaluation of the practice of public space planning in three North American cities. The cities examined are San Francisco, Portland, and Victoria. The purpose of the evaluation is to test the conceptual framework presented in Chapter Two by applying it to three practical public space planning frameworks, and to learn about general approaches, plan structures and strategies used to achieve overall plan objectives. At the end of the chapter, a list of the lessons learned are presented. In Chapter Four, the planning framework and the lessons learned from this investigation are used to generate a neighbourhood-specific public space planning strategy for Downtown New Westminster.

The evaluation of each city begins with an overview of the city context and the publications guiding public space planning. This is followed by a detailed analysis of the public space planning framework, general objectives, policies and performance standards employed. Compliance with the conceptual framework as well as the strengths and weaknesses of each public space planning framework is examined. The performance strategies for each city are reviewed since they define the qualitative or quantitative actions required to achieve the general objectives and policies of the plans. Completing the evaluation is a review of the process, implementation, maintenance and monitoring strategies employed in addition to the lessons learned. The specific details of the public space evaluation for each city are outlined in Appendix A, B and C respectively.

To gain a practical understanding of public space planning at the urban scale, the downtown neighbourhoods of the cities of San Francisco, Portland, and Victoria are examined. The rationale for exploring the practices of these cities is that they share a number of similarities with Downtown New Westminster. They are coastal cities, with similar climates, attractive views of natural and built features and have a unique



character. Although their sizes differ considerably, they provide valuable and practical lessons in public space-making objectives and policies, and the actions through which to achieve them.

### **3.1. San Francisco**

#### **3.1.1. Context**

The City of San Francisco is located on the West Coast of California between the Pacific Ocean and the San Francisco Bay. As one of the world's most popular destinations, its population of 724,000 supports thriving industrial, tourist and financial industries (AAA Tourbook 1996, 161). San Francisco is well known for its rolling topography and spectacular views, its quality architecture, and its human-scaled environment. Due to its compact nature, the downtown offers pedestrians a uniquely walkable city.

Although Downtown San Francisco is substantially larger than Downtown New Westminster in terms of land area and population, the two downtowns are similar in several ways. They are very compact areas which share a similar human scale character and coastal climate. The downtowns are situated on hilly West Coast terrain adjacent to important water bodies. And they both share a distinct history and heritage character in terms of architecture and image at home and abroad. Such similarities to Downtown New Westminster justify the examination of San Francisco as an appropriate public space case study.

### 3.1.2. Public Space Planning

A comprehensive public space planning framework governing the creation and enhancement of the public realm was first introduced in the San Francisco Downtown Area Plan. This Plan was a traditional land use plan which addressed a variety of issues including commercial and residential development, historic preservation, urban form, pedestrian and vehicular movement as well as open space. Adopted in 1985, the Downtown Plan was a response to "public concern over the degree of change occurring in the downtown" (San Francisco Downtown Plan 1985, II.1.1).

As part of the process, an extensive study of public spaces throughout the downtown was undertaken. The two main findings of the study were that there was not enough space to accommodate the rising population of the downtown and that many of those spaces created through the previous density bonusing strategy were of poor quality in terms of access, shading and provision of pedestrian amenities (Leibermann 1996). To improve the quantity and quality of public spaces in the downtown, the zoning code was revised to require the provision of public space with each new development and detailed open space design guidelines were created. These pieces of legislation direct the creation and design of public open spaces in the downtown.

A companion plan to the 1985 Downtown Plan entitled Destination Downtown: Streetscape Investments for a Walkable City: The Downtown Streetscape Plan was adopted in 1995. The Downtown Streetscape Plan presents a detailed set of design guidelines and an implementation plan to achieve Objective 22 of the Downtown Plan, *Improve the downtown pedestrian circulation system, especially within the core, to provide for efficient, comfortable, and safe movement.*

Together, the Downtown Area Plan, the Zoning Code, and the Downtown Streetscape Plan form the basis upon which public space is created and enhanced in downtown San Francisco.

### **3.1.3. Analysis**

The Downtown Area Plan and the Downtown Streetscape Plan set the stage for the creation of a vibrant public realm. The Plans use both a generic framework approach and an area-specific approach to achieve their objectives. While applying quantitative performance standards, the open space guidelines form the generic framework which is applied to all public spaces. The streetscape guidelines, on the other hand, are a mixture of qualitative and quantitative performance standards, and comprise the area-specific framework which is designed for both specific streets in the downtown and a general hierarchy of all streets. The primary focus of the Plans is to generate an exciting and memorable pedestrian experience while facilitating pedestrian movement.

In general, the goals, objectives, criteria and guidelines address a broad range of user needs and provide practical ways in which to achieve them. The issues of location, public space network and variety, visual interest, adequate size, access, sunlight and wind, pedestrian safety, place meaning, comfort and relaxation, maintenance, food and signage are particularly well addressed and directed through specific performance standards. These general criteria provide a useful framework for satisfying various community, functional, psychological and physical needs (see Appendix A).

San Francisco's public space planning framework is, indeed, a commendable effort to guide the creation of a high quality public realm for pedestrians. The strength of the

framework lies in the design criteria and action-oriented performance standards for pedestrian movement corridors such as streets and alleyways, and open spaces such as plazas, pocket parks or atriums. They are very comprehensive in nature and are designed to achieve the general policies stated in the Plans. At the same time, the planning framework excels in directing future public space planning initiatives. Not only does the framework include performance standards to address a majority of the general planning framework criteria, but it clearly identifies areas in the downtown which are deficient in public space. Therefore, the framework directs a more equitable and achievable distribution of public spaces in the downtown.

Another strength of the Plans is the practical approach they take to creating successful public spaces. The creators of the Plans realized that if public spaces are not comfortable for the user, they will not be well used. Therefore, the Plans focus specifically on creating a comfortable and safe public space environment for workers, residents and visitors through design-related performance standards. The Plans are further strengthened by expanding the definition of the public realm to include both outdoor and indoor public spaces.

Many needs, however, are not addressed in either adequate detail or at all. Strategies which support the ecological needs, economic needs and democratic needs of urban dwellers are not addressed in great detail (see Appendix A). Similarly, other important issues missed in the Plans include fit into the surrounding context, responsiveness to change, multifunctionality, significance, sense of longevity, stimulating learning environment, and well-organized and diverse programming. The absence of fit was particularly noticeable because of its importance in linking districts and their internal elements with one another. Instead of addressing this

issue, the Plans emphasize the need to harmonize the built form with the surrounding buildings.

As these deficiencies indicate, the planning framework does not place much emphasis on the way public spaces are used, the sense of place reflected in them and their continuity with the surrounding environment. It focuses more on the physical experience of the pedestrian through the provision of new public spaces, making them usable and aesthetically pleasing. This may be the case because physical elements and design features are easier to plan, implement and control than elements which arouse certain feelings of identity and continuity in the user.

The major weakness of the public space planning framework is the separation of the public realm into two distinct entities, the streetscape and open space. This separation creates three stumbling blocks to the effective implementation of the planning framework and realization of the desired product. The predominant difficulty lies in the absence of a comprehensive method to link streetscape improvements to open spaces and vice versa. Using trees and sitting areas as connections and integral elements in both the Downtown Pedestrian Network and the Open Space Network is the only direction the planning framework provides. The need to coordinate the type of street furniture or landscape with the adjacent open space, for instance, is not addressed.

Second, the guidelines for open space are not consistent with the guidelines for streetscapes. Not only are they different but many of the guidelines could have been applied to both streets and open spaces in order to create a much richer public realm. Further, the accompanying two-tiered implementation strategy (a joint publicly and privately funded program for streetscape improvements and a privately funded program for open space creation) compounds the inconsistencies by making it more

difficult to coordinate efforts of the public and private sector. These stumbling blocks may be a result of the existence of two separate agencies which created and are now implementing the two sets of guidelines at the same time. Consequently, the public space planning framework is not as strong as it could have been.

Compounding these weaknesses is the lack of consistency in the prescriptive nature of the Plans. The Downtown Plan lacks much of the detail found in the Streetscape Plan, particularly in terms of open space. The open space component of the Downtown Plan does not identify potential sites, provide site-specific performance standards nor does it present a comprehensive implementation plan to achieve the overall objectives. Only the generic open space guidelines, a method of implementation (zoning code requirements) and the deficiency areas are provided. The rest is left up to the developer. This generates uncertainty in the Downtown Plan's ability to achieve its open space objectives thus contradicting the purpose of creating open space guidelines in the first place. Nevertheless, the quantitative nature of the open space performance standards does place a limit on the discretionary power of the developer in terms of design.

The Streetscape Plan, on the other hand, provides various area-specific performance standards as well as an implementation plan. The design of several streets in three districts of the downtown is prescribed in terms of street improvements and a plan to achieve these improvements is presented. However, not all parts of the districts are addressed, leaving the generic improvements to apply. Consequently, the Plans attempt at being prescriptive in terms of streetscape and open space standards falls short of being consistent and truly effective as an action and result-oriented public space plan.

In terms of the policies and performance criteria, the planning framework is not very consistent. In addressing some issues such as variety in surrounding land uses and facilitates active and passive social contact, the Plans provide a policy but not a performance standard. In other cases, performance standards are provided but without policy directives. As a result, the Plans do not provide a clear direction or performance standards with which to achieve the ultimate goals of the Plans.

The public space planning framework in San Francisco is coordinated and implemented by the Planning Department. Each private development project is required to provide a quantity of open space that is directly proportional to the amount of nonresidential space in the building (1 sq ft/50 sq ft of office space and 1 sq ft/100 sq ft of commercial space). Streetscape improvements, on the other hand, depend largely upon private development exactions with a limited contribution from the public sector. A majority of the Planning Department's control in the process is played out in the numerous meetings held between the Planning Department and the project developer. These meetings are where the specifics of public space provision and design are negotiated.

According to Leibermann, the Planning Department has learned several valuable lessons since the initial implementation of the Downtown Plan in 1985 (Leibermann, 1996). By tying the provision of open space to the development process on a project-by-project basis, a relative balance between the amount of open space and the number of users has been reached. This has ensured that the amount of open space created is equal to the amount of people potentially using the sites. When the office market collapsed in the late 1980's, for instance, few new open spaces were created. This corresponded quite closely to the limited number of people moving into the area.

In terms of the open space guidelines, the Planning Department has found that the seating requirements may be too high for the spaces to function adequately. On the other hand, the detailed open space guidelines may have generated more work for the City's planners. To achieve the objectives of the Plans, the planning and design process still needs to be closely supervised (Loukaitou-Sideris and Banerjee 1993, 5). Nevertheless, the Downtown Plan has functioned quite well to date and the quality of downtown public space has improved dramatically. Given the short time the Streetscape Plan has been in effect, it is too early to tell whether it has succeeded in achieving its goals.

In general, the public space planning framework as stated in the Plans directs the creation of a vibrant, pedestrian-oriented public realm. The approach is a mixture of generic and applied public space planning with the objective of creating a comfortable and memorable pedestrian experience. Open space guidelines and streetscape improvements form the backbone of the Plans. Although the Plans satisfy various community, functional, psychological and physical needs, other needs including ecological, economic and democratic needs are not well addressed. This indicates that the Plans are designed more to enhance the physical pedestrian experience rather than the psychological experience in and use of public spaces. Nevertheless, the Plans guide the creation of a usable system of public spaces which pay close attention to pedestrian comfort and safety.



## **3.2. Portland**

### **3.2.1. Context**

Portland is situated along the Willamette River in the Northwest region of Oregon. It is a city with attractive views of local mountains, a mild climate and a relatively flat topography. With a population of over 400,000, the city specializes in the export of wheat and lumber products as well as deep-water port activities (AAA Tourbook 1996, 72).

Portland is well known for its many green-city initiatives. Most notably, the city has cleaned up the Willamette River to accommodate fishing, boating and water-skiing, and has established a distinctive parks and open space system. More than 200 parks and open spaces of various sizes and adorned with fountains and public art are scattered throughout the city. In particular, Portland possesses a unique boulevard park system which extends throughout the downtown and encompasses more than 25 consecutive city blocks.

The focus of this examination is the River District, one of seven districts which comprise the Central City. Situated adjacent to the downtown core, the River District is a neighbourhood of mixed uses - commercial, residential and industrial - which shares a notable resemblance to Downtown New Westminster. The two neighbourhoods are located along prominent regional rivers with working waterfronts, contain large tracts of railway right-of-ways, and have similar mixed use compositions, particularly in terms of residential uses which are planned both within the neighbourhood and along the waterfront.

While both neighbourhoods are in a state of transition in terms of changing land uses, their communities place great emphasis on their 'cities' past, as viewed in their respective historic districts and efforts to preserve them. At the same time, they are also attempting to reinforce their connection to the river through the use of connective linkages and water-related design themes. The similarities between the River District and Downtown New Westminster make the analysis all the more appropriate.

### **3.2.2. Public Space Planning**

Since the early 1970's, Downtown Portland has experienced a tremendous amount of growth. The original downtown expanded its reach to areas north and south as well as across the Willamette River. In order to guide future growth in a responsible and coordinated manner, the Central City Plan was created. Adopted in 1988, the Central City Plan is comprised of thirteen functional and eight district policies, each with a set of proposals for action in terms of projects and programs. What distinguishes this Plan from those of San Francisco and Victoria is that the timing and possible implementing agency is noted for each prescribed action. The creation of an attractive, ecologically sensitive and identifiable public realm is directed through the policies for the Willamette riverfront, the natural environment, parks and open spaces, urban design and the River District.

The River District Development Plan is the companion series of documents to the Central City Plan and deals specifically with the development of the River District. It is comprised of five separate reports: the River District Urban Design Plan, the River District Development Program, the River District Design Guidelines and River District Right-of-Way Framework Plans, Design Criteria and Design Standards. Although the

reports address very distinct issues, certain components of each work together to direct the creation and enhancement of the River District's public realm.

### **3.2.3. Analysis**

The Central City Plan and the River District Development Plans are the tools used to guide the development of a very distinct community and public realm. The Plans follow a joint site and area-specific approach in which they identify areas in need of open space or enhancement and provide qualitative open space performance standards and quantitative streetscape performance standards to achieve them. Instead of emphasizing the need to create new public spaces, the Plans focus on using public space as a resource to achieve three primary objectives - to link the community to the waterfront, to create a distinct identity and sense of place in specific areas and the community as a whole, and to enhance the natural environment. Design solutions are by far the desired method to achieve these objectives, particularly in regards to establishing linkages and a sense of identity throughout the community.

In general, the Plans satisfy a significant number of human needs and present usable performance standards with which to achieve them. Issues that are well addressed include linked system of public spaces and public ways, good local fit, visual interest, visual and physical access, stimulation, safe pedestrian environment, meaningful place, enhance natural processes, conservation and community health, and adequate maintenance. By addressing these issues in such detail, the Plans satisfy many community needs, physical and psychological needs, ecological needs and functional needs (see Appendix B).

While the Plans address a majority of the needs identified in the conceptual framework, they fail to adequately deal with the democratic needs and economic needs of public space users. Further, the Plans do not address many elements which are integral to the design and use of public spaces. The issues which are not addressed include central location and reasonable walking distance for open spaces, close relationship between open space and street, responsive to change, internal variety, right to claim, user choice, sunlight enhancement, comfortable temperature and humidity, signage, enhance property values, provide local employment and economic responsibility (see Appendix B). In general, the Plans place more emphasis on the image or identity of the district, its connection to other areas of the City and creating an ecologically sustainable environment than in creating comfortable public spaces which are well used by residents, workers and visitors to the area.

Nevertheless, the Plans do possess several notable strengths which are characteristic of successful public space planning. The most significant strength of the Plans is their combination of detailed site and area performance standards. While the qualitative open space guidelines encourage developer creativity, they are designed to address particular issues in specific areas of the neighbourhood. The quantitative nature of the streetscape guidelines, on the other hand, leave little room for developer expression except in regards to street furnishings. Yet by laying the detail out in advance, the private sector is well informed of the City's intentions for the area and usually designs its plans and budgets accordingly. In Portland, the development negotiation process plays a key role in determining the type and specific nature of the public space planned.

At the same time, the structure of the Plans contributes to their potential success. By designing the performance standards to reflect three primary objectives - to link the

waterfront to the community, create a distinct identity and sense of place, and enhance the natural environment - the Plans do not overextend their reach. Instead, they focus all their efforts on achieving these three objectives. Not only does this general framework give direction to public space planning as a whole, but it adds strength to the performance standards and the realization of the objectives of the Plans.

The objectives of the Plans themselves also add to the strength of the public space planning framework. The existence of the linear block system and its planned extension through the River District to the waterfront is a strong-point. Specifically, the performance standards which direct its duality as a linkage to the waterfront and the downtown as well as a community park in certain parts are commendable. Similarly, the emphasis placed on using design elements to instill a sense of place such as public art and water features throughout the area only strengthens the public realm and its connection to the local and regional environment. Furthermore, the ecological focus of the Plans in directing nature conservation and enhancement in addition to the initiatives designed to improve community health completes the overall vision of the Plans.

Although there are many strengths to the Plans, they do possess several weaknesses. The most pronounced weakness is the inadequate amount of attention paid to the internal elements of public spaces such as their design or their relationship to the street. This is likely a result of the focus on neighbourhood identity and linkage to the surrounding areas which tends to ignore the issues of pedestrian comfort and relaxation in public spaces. At the same time, the creation of small spaces is virtually disregarded as an appropriate option for the area. Instead, the Plans focus on the larger public space sites such as the linear block system and its design theme. This is

due to the fact that it is more cost effective and generally easier to achieve the Plan's objectives through the use of large spaces than it is with a series of small public spaces (Joslin 1996).

To complicate the issue of public space, Portland also separates open space from the streetscape component. Although this separation is not as pronounced as it is in San Francisco, the performance standards of each component are not fully consistent with one another. However, the open space performance standards are structured in such a way as to influence the design components of the streetscape. Similarly, the streetscape performance standards of the Right-of-Way Plan provide a flexible structure which allows complimentary design features to be implemented, particularly in regards to street furnishings. Despite the inconsistency, the Plans provide a method to coordinate open space and streetscape design which lays the foundation for a cohesive public realm.

The organization of the Plans, on the other hand, tends to weaken their potential effect on public space planning. The Plans are separated into six stand-alone reports - the Central City Plan and the River District Development Plan which includes the Development Program, the River District Urban Design Plan, the River District Design Guidelines and the River District Right-of-Way Framework Plans, Design Criteria and Design Standards. Although they address public space planning in a comprehensive fashion, using such a structure to guide the process is inefficient and makes it difficult for the user to follow, particularly for someone who is interested in a specific component of the Plans. To make the process easier, the Plans should be separated into topic areas such as public space or pedestrian circulation and accompanied by their respective performance standards. Another weakness in the

Plans is that they focus extensively on outdoor space creation and enhancement and neglect the use of indoor space as an integral part of the public space system.

In terms of coordinating policies with performance criteria, the Plans missed several combinations. While some policies such as good regional fit are not accompanied by performance strategies with which to achieve them, other performance strategies such as providing relief and restoration are not accompanied with policies with which to guide them. Consequently, some inconsistencies exist with the approach the Plans take in achieving its prime objectives.

To implement the River District Development Plan, the lead agency, the Portland Development Commission, is organizing a partnership between the public and private sectors. The partnership entails linking the strategic investment of public funds for infrastructure such as streets, transit and public space with funds from private investment for residential and commercial development. The proposed ratio of public to private investment is 1:5. Since there are a small number of property owners in the River District and previous experience with this type of arrangement has been a success for the City (largely due to the trusting relationship which exists between the public and private sector) it is expected that this partnership will follow suit (Joslin 1996). To date, however, it is too early to tell whether the planning approach and implementation strategy being used have been successful.

Overall, public space planning in the River District of Portland directs the creation and enhancement of a public realm with a strong identity, waterfront connection and environmental focus. It is a comprehensive type of plan which identifies a series of general public space objectives, and site and area specific performance standards with which to achieve them. In using this public space planning approach, the Plans satisfy many of the community, physical and psychological, ecological and

functional needs of public space users. By failing to adequately address the democratic and economic needs of public space users in addition to site-specific design related needs, however, the Plans emphasize the district's image and connection to adjacent neighbourhoods more so than creating public spaces which are well used by residents, workers and visitors in the area. Nevertheless, the Plans do set the stage for the creation of an interesting and identifiable public realm.

### **3.3. Victoria**

#### **3.3.1. Context**

Victoria is the capital city of British Columbia. It is located at the southern tip of Vancouver Island adjacent to the Inner City Harbour. Although it has a population of only 71,200, Victoria is unique in charm and character (AAA Tourbook 1996, 129). As the capital city, Victoria is the centre of provincial government and associated activities. It also boasts a flourishing commercial and tourism industry.

As the heart of the city, Downtown Victoria shares a number of similarities with Downtown New Westminster. Situated adjacent to important waterways, their connection to the waterfront has always been paramount to their identity and function as cities of the Canadian West Coast. At the same time, they possess a rich collection of heritage structures, many attractive vistas and venues, and host a variety of cultural activities. Although only Downtown New Westminster has a steep topography, both downtowns are compact nature, designed with grid patterned streets and share a similar mixture of land uses. Given these similarities, Downtown Victoria is an appropriate and useful case study to examine in terms of public space planning.



### **3.3.2. Public Space Planning**

Up until the late 1980's, public space planning in Victoria was addressed on a project-by-project basis. With rising development pressures and the desire to preserve the historical integrity of the community, Victoria developed the Downtown Victoria Plan. Adopted by Council in 1990, the Downtown Victoria Plan guides the future development of the Downtown. Part One of the Plan outlines the general objectives, policies and implementation strategies while Part Two identifies twenty-five precinct plans and their respective site-specific improvements. The sections which direct the public space component of the Plan include open space and public buildings, streetscape, pedestrians and cyclists, urban design, tourism, residential, density and bonusing, retail and entertainment in addition to the precinct plans.

As improvements to the public realm were initiated, the City realized that the coordination of design ideas was becoming increasingly difficult. To facilitate these efforts, the Downtown Victoria Beautification Strategy was created. Adopted on January 26, 1995, the Beautification Strategy provides general objectives, policies and design guidance for downtown streetscapes as well as specific character area recommendations. Working together, the Beautification Strategy and the Downtown Plan guide the future development of the Downtown and its public realm.

### **3.3.3. Analysis**

The Downtown Victoria Plan and the Downtown Victoria Beautification Strategy lay the foundations for a unique public realm. They focus on creating an identifiable downtown image and a comfortable pedestrian environment through the use of interesting design and linkage features. This environment is designed to accommodate the interests and needs of the many tourists who visit the City each

year. The approach used to achieve such an experience is a mixture of general objectives and policies accompanied by qualitative site-oriented performance criteria and quantitative right-of way performance criteria.

As a whole, the Plans satisfy a select number of needs outlined in the planning framework. They address the issues of attractive and inviting human-scaled environments, linked system of public spaces and public ways, good local fit, visual interest, and meaningful spaces particularly well. Other issues such as stimulation, variety of amenities, and safe pedestrian environment are also well addressed. Overall, the Plans satisfy many of the community needs, physical needs and psychological needs of public space users in the Downtown (see Appendix C).

The strength of the Plans lie in their well organized and complimentary structure. They contain a well developed mixture of site-specific, area-specific and neighbourhood-specific objectives, policies and performance standards. Each component is correlated in order to provide general and specific design recommendations for all areas of the downtown. Complimented by an intensive development negotiation and development permit process, the public space objectives are usually realized (Lam 1996). Although open space and streetscape components are addressed separately, the structure of the Plans, particularly the flexible streetscape design recommendations and their reference to character areas, provide the cohesiveness that makes all components function well together. Overall, the structure of the Plans provides a useful framework for generating a vibrant public realm in Downtown Victoria.

In terms of general objectives, the Plans excel at creating strong linkages within the downtown, to the waterfront and to adjacent communities. Similarly, provisions to direct the development of a distinctly historic character and image for the area

which enhances the downtown sense of place are commendable. Other strengths include the identification of potential sites for the creation of new public spaces and the need for usable indoor and outdoor space.

The Plans, however, leave a number of user needs out of the public space planning framework. They totally neglect democratic needs, social needs as well as many psychological needs, functional needs and economic needs. In addition, ecological needs are barely covered in adequate detail. Specifically, the Plans do not address the issues of central location, good regional fit, active and passive social contact, freedom of access, freedom of use, right to claim, user choice, significance, sense of longevity, well-organized and diverse programming, and enhance property values and rental rates (see Appendix C). These omissions constitute the major weakness of the Plans. The appearance of the neighbourhood and the ease of pedestrian movement are emphasized at the expense of psychological perceptions and experiences as well as the rights of the pedestrian.

Another notable weakness in the Plans is the incompleteness of the general policies and their corresponding performance standards. In the planning framework several general policies are provided such as variety of surrounding land uses and adequate maintenance but corresponding performance standards are not presented. In other cases, specific performance standards such as internal variety and appropriate signage are given but without a directing policy. As a result, these inconsistencies tend to weaken the impact of the Plans in creating a usable and well directed public realm.

To implement the public space planning framework, the City depends upon two primary structures. The creation and enhancement of open space is a function of private development and partnership arrangements between the City, local

businesses and outside agencies such as the Provincial Government. Street beautification, on the other hand, is achieved through either partnerships between the City, property owners and outside agencies for large projects or partnerships between the City and business owners for small projects.

Since the creation of the Downtown Victoria Plan in 1990, two important lessons have been learned by the Victoria Planning Department in terms of public space planning (Lam 1996). Although the Plan is characterized by its specificity, it is designed to provide maximum flexibility and creative interpretation by the development industry. The Planning Department has found that this structure has led to the successful achievement of many of the Plan's public space objectives and policies. On the other hand, the Plan has not yet functioned as well as it could because the Beautification Strategy has not been finalized. If the Plan and the Strategy were created and implemented at the same time, the two would have complemented one another in terms of corresponding initiatives and strategies. However, it is only a matter of time before the Beautification Strategy is implemented in conjunction with the Downtown Plan.

On the whole, Victoria's Downtown Plan and Beautification Strategy direct the creation of a visually interesting and pedestrian-friendly public realm. The approach used is a combination of general objectives and policies for the whole Downtown and specific area and site-oriented performance standards. Although the Plans do not adequately address many of the democratic, social, psychological, functional, economic and ecological needs of public space users, they do address in great detail a variety of community needs as well as some physical and psychological needs. In essence, the Plans emphasize the appearance and linkage of public spaces throughout the Downtown and the surrounding environment. Over the past five

years, the Downtown Plan has served Victoria well. Many of its objectives have been achieved through the creation of new public spaces and streetscape improvements while still maintaining the integrity of the existing public realm. It seems that the combination of a specific yet general approach, an innovative implementation strategy and close control of the process by the Planning Department have contributed to the success of Victoria's public space framework.

### **3.4. Conclusion**

In their efforts to create a successful public realm, San Francisco, Portland and Victoria use a variety of different planning frameworks and strategies. San Francisco focuses on the quality of public spaces by implementing quantitative open space and a combination of quantitative and qualitative streetscape standards. Portland emphasizes community links, sense of place and an ecologically sustainable environment by employing qualitative open space and quantitative streetscape standards. Victoria, on the other hand, uses general objectives and policies in addition to qualitative site-oriented open space criteria and quantitative streetscape standards to direct the creation of an attractive and comfortable pedestrian environment.

Although the approaches are designed to address the specific needs and constraints of their respective cities, they provide a valuable tool for learning about the practice of public space planning at the downtown neighbourhood level. By examining the strengths and weaknesses of each approach, a number of useful lessons have emerged. If these lessons are applied to the case study of Downtown New Westminster, a more progressive and usable public space planning strategy may be developed. This then may be used to guide the creation of a public space plan for the Downtown. The most significant of these lessons include the following:

## **A. Use a Holistic Approach to Public Space Planning**

### **1. Public space plans should not be planned in isolation.**

Within every city centre, a variety of forces are actively shaping and reshaping the expression of public life. In Downtown New Westminster, for example, the social, economic and cultural environment strongly influences the potential success of the public realm. A vibrant people-oriented downtown with a strong business base is much more conducive to the creation of a successful public realm than a declining downtown core. Given their interdependent nature, public space planning efforts and the various forces active in the downtown should be addressed at the same time. In all three case studies, the issue of public space was addressed as part of a neighbourhood effort to enhance the downtown environment. It was not addressed in isolation.

### **2. Open space and streetscape space should be addressed together as part of the larger public realm.**

The public realm is that part of the urban environment which is open for public use and enjoyment. It takes into account all types of public spaces and treats them as one distinct entity. In each case study, however, public space was addressed as two separate entities - open space and streetscape space. Although it was not as pronounced in Victoria and Portland, the separation of these components led to various inconsistencies in the objectives, policies and performance standards applied to the public realm. In San Francisco, for instance, the design elements prescribed for open spaces do not correspond to those prescribed for streetscape spaces.

Similarly, the separation of open space and streetscape space in San Francisco has led to the creation of a two-tiered implementation strategy where open space is privately funded and streetscape improvements are funded jointly by public and private

interests. Coordinating public and private sector interests and implementing two separate programs is, indeed, a challenging task. If open space and streetscape space were addressed together as part of the larger public realm, only one program and one implementation strategy would be required, thus eliminating any possible inconsistencies in the plan directives. As a result, potential opportunities to link open spaces and streetscape spaces into a cohesive public realm and provide economically responsible public space planning initiatives may be realized.

**3. Public space planning should be conducted in a comprehensive fashion.**

Public space plans should adequately address the broad range of issues integral to the success of the public realm. They should first address the array of human needs and planning process requirements outlined in the planning framework. Then the physical and process-oriented benefits and constraints of the planning process should be clearly identified. Workable solutions to facilitate this process should be applied as the need arises. Further, the public space plan should identify any potential opportunities for public space creation and enhancement on a site-by-site basis, and utilize the full typology of public spaces in its conceptual planning scheme.

Neglecting to address any of these issues only detracts from the full strength of the public space plan. In terms of the case studies examined, each city failed to address public space planning in a comprehensive fashion. Victoria, for instance, places most emphasis on creating an attractive appearance and comfortable pedestrian environment while totally neglecting the social, psychological, democratic, economic and functional needs of public space users. If Victoria addressed all of these needs in its public space plan, it would have come much closer to establishing a strong foundation for a successful public realm.

#### **4. Public space plans should be consistent.**

Consistency in the creation of planning objectives, policies and performance standards is integral to the success of a public space plan. Each objective should have a policy and performance standard which directs the achievement of that particular objective. Similarly, each policy and performance standard should have an objective which directs them from a more general conceptual level. In Portland, for instance, the plan directs public spaces to fit well within the regional context but does not provide a method with which to achieve it. If the plan was consistent and provided a directing performance standard, confusion and inconsistencies would be eliminated and the objective would be fully realized.

#### **B. Be Specific Yet Flexible in Public Space Planning Initiatives**

##### **1. Public space plans should provide a general framework of qualitative directives which address each level of public space planning efforts.**

To address public space planning in a comprehensive and consistent manner, public space plans should include a combination of general neighbourhood-wide objectives, character area policies and qualitative site-specific performance standards. The general neighbourhood-wide objectives provide common goals which direct the creation of a public space network on the more conceptual neighbourhood level. Character area policies are more specific in nature and are designed to provide public space planning guidance in a number of characteristically similar neighbourhood precincts. Qualitative site-specific performance standards are brief descriptions of what is desirable at a particular site. Each level of the planning hierarchy is designed to guide the progressive development of a successful public realm.



These components are significant because they are descriptive not prescriptive in nature. While they clearly guide the creation of a successful public realm, they do not limit the possibilities of creative interpretation and implementation of public space planning initiatives. For instance, the quantitative design features prescribed for open spaces in San Francisco are so specific that little room is left for the expression of more innovative design schemes. The qualitative nature of Portland's open space initiatives, on the other hand, provides a general description of what is desired but is flexible enough to encourage the development and implementation of creative design solutions to enhance its public realm. Creativity in public space planning is important because more meaningful and memorable experiences often occur in areas where new ideas of public life and public space are expressed.

**2. When planning the structural elements of the public right-of-way, quantitative performance standards should be used.**

When planning such elements as street and sidewalk widths, or street lighting and street trees arrangements, a more standard approach should be used. In any downtown core, these elements form the backbone upon which the public realm is constructed. Therefore, their design and placement should be consistent and uniform throughout the downtown. A standard approach may be employed at the street level, character area level or neighbourhood level. In the case study examples, each city uses quantitative performance standards to direct the structural elements of the public right-of-way.

San Francisco uses a hierarchy of three street levels to depict the general design features and quantitative performance standards desired. Portland uses a mixture of neighbourhood framework plans, a street hierarchy system as well as right-of-way performance criteria of quantitative standards. Victoria prescribes specific performance standards on a neighbourhood and character area level. By planning

the structural elements of the public right-of-way in a quantitative manner, the basis for a consistent and uniform public realm may be established. The flexibility in such an approach lies in the standards designed at the street or character area level, not the specific sites themselves.

**3. Design public space planning initiatives to be site-specific not generic in nature.**

Public space plans should employ a site-specific approach when designing strategies to enhance the public realm. A site-specific approach facilitates the creation of policies and performance standards which specifically respond to the intricacies of a particular site. Not only do they provide more certainty in achieving the type of public space system envisioned, site-specific directives economize the time, effort and expenses of both the developer and the planning agency. If the public space initiatives are designed according to the vision presented, the amount of time spent in the development discussion process may be minimized.

Further, a site-specific approach increases the chances of satisfying a variety of often neglected human needs such as local and regional fit or internal variety and right to claim since these elements require more precise direction if they are to be realized. In San Francisco, for instance, a generic approach to open space planning is used. This approach lacks the specificity and integrative nature of more site-specific public space planning frameworks and often leads to the development of spaces which are not clearly distinguishable from one another. It also sets the stage for a substantial amount of time and effort in the development discussion stage to be wasted on sorting out the best design for the space.

**4. Provide more detailed standards for those needs which are new to the practice of public space planning or are more challenging to achieve.**

Public space plans should provide a greater level of guidance for those general needs which are relatively new concepts in public space planning practice or are more challenging to achieve. In the case study examples, ecological, democratic, economic and psychological needs were not as well addressed as community and physical needs were. This indicates that they are not as easy to plan for when compared to the more straightforward community and physical needs of public space users. To improve their ease of implementation, a greater understanding of the importance of satisfying human needs and the interrelationships existing amongst them is necessary. Increasing the level of detail guiding these public space initiatives is one method of addressing the lack of guidance found in public space plans. With a clearer idea of how to design spaces to accommodate the needs of public space users, a more successful public realm may be realized.

**5. Do not underestimate the power of the development discussion process.**

Although public space plans should rely primarily on detailed performance standards to guide the creation of a successful public realm, the final designs can always be reshaped if an adequate development discussion process exists. This process is important because it provides the forum for discussions between the city and the developer and serves to ensure that the proposed initiatives conform to the general ideas conveyed in the public space planning framework. If they do not conform, the city may ask the developer to rework the plans until they satisfy the necessary requirements. In essence, the development discussion process guarantees compliance with the public space planning framework. All three case studies employ

a development discussion process in one form or another to review proposed changes to the public realm.

**C. Keep Public Space Planning Active in the Downtown**

**1. A combination of ad hoc and planned incremental development keeps public space plans alive.**

Public space plans should direct a combination of private sector ad hoc and public sector planned incremental development (or a partnership of private and public planned incremental development) of public spaces throughout the downtown. Such a combination ensures that public space is always being planned for, created or enhanced with little lag time involved between developments. If, for instance, there is a downturn in the downtown real estate market, as happened in San Francisco, a public space plan solely dependent on ad hoc private sector initiatives will produce very few, if any, public spaces. This is particularly significant if an adequate supply of public space does not already exist. A plan which is comprised of both ad hoc and planned incremental development initiatives, on the other hand, provides more structure to the process and ensures that public space planning efforts continue during downturns, even if public sector funding is limited. Once the issue of public space is on the planning agenda and results are evident, it is easier to keep activities ongoing. If it is taken off the public agenda, it is much more difficult to solicit continued support for public space planning, especially if other high priority issues arise.

**D. Ensure Public Space Plans are Easy to Interpret and Act Upon**

**1. Design the presentation of the public space plan to be easily understood by its potential users.**

Public space plans should be professional documents which present the nature of the plan in a clear and concise manner. They should be well-organized and outline

exactly what information they contain, including a brief history of how the project originated and was carried out. Public space plans should be written in an easy to understand yet descriptive language and use numerous illustrations in the form of maps, diagrams, photos or sketches to support the ideas presented. To be effective, designers should be employed to give form to the policies of the plan. This ensures that the ideas presented are clearly understood by all parties involved. Further, public space plans should be comprised of only one primary document.

San Francisco's Streetscape Plan is the most comprehensive and user-friendly document of all the case studies. Its professional presentation and well-organized and written content closely matches the needs of its target audience. Not only does the plan provide a clear overview of the entire process but it utilizes numerous photos, diagrams, maps and sketches to depict exactly what it is proposing for the Downtown. Although it is the second part of a two document plan, the Streetscape Plan is comprehensive enough to be viewed on its own.

**2. Give coordinating agencies a set of tasks and a scheduled time frame in which to complete them, and designate a lead agency to oversee the process.**

To implement a public space plan, a set of tasks and their anticipated completion date should be outlined for all coordinating agencies. These items focus the activities of each agency and direct the coordinated implementation of the larger public space plan. To oversee the process, a lead agency should be designated. This agency should ensure efforts are coordinated and that they are completed on time. In addition, the lead agency should be responsible for solving any difficulties or amending the designated tasks to facilitate the successful completion of the planning process.

Portland's Centre City Plan provides a useful example of coordinated planning efforts. It specifically outlines proposals for action and divides them into projects and

programs for implementation. Each proposal has a timing sequence of five year intervals including immediate actions and identifies the possible implementing agencies. Further, it identifies the Bureau of Planning as the lead agency to oversee the entire process. Organizing a public space plan in such a fashion provides not only structure to the process but it brings the necessary agencies together and sets a time frame for the completion of the plan.

Altogether, these lessons provide a practical framework to direct the approach, content and presentation of a public space plan and the method through which it may be achieved. In combination with the planning framework developed in Chapter Two, these practical guiding principles are used in Chapter Four to direct the development of a comprehensive strategy for Downtown New Westminster. This strategy outlines a step-by-step process of how to generate a public space plan for the Downtown neighbourhood.

## CHAPTER FOUR: A STRATEGY FOR DOWNTOWN NEW WESTMINSTER

Downtown New Westminster is a very distinct urban centre. As the economic and cultural heart of New Westminster, it attracts a variety of workers, residents and tourists to its environs. Coupled with its attractive natural setting, historic character and compact nature, the Downtown has positioned itself as an important centre of urban activities both within New Westminster and the lower mainland. But what makes any downtown an attractive and interesting place to be is the public life it generates. As people go about their daily activities, they bring a certain excitement and vibrant atmosphere to the neighbourhood. This life is expressed primarily in the public spaces existing throughout the area. Without these public spaces and the people generating activities that a downtown possesses, public life and the exciting atmosphere it presents would not exist. A successful public realm is fundamental to the existence of a vibrant and active downtown centre.

The creation of a successful public realm in Downtown New Westminster depends upon the implementation of a comprehensive public space plan. This plan will outline the essential ingredients that make a public realm successful and a method with which to achieve them. To initiate a public space planning process, a number of fundamental requirements are necessary. It requires the careful coordination of various interests including residents, workers, property owners, visitors, in addition to the Planning, Parks and Recreation, Engineering, Police and Fire Departments, and the Downtown Business Improvement Association (BIA).

It involves working with existing public spaces, the physical and process-oriented opportunities and constraints as well as existing regulations and policies which influence the development of public spaces within the Downtown. Similarly, it requires the use of a public space planning framework and strategy designed specifically for the Downtown neighbourhood and the regulatory bodies which

govern it. Most importantly, it requires the commitment of the City to initiate and support the creation of a public space plan for Downtown New Westminster. Without this support, a successful public realm will fail to materialize.

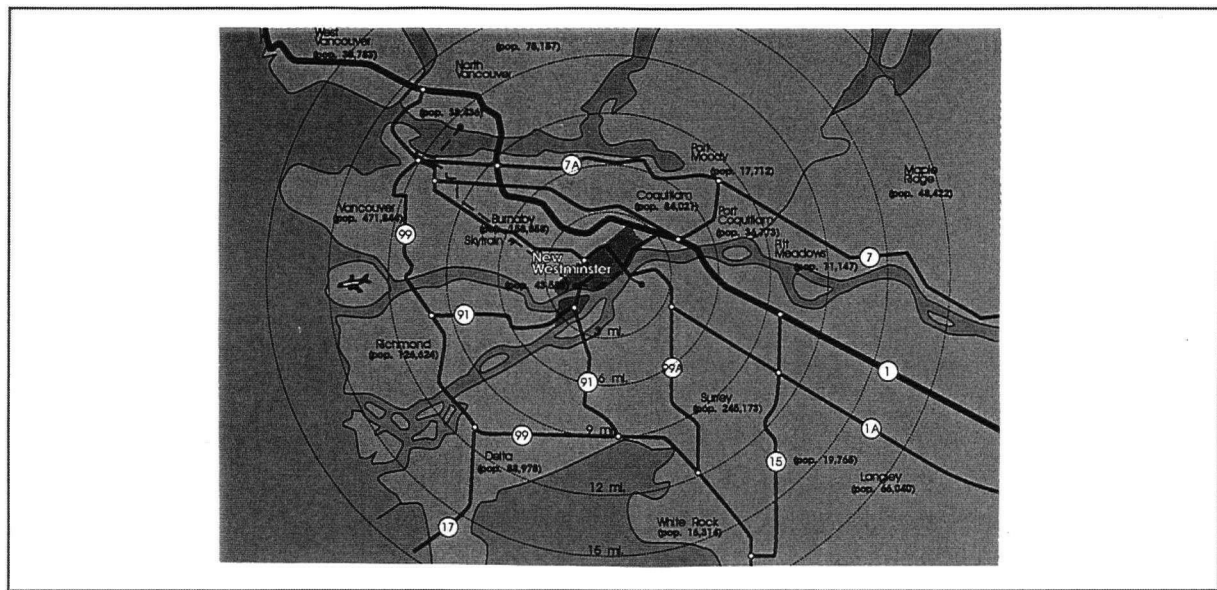
This chapter is the prelude to the creation of a public space plan for the Downtown New Westminster. It begins with an overview of New Westminster and the Downtown neighbourhood, including a review of existing and planned public spaces for the Downtown. This is followed by an examination of the policies and regulations which direct public space planning as well as the process involved. Then the strategic steps necessary to direct the formulation of a public space plan for the Downtown neighbourhood are outlined. The strategy utilizes a flow chart format which identifies the specific steps, the agencies responsible and how each step relates to the public space plan as a whole. The public space planning framework devised in Chapter Two, the guiding principles developed in Chapter Three and the overview of the Downtown neighbourhood and its guiding policies and regulations form the foundation from which the strategy is developed.

#### **4.1. New Westminster**

New Westminster was the first municipality incorporated in the Western provinces and the first capital city of British Columbia. It is situated in the centre of the Greater Vancouver Regional District on a hillside overlooking the Fraser River. Bounded by the municipalities of Burnaby, Coquitlam, Surrey, Richmond and the Fraser River, New Westminster is easily accessible by road, SkyTrain, water and rail.



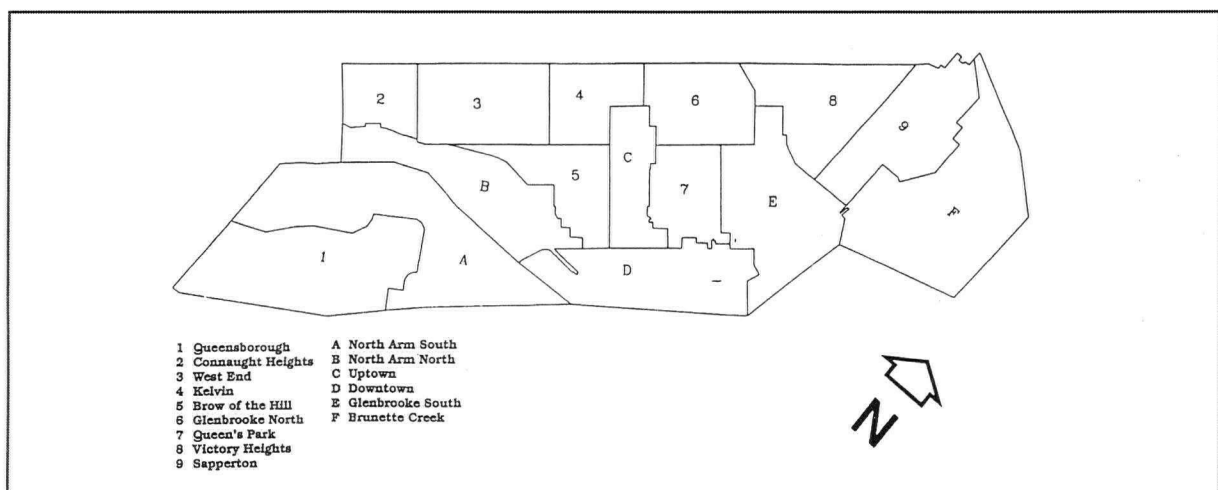
**Figure 4.1.**  
**New Westminster, B.C. Centre of the GVRD**



*Source: New Westminster Planning Department*

With a population of 48, 700 in 1997 and a size of only 5.9 square miles excluding waterbodies, New Westminster is small in size compared to other GVRD municipalities (New Westminster Planning Department). It's area is divided into fifteen neighbourhoods which are identified below.

**Figure 4.2.**  
**Neighbourhoods of New Westminster**

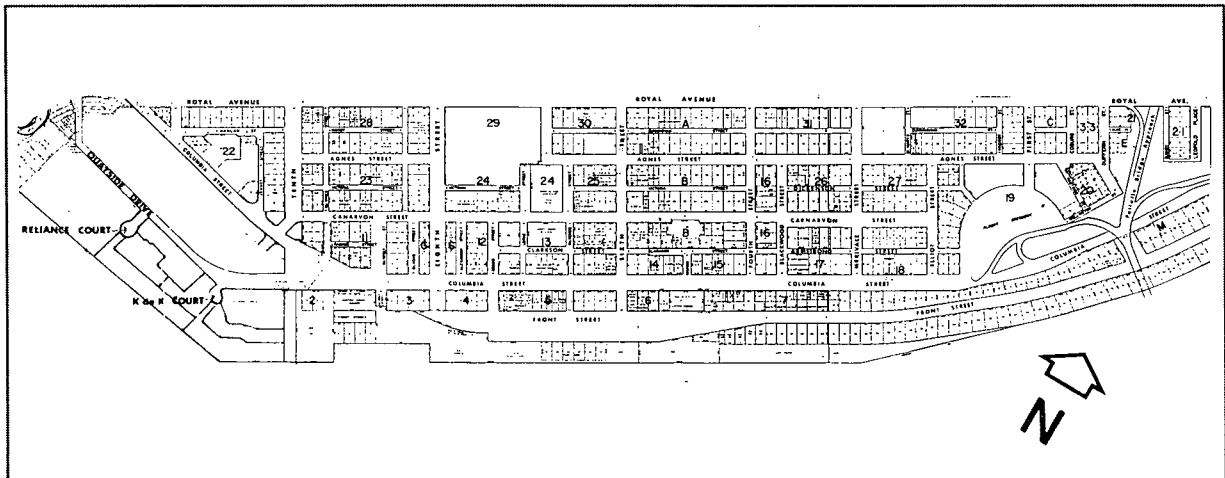


*Source: New Westminster Planning Department*

#### 4.2. The Downtown

The Downtown neighbourhood is the oldest part of New Westminster. Its numerous well preserved heritage buildings and attractive streetscapes lend a unique historical flavour to the area. Bounded by Royal Avenue to the North, Twelfth Street to the West, the Fraser River to the South and McBride Boulevard to the East, Downtown is the economic and cultural heart of New Westminster.

**Figure 4.3.**  
**Downtown New Westminster**



*Source: New Westminster Planning Department*

The Downtown is zoned to accommodate a variety of commercial, institutional and multi-family residential uses. It consists of a strong financial and legal sector, complemented by several major banking institutions, the Provincial Law Courts and the Land Title Office, a sound retail, personal and business service component in close proximity to Columbia Street and the well-known Westminster Quay waterfront development which includes a public market, an office complex, a major hotel and a number of high and low density residential developments. In terms of institutional establishments, Downtown includes within its borders Douglas College, the City's educational centre, several government facilities and numerous clubs, halls and

community buildings, the stage of a number of New Westminster's cultural activities. To support such facilities, Downtown accommodates a substantial residential population in both low rise and high rise housing forms.

According to area population statistics, the Downtown is the third most populated area in the City. When the total number of units permitted in each area is considered, the Downtown rises to second place, with a total capacity of 12,297 units. If an average household size of 1.4 persons is anticipated, Downtown could accommodate a future population of 17,142 persons.

**Table 4.1.**  
**New Westminster Zoning and Population Capacity by Area (1995)**

Area	Population (1991)	% of New Westminster Population (1991)	Housing Unit Capacity	Population Capacity
Downtown	5,660	13	12,297	17,142
Uptown	18,460	42	17,771	30,009
Sapperton	9,730	22	5,755	11,738
West End	5,525	13	3,328	7,836
Queensborough	1,940	4	2,307	4,774
New Westminster	43,585	-	41,508	71,570

*Source: New Westminster Planning Department*

As a community, the Downtown possesses a strong urban presence. Its human-scaled buildings and compact nature focus activity within a relatively small space. Its close relationship to the river, long established history and resulting heritage character generate a distinct village-like atmosphere. For its inhabitants, the Downtown is an attractive and distinct working and residential neighbourhood. For its visitors, the Downtown is an interesting destination with a wide selection of sites and specialty shops to visit. The connective tissue which binds Downtown destinations and activities together is its public realm.

#### 4.3. Downtown Public Spaces

The Downtown neighbourhood possesses a diverse collection of public spaces. These spaces have been developed through the beautification of existing City lands and the acquisition of new lands. While the majority of these spaces follow the City's original subdivision pattern, new innovative opportunities to add to the public realm have arisen over the years. For instance, the Waterfront Esplanade was created from land previously zoned industrial. In addition, by owning its own streets, New Westminster has been able to convert underutilized streets into usable public space with relative ease.

While several public spaces are in the planning stage, most already exist. The collection of public spaces in the Downtown is comprised of a centrally located city plaza, a city square, pocket parks, right-of-way triangles, indoor parks, public ways, an esplanade, playground space, and transit entry spaces (see Table 4.2.).

**Table 4.2.**  
**Downtown New Westminster's Public Space Chronology (1996)**

##### *Existing Public Spaces*

<b>OUTDOOR:</b>			
<i>Public Space</i>	<i>Size</i>	<i>Use</i>	<i>Year Established</i>
Street Plan	-	public ways	1860
Albert Crescent	4.50 acres	residual space	1889 (partially expropriated in 1955)
Columbia Street Beautification	-	widened sidewalk	1911, 1965, 1986, 1989, 1994
Irving House	-	snippet	-
Holy Trinity Cathedral Walkway	-	pedestrian link	1950
St. Mary's Hospital	-	small entryway	1956
Sea Deck	-	view terrace	1976
Begbie Square	19,707 s.f.	city square	1981
Douglas College Plaza	-	large entry plaza	1982
Hyack Square	13,083 s.f.	city plaza	1986
Waterfront Esplanade	1.5 miles in length	esplanade	1986
Quayside Park	-	playground space	1986
SkyTrain Spaces	-	transit entry spaces	1986

Table 4.2. (cont.)

Eleventh Street Triangle	-	right-of-way triangle	-
Quayside Triangle	-	right-of-way triangle	1986
Clarkson Underpass	-	pedestrian link	1989
410 Carnarvon (Carnarvan Place)	-	garden plaza	1990
328 Armstrong (Highbourne Tower)	-	view terrace	1993
838/828 Agnes and 55 Tenth Street	-	urban garden/view terrace	1993
Columbia Street Pocket Park	-	pocket park	1994
Mackenzie Steps	-	pedestrian link	1995
<b>INDOOR:</b>			
Douglas College	-	indoor park	1982
Westminster Quay Public Market	-	indoor galleria	1986
Royal City Centre	-	indoor galleria	1992

#### *Planned Public Spaces*

Emmanuel Pentecostal Church	-	pocket park	1997
Lorne Street	-	plaza and pedestrian link	1997
Westminster Pier	-	linear walkway	1998+
Larco Site	-	linear walkway and garden plazas	1998+

*Source: New Westminster Planning Department*

## **4.4. Public Space Planning**

Public space planning in the Downtown is influenced by both regional and local planning efforts. While the role of the GVRD is important to the process of planning the public realm, the balance of power lies at the local government level. The approaches, policies and regulations which direct the creation and enhancement of public space in the Downtown are described below.

### **4.4.1. Regional Level**

At the Regional level, the GVRD takes on an advisory approach to the development and enhancement of public space. Their guiding document, the Livable Region Strategic Plan, outlines a series of Green Zone policies which identify and protect the

most valued green space in the region. An integral component of the Green Zone concept is the creation of a park and outdoor recreation system. This system is intended to "enhance the character of the . . . outdoor recreation components, while providing valuable connections between sites to allow people and wildlife to move more freely across the region" (GVRD Strategic Planning Department 1993, 31). Although none of the GVRD's Green Zone areas are situated in the Downtown, the Green Zone concept does place special emphasis on the Fraser River recreation/wildlife potential and calls for an increase in public access to the River and its shoreline (ibid., 32).

#### **4.4.2. Local Level**

At the local level, the municipal government plays a direct role in planning the public realm. Public space planning efforts in the Downtown are governed by a series of regulatory requirements, guiding policies as well as a mandatory development negotiation process.

##### **4.4.2.1. Regulatory Requirements**

The regulatory requirements for planning the public realm are dictated in New Westminster's Zoning Bylaw and the Subdivision Control Bylaw. While the Zoning Bylaw requirements focus on the creation of public space in residential developments, the Subdivision Control Bylaw deals with the provision of street trees and their placement.

#### **4.4.2.1.1. Zoning Bylaw**

In terms of public space creation, the Zoning Bylaw requires that:

For Apartments, row houses, terraces and townhouses, usable open space shall be provided of not less than 10% of the gross residential floor area and, in any event, not less than 25% of the site area and,

usable open space shall mean an unobstructed area or areas, accessible in whole or in part to all occupants of the building it serves, having no dimension of less than 10 feet and being available for safe and convenient use for recreation or leisure activities. This usable open space may be on roofs or structures or at grade and may include private balconies or patios but shall not include off-street parking areas, off-street loading areas or service driveways (New Westminster Planning Department (1940), 1992).

A setback requirement for all multi-family residential properties in the Downtown also contributes to the creation of public space. It requires that "a side setback of not less than 15 feet for buildings that are over 40 feet in height, with an additional 15% of that portion of the building over 40 feet in height" be provided (New Westminster Planning Department (1940), 1992). Although these public spaces are relatively small and are privately owned, they contribute to the overall public space network within the City.

#### **4.4.2.1.2. Subdivision Control Bylaw**

The requirements of the Subdivision Control Bylaw apply to all lands being subdivided and developed within the Downtown. The Bylaw requires developers to install trees along the property line adjacent to the street at intervals of 7.5 metres to 9.0 metres depending upon the location (New Westminster Planning Department 1988, 5). It also requires decorative sidewalks in front of commercial buildings.

#### **4.4.2.2. Guiding Policies**

The policies which direct the creation and enhancement of public spaces within the Downtown are found in the Downtown New Westminster Community Plan, the Heritage Area Revitalization Program guidelines, and the Downtown New Westminster Action Plan. Together, their primary role is to guide public space planning efforts in order to achieve the City's desired vision of the Downtown.

##### **4.4.2.2.1. Community Plan for Downtown New Westminster**

Adopted in 1987, the Community Plan for Downtown New Westminster provides a framework for revitalizing the Downtown and creating a regional town centre. The Plan objectives which relate to public space planning in the Downtown include the following:

- develop and improve the convenience and safety of the area for pedestrians.
- provide development on a human scale.
- encourage a diversity of activities for a wide range of age groups during the day and evening of both business days and holidays.
- develop public access to the Fraser River waterfront at various points including a public esplanade along the full length of the waterfront within the area.
- encourage a wide range of complementary uses within the area including residential, retail, institutional, general office, educational, entertainment and service facilities.
- enhance the environment by assuring proper relationships between buildings and open spaces; encouraging creative, innovative and unique architecture and providing extensive landscaping and imaginative street and open space treatments (New Westminster Planning Department 1987).

In terms of pedestrian movement, the Plan promotes the creation of a catalyst node midway between the two SkyTrain Stations and a pedestrian link along McKenzie



Street to reinforce it. The purpose of this pedestrian route is to link Douglas College, Begbie Court and Columbia Street into a vibrant activity centre.

#### **4.4.2.2.2. The Columbia Street Heritage Area Revitalization Program (HARP) Guidelines**

The HARP guidelines were originally created as part of a cost sharing program designed to upgrade twenty-seven historic buildings in the Downtown. They are a detailed set of design guidelines which focus primarily on the restoration of facades with a heritage-style motif. Despite the early demise of the program, the City still encourages the restoration and refurbishment of historic buildings according to the HARP guidelines.

#### **4.4.2.2.3. The Downtown New Westminster Action Plan**

The Downtown Action Plan was the result of an extensive public planning process designed to form a collective vision for the Downtown and a plan of action to achieve it. In terms of public space planning, the Plan promotes the creation of an active and vibrant public realm. The provision of a safe and interesting pedestrian environment as well as linking the waterfront and other Downtown destinations are key components of the Plan. The specific goals and objectives regarding public space planning in the Downtown are outlined below.

**Table 4.3.**  
**Downtown Action Plan: Public Space Planning Goals and Objectives**

<b>Establish an identifiable theme for the Downtown</b> <ul style="list-style-type: none"> <li>• Develop a theme which builds on the character and history of the Downtown</li> <li>• Use public art to enhance the appearance of the Downtown and strengthen visual links between the Waterfront and Columbia Street</li> </ul>
<b>Create a Downtown that is the economic hub of the City</b> <ul style="list-style-type: none"> <li>• Build on existing economic strengths such as the close proximity to the Fraser River, SkyTrain stations and central geographic location</li> </ul>
<b>Promote and enhance cultural activities and events</b> <ul style="list-style-type: none"> <li>• Encourage festive activities to create a more active and vibrant street life</li> <li>• Animate commercial frontage to be an extension of commerce and people-oriented activities</li> <li>• Develop an attractive streetfront signage scheme</li> <li>• Preserve and enhance heritage features and showcase its history</li> </ul>
<b>Reinforce the Downtown's sense of place</b> <ul style="list-style-type: none"> <li>• Introduce green and open space to encourage people-oriented activities</li> <li>• Preserve the waterfront and maintain direct public access</li> </ul>
<b>Establish a comprehensive pedestrian and bicycle pathway system</b> <ul style="list-style-type: none"> <li>• Connect the waterfront and the Downtown to one another and other parts of the City</li> <li>• Upgrade the Parkade to accommodate a variety of uses (including Sea Deck beautification)</li> </ul>
<b>Develop a safer transportation network using traffic calming techniques and other improvements</b> <ul style="list-style-type: none"> <li>• Encourage local vehicular traffic and pedestrian movement in the Downtown</li> </ul>
<b>Minimize the impact of the railway</b> <ul style="list-style-type: none"> <li>• Minimize noise, pollution and visual impacts</li> </ul>
<b>Create a people friendly and safe downtown with a vibrant street life</b> <ul style="list-style-type: none"> <li>• Downtown businesses contribute to a people friendly and family-oriented atmosphere</li> <li>• Maintain Downtown streets, walkways and properties</li> <li>• Develop crime prevention techniques for the Downtown</li> </ul>

*Source: New Westminster Planning Department*

#### **4.4.2.3. Development Negotiation Process**

While the regulatory requirements and guiding policies are jointly coordinated by the Planning Department, the Parks and Recreation Department, Engineering Department and Police Department, the Planning Department effectively acts as the lead agency. It directs the creation and enhancement of the public realm primarily through the development negotiation process which includes a Design Review Panel and an Advisory Planning Committee. Through this process, the Planning

Department uses the regulatory requirements and guiding policies in addition to examples of other good public space projects in the City and elsewhere to influence the creation an interesting and vibrant public realm in the Downtown. The issue of jurisdictional control of the site in question is also addressed at this stage of the process. Since the public realm is built primarily out of developer contributions, the Planning Department strives to coordinate and build on each contribution (Pynenburg 1996).

#### **4.5. Strategic Steps**

In order to generate a public space plan for Downtown New Westminster, a strategy of how it will actually be accomplished is required. The following strategy outlines each consecutive step of the process and the tasks involved. Further, it identifies the agencies responsible for carrying out the specific tasks and their relationship to each other and the process as a whole. Since the proposed project requires a substantial amount of work, the strategy recommends that a consultant be hired to work directly with the primary agency, the Planning Department. The consultant would lead the process, coordinate efforts amongst the various agencies and produce the main document in consultation with the interagency task force. The following strategy is designed to satisfy this requirement:

**Table 4.4. Strategy to Guide the Creation of a Public Space Plan for Downtown New Westminster**

STRATEGIC STEPS	CONSULTANT (work closely with primary agency)	PLANNING (primary agency)	TASK FORCE (Planning, Parks and Recreation, Engineering, Police/Fire, BIA, Politicians)	PUBLIC
Step 1: Obtain the Support of the City to Conduct a Comprehensive Public Space Plan for Downtown New Westminster	<ul style="list-style-type: none"> <li>-present proposal to the Planning Department for review and support</li> <li>-present proposal to other agencies for review and support</li> <li>-obtain feedback from all agencies and revise proposal</li> <li>-prepare a council report outlining the need for a public space plan and present proposal</li> </ul>	Review report, provide feedback and present to Council	Review report and provide feedback Obtain political support	-
Step 2: Form an Interagency Task Force	<ul style="list-style-type: none"> <li>-present and obtain feedback and support for planning framework, criteria and strategy</li> <li>-determine interdepartmental/agency opportunities and constraints</li> <li>-identify possible implementation structure (who will do what)</li> <li>-analyze information collected and revise planning framework, criteria and strategy accordingly</li> </ul>	Review planning framework, criteria and strategy, and provide feedback	Review planning framework, criteria and strategy, and provide feedback	-
Step 3: Review Policies and Regulations Which Affect Public Space Planning	<ul style="list-style-type: none"> <li>-add any new information to existing data</li> <li>-identify regulatory opportunities and constraints</li> </ul>	Provide policy and regulation information	Provide policy and regulation information	-
Step 4: Update Public Space Inventory	<ul style="list-style-type: none"> <li>-add new information to inventory including public spaces within New Westminster and in municipalities abutting its border</li> <li>-coordinate opportunities of potential/planned developments</li> </ul>	Indicate new, potential and planned developments, public spaces and street beautification efforts	Indicate new, potential and planned developments, public spaces and street beautification efforts	-

Table 4.4. (cont.)

<b>Step 5: Conduct key-informant Interviews Using Planning Framework</b>	<ul style="list-style-type: none"> <li>-determine primary issues</li> <li>-identify effect on public space planning</li> <li>-identify possible solutions</li> </ul>	Interview City Planner	Interview Parks and Recreation Director and Manager, Design Engineer, Safety Coordinator, Fire Chief, Executive Director, Politicians.	-
<b>Step 6: Perform a Site Assessment</b>	<ul style="list-style-type: none"> <li>-examine the natural, built and social environment</li> <li>-identify potential opportunities and constraints</li> <li>-identify high priority sites/movement corridors</li> <li>-identify character areas</li> </ul>	Provide planning and statistical information	Provide information on ecology, movement, crime, celebrations, street entertainment and other commercial/recreational activities	-
<b>Step 7: Translate Select Ideas Generated from the Policies, Regulations, Interviews and Site Assessment into Design Possibilities</b>	-illustrate possible design scenarios	Hire a designer to illustrate possible design scenarios Analyze design scenarios and comment	-	-
<b>Step 8: Identify Possible Sites and Devise a Potential Public Space Network for the Downtown</b>	<ul style="list-style-type: none"> <li>-identify deficiency areas</li> <li>-identify publicly owned sites, residual land parcels, those with redevelopment potential and sites for outright purchase and development by the City</li> <li>-identify potential public space opportunities</li> <li>-link them together to form a neighbourhood-wide network of public spaces</li> <li>-illustrate network</li> </ul>	Provide information on publicly-owned sites, residual land parcels, those with redevelopment potential and sites for outright purchase and development by the City Review public space opportunities and network and provide feedback	Provide information on publicly-owned sites, residual land parcels, those with redevelopment potential and sites for outright purchase and development by the City	-
<b>Step 9: Review Project with Task Force</b>	-review work to date and obtain feedback	Review work to date and comment	Review work to date and comment	-

Table 4.4. (cont.)

<b>Step 10: Perform Post-Occupancy Evaluations on Existing Public Spaces</b>	<ul style="list-style-type: none"> <li>- generate brief public space survey which determines if user needs are being satisfied and what changes are necessary to satisfy them</li> <li>- tabulate survey results and illustrate changes</li> </ul>	Review public space survey and aid in its implementation Review survey results and illustrations	Review public space survey and aid in its implementation Review survey results and illustrations	Complete brief site survey
<b>Step 11: Devise a General Framework of Qualitative Public Space Planning Standards</b>	<ul style="list-style-type: none"> <li>- using planning framework, key informant interviews, site assessment and post-occupancy studies, develop a set of qualitative objectives and policies for the neighbourhood and character area levels</li> <li>- develop qualitative standards for existing and potential public space sites</li> <li>- illustrate key standards</li> </ul>	Review framework and illustrations	-	-
<b>Step 12: Devise Quantitative Standards for Structural Elements of the Public Realm</b>	<ul style="list-style-type: none"> <li>- using planning framework, key informant interviews, site assessment and post-occupancy studies, develop a set of quantitative standards for the neighbourhood and character areas</li> <li>- illustrate key standards</li> </ul>	Review standards and illustrations	-	-
<b>Step 13: Review Project With Task Force</b>	<ul style="list-style-type: none"> <li>- present work to date and obtain comments</li> </ul>	Review work to date and provide feedback	Review work to date and provide feedback	-
<b>Step 14: Devise an Implementation Strategy</b>	<ul style="list-style-type: none"> <li>- identify tasks</li> <li>- determine how best to accomplish them (using what implementation techniques?)</li> <li>- identify possibilities for public/private partnerships</li> <li>- identify which agencies can best accomplish the various tasks</li> <li>- assign tasks to specific agencies</li> <li>- create a schedule of implementation</li> </ul>	Review implementation strategy	-	-

Table 4.4. (cont.)

<b>Step 15: Create a Monitoring Strategy</b>	-identify what needs to be monitored -determine monitoring time frame -identify monitoring agency/ies -coordinate an ongoing task force to guide and monitor plan implementation	Review monitoring strategy	-	-
<b>Step 16: Review Project With Task Force</b>	-obtain comments and revise document	Review project and comment	Review project and comment	-
<b>Step 17: Write Public Space Plan and Review With Task Force</b>	-write public space plan and review with task force -make necessary revisions	Review public space plan and comment	Review public space plan and comment	-
<b>Step 18: Obtain Council Approval</b>	-prepare report to Council presenting the plan	Present to Council	Approve presentation to Council	-
<b>Step 19: Implement Public Space Plan</b>	-set implementation in motion	Oversee implementation Provide implementation support	Provide implementation support	-
<b>Step 20: Review and Evaluate Plan</b>	-	Review effectiveness of plan after designated time period Evaluate plan and revise where necessary	Review effectiveness of plan after designated time period Evaluate plan and provide comments	-

Source: Author

#### 4.6. Conclusion

Overall, the creation of a successful public realm in Downtown New Westminster is dependent upon the existence of a comprehensive public space planning strategy and its implementation. The strategy presented in this chapter is derived from three primary sources. It utilizes the public space planning framework in Chapter Two as a basis for determining the primary issues and possible design schemes. Similarly, the framework defines a useful planning process, and implementation, monitoring and evaluating scheme which forms the foundation of the strategy itself.

The practical lessons learned in Chapter Three are used to refine the progression of steps necessary to develop a public space plan as well as define its integral components. Finally, the review of the Downtown, its public spaces and the regulations, policies and negotiation process which govern it provide the context in which the strategy is placed. In addition, it represents the basis of neighbourhood-specific information upon which the strategy is built. As a whole, the strategy represents a useful method to guide the creation of a public space plan and, in turn, a successful public realm. The following chapter reviews the main ideas presented in Chapters Two, Three and Four and outlines the implications of developing and implementing a public space plan for the Downtown neighbourhood.



## **CHAPTER FIVE: CONCLUSIONS**

Planning a successful public realm is, indeed, a challenging task. But with the appropriate tools and a strategic method with which to implement them, Downtown New Westminster has the potential of becoming a dynamic centre of public life. The purpose of this chapter is to summarize the findings of this thesis and emphasize the importance of generating a public space plan for the Downtown neighbourhood. It begins with a review of the public space planning framework presented in Chapter Two, the practical lessons learned in Chapter Three and the planning strategy provided in Chapter Four. This is followed by a discussion of the implications a public space plan would have on the Downtown neighbourhood. Finally, the significance of these findings and directions for further research are presented.

### **5.1. Public Space Planning Framework**

A comprehensive guiding framework is integral to the success of any public space planning process. Chapter Two presents a public space planning framework which is comprised of three primary components - a description of the most significant human needs and general criteria with which to satisfy them; a systems/ecological planning approach; and an implementation and monitoring strategy. These components are supplemented by a detailed typology of public spaces. Together, they form a comprehensive public space planning framework which may be used to guide the creation of a successful public realm in Downtown New Westminster.

Since the fundamental objective of public space planning efforts today is to satisfy the needs of public space users, Chapter Two provides a detailed outline of the most significant user needs and a variety of methods with which to achieve them. The human needs identified include community needs, democratic needs, physical needs, psychological needs, ecological needs, functional needs and economic needs. If a

majority of these needs are met, it is likely that the public realm will be a successful one.

Community needs address the level of the site and neighbourhood as a whole. They focus mainly on the provision, use and design of public spaces. At the same time, community needs emphasize the social aspect of public spaces as well as their integration into the local and regional context. Democratic needs, on the other hand, are those needs which promote equality of use amongst all public space users. They address issues of access and use, in addition to user control and choice of public spaces in the urban environment.

The physical needs of public space users focus on the physical components which either add or detract from the public space experience. They emphasize the need for physical and visual access, a variety of amenities including appropriate seating opportunities, sunlight enhancement, wind protection and pedestrian safety.

Complementing the physical component are the psychological needs of public space users. These needs are addressed on a more perceptual and experiential level and determine the type of connection users make between the site, themselves and the world around them. Psychological needs emphasize positive place meanings, place significance, a sense of longevity, comfort, relaxation and a stimulating learning environment.

Ecological needs address the natural elements of life which support human existence, continuity and comfort. They emphasize the importance and use of public spaces in terms of climate control, nature conservation, biodiversity and community health.

Functional needs, on the other hand, focus on the daily management of public spaces. They promote the provision of active programming, appropriate maintenance levels, food/vending outlets and appropriate signage schemes. Finally, economic needs are

those needs which contribute to the economic improvement of the community. They focus on commercial vitality, the enhancement of property values and rental rates, the provision of local employment and economic responsibility.

The presentation of a systems/ecological planning approach is the second component of the public space planning framework. This approach identifies a usable foundation upon which a strategy to create a public space plan may be developed. Its strength lies in the logical progression as well as inclusion of key steps from identifying potential public space users and their needs to the development, implementation and evaluation of the proposed plan.

The implementation and monitoring strategy is the final component of the public space planning framework. It provides a variety of methods which may be used to achieve a cohesive network of public spaces throughout a downtown core. In particular, the strategy stresses the importance of monitoring, evaluating and revising a public space plan to meet the needs and expectations of public space users, the ultimate judges of a public space network. As a whole, the human needs criteria, the systems/ecological planning approach, and the implementation and monitoring strategy presented in Chapter Two are essential to the creation of a sound public space plan and, in turn, a successful public realm for Downtown New Westminster.

## **5.2. Public Space Planning Practice**

Learning from the experience of comparable urban centres is crucial to the process of public space planning. Chapter Three presents a detailed analysis of the public space planning practices of San Francisco, Portland, and Victoria. From this analysis, a number of valuable lessons emerged which may be used to enhance the potential success of public space planning efforts in Downtown New Westminster. The lessons

focus on the approach, content and presentation a public space plan should take if it is to adequately address the needs of public space users, makers and facilitators, and result in the development of a thriving public realm.

Public space plans should utilize a more holistic approach in planning the public realm. They should first be planned in conjunction with other influential components of a downtown core such as social or economic development in order to reflect their multidimensional nature. They should not be planned in isolation. Similarly, open space and streetscape space components of a public space plan should be addressed as interdependent parts of the larger public realm, not as separate entities.

Using a holistic approach also entails being comprehensive and consistent in public space planning efforts. The broad range of issues integral to the success of the public realm such as human needs and planning process requirements should be appropriately addressed at each stage of the process. At the same time, the planning objectives, policies and performance standards developed should be consistently linked with one another to provide clear direction for public space planning initiatives. By adhering to these principles, a more encompassing public space planning framework and strategy which is easier to direct and implement may be produced.

Public space plans along with their directives should be specific yet flexible in their approach. To address the need for flexibility, public space plans should provide a general framework of qualitative directives which includes a combination of general neighbourhood-wide objectives, character area policies and qualitative site-specific performance standards. Together, their descriptive nature should guide the progressive development of a successful public realm while allowing a certain

degree of creative interpretation to take place. At the same time, these qualitative directives should be complemented by quantitative performance standards for the structural elements of the public right-of-way. Since the public right-of-way is the backbone upon which the public realm is constructed, a more standard approach to planning its character should be used. The flexibility in the use of quantitative directives lies in the standards designed for the street or character area levels.

To achieve a degree of specificity, public space planning initiatives should be site-specific in nature. Each potential site should be governed by performance standards which are designed to respond to the intricacies of that particular site. Similarly, more detailed standards should be provided to satisfy those needs which are either new to the practice of public space planning or are more challenging to achieve. If some uncertainty arises with respect to a particular directive, it should be addressed in the essential development discussion process. Otherwise, designing a public space plan with elements of both specificity and flexibility should provide more certainty in achieving the desired results while encouraging the creative interpretation of the public space directives presented.

Keeping public space planning efforts active within the downtown core is another sign of a successful public space plan. To accomplish this, a combination of private sector ad hoc and public sector planned incremental development should be employed. This will ensure that the public realm is always being planned for, even in economic downturns.

Public space plans should also be easy to interpret and act upon. The document itself should be easily understood by its potential users in terms of the presentation and language style used. At the same time, coordinating agencies should be given a set of tasks and a time frame in which to complete them. To oversee the creation and

implementation of a public space plan, a lead agency should be designated. If these principles are followed, the ease and directness of use should set the stage for the creation of a public realm which people use and enjoy.

### **5.3. Public Space Planning Strategy**

Devising a strategy to create a public space plan is essential to the process of developing a successful public realm. Chapter Four presents a extensive planning strategy which is designed to guide the creation of a public space plan for Downtown New Westminster. The chapter is supplemented by brief overview of the Downtown neighbourhood and the regulations, policies and negotiation process which guide public space planning efforts. The strategy incorporates the public space planning framework generated in Chapter Two, the useful lessons learned from the case study analysis in Chapter Three and the review of the Downtown and its public space planning efforts to date. Consequently, the strategy provides a useful approach to planning the public realm which addresses the most significant issues, follows a logical progression of steps, organizes the product in a usable fashion and is designed specifically for the Downtown neighbourhood.

The strategy is comprised of twenty detailed step which are to be carried out by a planning consultant in conjunction with an interagency task force. The interagency task force includes representatives from the Planning Department (lead agency), the Parks and Recreation Department, Engineering Department, Police Services, Fire Department, the BIA and the City Council. Public input is gained through the products of previous public planning consultation processes as well as a brief site survey of public space users.

The first step of the process is the most significant - obtaining City support to conduct a comprehensive public space plan for Downtown New Westminster. Without this initial support, a successful public realm will fail to materialize. Once support is obtained, Step Two is to form the interagency task force, and review and obtain support for the proposed planning framework, criteria and strategy. With a task force in place and its support apparent, the regulations and policies guiding public space planning as well as the public space inventory should be reviewed and updated.

Step Five involves conducting key-informant interviews with each member of the task force to define the primary issues and possible solutions. Step Six entails conducting a site assessment of the Downtown neighbourhood to identify potential opportunities and constraints. At this point, select ideas generated from the policies, regulations, key-informant interviews and the site assessment should be translated into possible design scenarios. Then potential sites should be identified and a possible public space network for the Downtown should be developed. Once these steps are completed, the work generated up to this point should be reviewed and commented on by the task force.

Step Eleven is to devise a general framework of qualitative public space planning standards and to illustrate the key ideas. Step Twelve is to develop a series of quantitative standards for the structural elements of the public realm and to illustrate them as well. At this point, the qualitative and quantitative standards, and their relationship to previous work should be reviewed and commented on by the task force. Step Fourteen is to devise an implementation strategy which identifies the tasks necessary to achieve the directives of the plan, the agencies responsible for them, and a time frame in which to complete them. Step Fifteen involves creating a

strategy to monitor the tasks identified and ensure they are completed on time and by the appropriate agency. Then the project should be reviewed and commented on by the task force.

Once the essential ingredients of the plan are combined into a cohesive document, it should then be presented to the task force for final review and comment, and the appropriate revisions should be made. Step Eighteen is to obtain approval by the City Council to set the plan in motion. Once approval is granted, Step Nineteen involves implementing the public space plan. The final step of the strategy is to review and evaluate the plan, and make the necessary revisions to it. If the plan is implemented according to the multi-faceted strategy proposed here, in time, a public realm which satisfies the needs of its users may be realized.

#### **5.4. Implications for Downtown New Westminster**

Downtown New Westminster has the potential to become a popular destination for people throughout the region. Its unique heritage legacy, strong association to the Fraser River, compact nature and diverse population and land use base, together, generate an attractive village-like atmosphere in the heart of the lower mainland. Although the existing public realm is plagued by problems of undersupply, underuse and a lack of identity and linkages to the larger community, it does have the potential to become a vibrant and active centre of public life.

In the years to come, Downtown New Westminster will experience a tremendous influx of residents, workers and visitors. To enhance existing conditions and accommodate new expressions of public life, the Downtown neighbourhood requires a comprehensive public space plan. The public space plan should address the needs of public space users and utilize the potential opportunities to direct the creation of a



vibrant, people-oriented public realm. The success of the public realm is fundamental to the existence of a vibrant downtown centre.

By applying the planning framework, the practical lessons learned and the strategy presented in this thesis, a practical and usable public space plan may be developed for the Downtown. The implications of executing such a plan are far reaching. In terms of the public realm, a public space plan has the potential to create a vibrant people-oriented centre where public life is "accommodated, supported and celebrated" (Watson 1990, 1). It may generate new spaces, enhance existing spaces and bind them together into a cohesive network which connects Downtown destinations to one another and the surrounding community.

A public space plan may bring the Downtown one step closer to satisfying the community, democratic, physical, psychological, ecological, functional and economic needs of public space users. It may introduce a greater variety and choice of public spaces within a reasonable walking distance. It may attract a diversity of new activities and uses to the Downtown which may enhance the local economy. Not only may pedestrian safety be improved, but a public space plan may mitigate the negative effects of a vehicle-oriented downtown. In addition, it may enhance natural processes, nature conservation and community health.

At the same time, a public space plan may set the stage for more meaningful and memorable experiences to occur. This may instill a new sense of meaning, significance and community pride in public space users and the community as a whole. Similarly, it may better inform people of existing public spaces in the Downtown and how to use them. But most importantly, a public space plan has the potential of attracting new people to experience the energy of a successful public

realm and, at the same time, to support the social, economic and cultural foundation of the Downtown neighbourhood.

In terms of the planning process, a public space plan may provide a logical, systematic and well-organized method to achieve the public space objectives of the community. This method may provide the means to coordinate various government and non-governmental agencies to play their part in enhancing the public realm.

At the same time, it may present new opportunities to generate creative solutions to address such challenges as an expensive land market, high costs of maintenance and the potential loss of existing public spaces through new development initiatives. By permitting such flexibility in its approach, it may allocate City resources in an efficient and effective manner. Further, it may provide the means to coordinate and build upon public space improvements in a way which benefits the community as a whole. But most importantly, a public space plan may be used to identify potential opportunities and provide a strategy through which to achieve them.

Given the lack of a comprehensive approach to public space planning in New Westminster and a public realm which does not function well within the urban environment, the need for a public space plan for the Downtown is evident. If the planning framework, the lessons learned and the strategy presented in this thesis are used to guide the creation of a public space plan, a practical and usable approach to public space planning and a successful public realm in the Downtown may result.

### **5.5. Significance to the Field of Urban Planning**

The tools presented in this thesis contribute to the field of urban planning in a variety of ways. The planning framework brings public space theory from a diversity of disciplines together and distills it into one cohesive and usable planning

tool. The inclusion of the ecological, economic and democratic components in the framework is particularly significant since their contribution to the public realm is often overlooked. The conclusions drawn from the analysis of three case studies, on the other hand, provide a practical set of guiding principles upon which a public space plan should be developed. These conclusions are important because they set the practical context for the development of a plan, thus increasing its chances of success.

The public space planning strategy formulates the multidisciplinary planning framework and the lessons learned into a practical plan of action. This plan is significant because it guides the systematic implementation of the previous planning tools. Finally, the importance of the planning framework, lessons learned and the strategy as a unit is that they may be applied to any urban centre seeking to enhance its public realm. While the framework and lessons learned may apply to all public space planning processes, the strategy is a template which may be altered to suit the needs of the community utilizing it.

#### **5.6. Further Research**

Throughout this examination of public space planning, a number of interesting issues arose which were outside the scope of this thesis but require further research. In terms of the literature, there was limited information describing the economic and ecological needs of public space users. Similarly, a strategic method of monitoring a public space plan to ensure its objectives was also not addressed in adequate detail. The most prominent absence of information, however, is in literature describing the experiences and lessons learned by public space planners in their attempts to create and implement successful public space plans. Each of these areas, in addition to this thesis itself, would benefit from further research.

At the same time, this thesis may benefit from a follow-up of the case study plans within a five to ten year time frame to see what effect they have actually had on the public realm. In addition, the use of a larger selection of case studies may have provided more insight into the public space planning process and desirable characteristics of a public space plan.

## REFERENCES

### Primary Sources:

#### Interviews

Joslin, Jeff, Senior Planner, Portland Bureau of Planning. 1996. Telephone interview by author, November, Vancouver.

Lam, Mickey, Designer, Victoria Planning Department. 1996. Telephone interview by author, November, Vancouver.

Leibermann, Eva, Senior Planner, San Francisco Planning Department. 1996. Telephone interview by author, November, Vancouver.

Pynenburg, Mary. City Planner, New Westminster Planning Department. 1996. Interview by author. October, New Westminster.

Scheving, Stephen. Planner, New Westminster Planning Department. 1996. Interview by author. October, New Westminster.

#### Official Planning Documents

Foundation Group Designs Ltd. 1990. The Columbia Street H.A.R.P. Guidelines. For the City of New Westminster.

Guzzi Perry & Associates Inc., Robert Freundlich & Associates, U.M.A. Engineering Ltd., Alan Slater Duncan and Gallop/Varley. 1992, revised 1995 by City of Victoria. Downtown Victoria Beautification Strategy. For the City of Victoria.

GVRD Strategic Planning Department. 1995. Livable Region Strategic Plan.

GVRD Strategic Planning Department/Parks Department. 1993. Creating Vancouver's Green Zone.

New Westminster Planning Department. 1940, revised 1992. Zoning Bylaw No. 1743.

\_\_\_\_\_. Parks and Recreation, n.d.

\_\_\_\_\_. 1987. Community Plan for Downtown New Westminster.

\_\_\_\_\_. 1988. Subdivision Control Bylaw No. 5798.

\_\_\_\_\_. 1995. New Westminster Fact Sheet.

\_\_\_\_\_. 1996. Downtown New Westminster Action Plan.

Portland Bureau of Planning. 1988. Central City Plan. Portland, OR: Bureau of Planning.

\_\_\_\_\_. 1991. River District: A Development Plan for Portland's North Downtown.

\_\_\_\_\_. 1996. River District Design Guidelines.

Portland Office of Transportation. 1996. The River District Right-of-Way: Framework Plans, Design Criteria and Design Standards.

San Francisco Planning Department. 1985. San Francisco Master Plan: Downtown - An Area Plan of the Master Plan of the City and County of San Francisco.

San Francisco Planning Department. 1995. Destination Downtown: Streetscape Investments for a Walkable City.

Sleath, Eleanor, New Westminster Heritage Advisory Committee. 1984, revised 1990. New Westminster Heritage Resource Inventory, Volume 1: Downtown.

Victoria Planning Department. 1990, revised 1995. Downtown Victoria Plan 1990: Main Document.

Victoria Planning Department. 1990. Downtown Victoria Plan 1990: Part "C" Precinct Plans.

#### Secondary Sources:

American Automobile Association. 1996. Tourbook: California Nevada - Attractions, Lodgings and Restaurants. Buffalo, NY: Quebecor Printing.

American Automobile Association. 1996. Tourbook: Oregon Washington- Attractions, Lodgings and Restaurants. Buffalo, NY: Quebecor Printing.

American Automobile Association. 1996. Tourbook: Western Canada - Attractions, Lodgings and Restaurants. Buffalo, NY: Quebecor Printing.

Barnett, Jonathan. 1982. An Introduction to Urban Design. New York: Harper and Row Publishers.

Brill, Michael. 1989. "Ontology for Exploring Urban Public Life". Places. 6 (1): 24-31.

Brill, Michael. 1989. "Transformation , nostalgia, and illusion in public life and public place". In Public Places and Spaces, eds. I. Altman and E. Zube. New York: Plenum Press.

Carr, Stephen, Mark Francis, Leanne G. Rivlin and Andrew M. Stone. 1992. Public Space. New York: Cambridge University Press.

Cook, E. A. 1991. "Urban Landscape Networks: An Ecological Planning Framework". Landscape Research. 16(3):7-15.

Cooper Marcus, Claire and Carolyn Francis, eds. 1990. People Places: Design Guidelines for Urban Open Space. New York: Van Nostrand Reinhold.

Cranz, Galen. 1982. The Politics of Park Design: A History of Urban Parks in America. Cambridge, Massachusetts: MIT Press.

Cregan, Michael. 1990. "Open Spaces and the Quality of Urban Life". Landscape Design. 191 (June): 12-14.

Crowhurst-Lennard, Suzanne H. and H.L. Lennard. 1984. Public Life in Urban Places: Social and Architectural Characteristics Conducive to Public Life in European Cities. Southhampton: Gondolier Press.

\_\_\_\_\_. 1990a. "Urban Space Design And Social Life". In Documentation on Urban Space Design: Selected from presentations at the International Making Cities Livable Conferences, by IMCL Council. California, 1-16.

\_\_\_\_\_. 1990b. "Importance of Public Space: Usable Public Spaces For Children and the Elderly in Cities". Making Cities Livable Newsletter, March/September, 1, 29-30.

\_\_\_\_\_. 1995. Livable Cities Observed: A Sourcebook of Images and Ideas for City Officials, Community Leaders, Architects, Planners and All Others Committed to Making Their Cities Livable. Carmel, California: Gondolier Press.

Dovey, Kim. 1985. "Place and Placemaking". In the Proceedings of the PAPER 85 Conference held in Melbourne June 19-22, 1985, edited by Kim Dovey, Peter Dontown, and Greg Missingham.

Fausold, Charles J. and Robert J. Lilieholm. 1996. "The Economic Value of Open Space". In Landlines: Newsletter of the Lincoln Institute of Land Policy, September 1996, 8 (5).

Findlay, Barbara and Ann Hillyer. 1994. Here Today, Here Tomorrow: Legal Tools for the Voluntary Protection of Private Land in British Columbia. Vancouver: West Coast Environmental Law and Research Foundation.

Francis, Mark. 1989. "Urban Gardens as Public Space". Places 6 (1): 52-59.

Gehl, Jan. 1987. Life Between Buildings-Using Public Space. Amsterdam: Elsevier Science Publishers.

Halprin, Lawrence. (1963) 1975. Cities. Cambridge, Massachusetts: MIT Press.

Heckscher, August. 1977. Open Spaces: The Life of American Cities. New York: Harper and Row Publishers.

- Hollen Lees, Lynn. 1994. "Urban Public Space and Imagined Communities in the 1980s and 1990s". Journal of Urban History 20 (4): 443-465.
- Hough, Michael. 1990. Out of Place: Restoring Identity to the Regional Landscape. New Haven: Yale University Press.
- Iwashita, Hajime, Tomio Watanabe, Michie Tanaka and Hidefumi Shimaki, eds. 1988. Pocket Park. Tokyo: Process Architecture Publishing Co. Ltd.
- Loukaitou-Sideris, Anastasia and Tridib Banerjee. 1993. "The Negotiated Plaza: Design and Development of Corporate Open Space in Downtown Los Angeles and San Francisco". Journal of Planning Education and Research. 13:1-12.
- Lynch, Kevin. 1965. "The Openness of Open Space". In City Sense and City Design: Writings and Projects of Kevin Lynch. Banerjee Tridib and Michael Southworth, eds. Cambridge, Massachusetts: MIT Press.
- Lynch, Kevin. 1981. Good City Form. Cambridge, Massachusetts: MIT Press.
- Lynch, Kevin and Gary Hack. 1984. Site Planning. Cambridge, Massachusetts: MIT Press.
- Mertes, James D. and James R. Hall. 1995. Parks, Recreation, Open Space and Greenway Guidelines. National Recreation and Park Association.
- Mozingo, L. 1989. "Women and Downtown Open Spaces". Places 6 (1): 38-47.
- Oosterman, Jan. 1992. "Welcome to the Pleasure Dome: Play and Entertainment in Urban Space: The Example of Sidewalk Cafe". Built Environment 18 (2): 155-164.
- Parry-Jones, William LI. 1990. "Natural Landscape, Psychological Well-being and Mental Health". Landscape Research 15 (2): 7-11.
- Platt, Rutherford H. 1994. "From Commons to Commons: Evolving Concepts of Open Space in North America". In The Ecological City: Preserving and Restoring Urban Biodiversity. Rutherford H. Platt, Rowan A Rowntree and Pamela C. Muick, eds. Chicago: University of Massachusetts Press.
- Projects For Public Spaces, Inc. 1984. Managing Downtown Public Spaces. Chicago, IL: Planners Press.
- San Diego Planning Department. San Diego Bay-Balboa Park Link Study.
- Steiner, Frederick. 1991. The Living Landscape: An Ecological Approach to Landscape Planning. New York: McGraw-Hill, Inc.
- University of British Columbia, Landscape Architecture Program. Fall 1995. Values for Assessing Places and Designs. LARC 221: Introduction to Landscape Architecture: Landscape, Architecture, Nature and Society. Vancouver: University of British Columbia.



Watson, J. Stroud. 1990. "Public Realm/Figural Space". In Documentation on Urban Space Design: Selected from presentations at the International Making Cities Livable Conferences, by IMCL Council. California.








Whyte, William H. 1980. The Social Life of Small Urban Spaces. Washington, D.C.: The Conservation Foundation.

Whyte, William H. 1988. City: Rediscovering the Center. New York: Doubleday.





## Appendix A:

### SAN FRANCISCO:











#### Product Analysis

HUMAN NEEDS	GENERAL CRITERIA	ISSUE ADDRESSED	DESCRIPTION	PERFORMANCE STANDARDS
Community Needs: <i>Neighbourhood Needs:</i>				
	attractive and inviting human-scaled environment		<ul style="list-style-type: none"> <li>-create aesthetic streetscapes</li> <li>-preserve and promote pedestrian-oriented building frontages on all downtown streets and alleyways</li> <li>-conserve the traditional street to building relationship</li> <li>-provide setbacks above building base to maintain streetwall continuity</li> <li>-maintain and enhance projecting cornices on smaller buildings and projecting belt courses on taller buildings</li> <li>-ensure facades relate harmoniously with existing patterns</li> <li>-provide quality open space</li> </ul>	<ul style="list-style-type: none"> <li>-see street and alleyway design criteria</li> <li>-see open space guidelines</li> </ul>
	central location and reasonable walking distance		<ul style="list-style-type: none"> <li>-provide every person living or working downtown access to a sizable sunlit open space within convenient walking distance</li> </ul>	-approximately 900 feet from user origin
	close relationship between open space and street		<ul style="list-style-type: none"> <li>-out of the stream of activity but within sight of its flow</li> <li>-integrate streetscape improvements and sidewalks into the open space system</li> </ul>	<ul style="list-style-type: none"> <li>-see open space guidelines (location)</li> <li>-see street and alleyway design criteria</li> </ul>
	linked system of public spaces and public ways		<ul style="list-style-type: none"> <li>-create a pedestrian network in the downtown core area that includes pedestrian-oriented streets, major pedestrian destinations and use generators</li> <li>-encourage the creation of new open spaces that become a part of an interconnected pedestrian network</li> </ul>	<ul style="list-style-type: none"> <li>-use consistent and connective design features - see street and alleyway design criteria</li> <li>-includes closure of streets to vehicular traffic, natural extensions such as mid-block connects, cross-walks, existing open spaces, and those required in major new developments</li> </ul>
	good local fit			-
	good regional fit			-
	variety of surrounding land uses		<ul style="list-style-type: none"> <li>-balance open space with space for commerce and space for housing</li> <li>-land uses adjacent to pedestrian links should be of interest and utility to pedestrians</li> </ul>	-






Product Analysis (cont.)

	variety of spaces		<ul style="list-style-type: none"> <li>-provide different kinds of open space downtown</li> <li>-require usable indoor and outdoor open space, accessible to the public, as part of new downtown development</li> <li>-give priority to sunlit plazas and parks</li> <li>-use window and corner setbacks</li> <li>-improve the usefulness of publicly owned rights-of-way</li> </ul>	<ul style="list-style-type: none"> <li>-see open space guidelines (description)</li> <li>-provide open space in a quantity that is directly proportional to the amount of nonresidential space in the building (1 sq ft/50 sq ft of office space and 1 sq ft/100 sq ft of commercial space)</li> <li>-convert lightly used streets and alleyways into lunch time malls with outdoor restaurant seating</li> <li>-combine rights-of-way with adjacent plazas to create a large open space</li> <li>-convert certain blocks into permanent plaza or park space</li> </ul>
	adequate amount		<ul style="list-style-type: none"> <li>-Provide quality open space in sufficient quantity and variety to meet the needs of downtown workers, residents, and visitors</li> </ul>	<ul style="list-style-type: none"> <li>-create through public and private efforts</li> <li>-focus on areas deficient in open space</li> <li>-allow open space requirements to be met offsite such as on public lands</li> <li>-acquire open space through the use of eminent domain powers when all other means fail</li> </ul>
Site-Specific Needs:	accommodates a variety of activities and uses			
	visual interest		<ul style="list-style-type: none"> <li>-use designs and materials and include activities at the ground floor to create pedestrian interest</li> <li>-encourage the incorporation of publicly visible art works such as sculpture, base-relief, mosaics, murals and decorative water features in new private development and in various public spaces downtown</li> </ul>	<ul style="list-style-type: none"> <li>-devote ground floor space along public spaces to retail and service uses that are of interest to the pedestrian and that meet the needs of workers and visitors to nearby buildings</li> <li>-use clear untinted glass on the first two or three floors of buildings</li> <li>-incorporate visually interesting details and/or decoration into the design of the base of buildings</li> <li>-texture blank walls</li> <li>- require artwork for all new public buildings of the City</li> <li>-use empty storefronts for temporary art displays</li> <li>-use standard elements such as sewer covers, catch basin and vents as opportunities for art and design expression</li> <li>-see open space guidelines (landscape, design)</li> <li>-see street and alleyway design criteria</li> <li>-build to the street property line along the entire frontage to a sufficient height for proper definition of street space</li> </ul>










Product Analysis (cont.)

	internal variety		-	-	-locate sitting places up front near the action, and in secluded back areas, in the sun and in shaded areas -see open space guidelines (size) -see streetscape plans
	adequate size		-	-provide different kinds of open space downtown	
	responsive to change		-	-	
<i>Social Needs</i>	facilitates active and passive social contact		-	-provisions should be made for those who desire quiet secluded locations as well as those who enjoy crowds and activity	-locate sitting places up front near the action, and in secluded back areas, in the sun and in shaded areas
<b>Democratic Needs</b>	freedom of access		-	-develop an open space system that gives every person living and working downtown access to a sizable sunlit open space within convenient walking distance -encourage the creation of new open spaces that become part of an interconnected pedestrian network -keep open space facilities available to the public	-open spaces should be situated approximately 900 feet from user origin -see open space guidelines (public availability)
	freedom of use		-	-	
	right to claim		-	-	-configurations should accommodate people in groups and those who want to sit alone -use walls, steps, ledges, planters, fountains and movable chairs in addition to conventional bench-type seating
	user choice		-	-	-provide different kinds of open space downtown -provide a variety of seating arrangements
	user control		-	-	
<b>Physical Needs</b>					
<i>Access</i>	visually and physically accessible public space		-	-provide open space that is clearly visible and easily reached from the street or pedestrian way -promote accessibility by reduce obstructions and implementing sidewalk improvements	-generally accessible from street at grade or not more than 3 feet above or below street level -any plaza or park not at street level should be connected by wide, visible, and inviting stairways or ramps -provide directional signage, particularly for terraces -see open space guidelines (access and other) -consolidate street signs -replace single head with double head parking meters








Product Analysis (cont.)

Comfort	variety of amenities		-provide a variety of seating arrangements in open spaces throughout the downtown	<ul style="list-style-type: none"> <li>-provide adequate seating in new facilities in direct relationship to the size of the open space</li> <li>-retrofit existing spaces which do not have adequate seating</li> <li>-configurations should accommodate people in groups and those who want to sit alone</li> <li>-provide a variety of seating arrangements</li> <li>-see open space guidelines (seating, tables, etc. and landscape and design)</li> <li>-see open space guidelines (sunlight and wind)</li> <li>-limit height and effectively orient buildings to the south, east and west of parks and plazas to allow sunlight in</li> <li>-focus activity along sunlit streets and alleyways</li> <li>-all buildings are required to perform a shadow simulation study</li> <li>-use light reflective surfaces/light colors on surrounding buildings</li> <li>-see open space guidelines (sunlight and wind)</li> <li>-exposed facades should use setbacks at various levels and other configured shapes and design features to reduce wind impact</li> <li>-for sizable projects, test alternative building masses in wind tunnels</li> <li>-general rule: winds should not be greater than 11mi/hr for walking areas and 7mi/hr for sitting areas</li> <li>-see open space guidelines (other)</li> </ul>
	sunlight enhancement		-address the need for human comfort in the design of open spaces by maximizing sunshine	<ul style="list-style-type: none"> <li>-promote building forms that will maximize the sun access to open spaces and other public areas</li> </ul>
	wind protection		-address the need for human comfort in the design of open spaces by minimizing wind	<ul style="list-style-type: none"> <li>-promote building forms that will minimize the creation of surface winds near the base of buildings</li> </ul>
	comfortable temperature and humidity		create and maintain a comfortable pedestrian environment	
	safe pedestrian environment		improve pedestrian safety	<ul style="list-style-type: none"> <li>-do not eliminate pedestrian space</li> <li>-minimum 6 ft for pedestrian through movement</li> <li>-widen sidewalks at corners and keep them clear of obstructions</li> <li>-time crosswalk signals to provide safe pedestrian crossing</li> <li>-install pedestrian safety signage at dangerous intersections</li> <li>-light recessed or dark areas</li> <li>-ensure adequate distribution of telephones</li> <li>-target dangerous intersections for pedestrian safety improvements</li> </ul>

Product Analysis (cont.)

<b>Psychological Needs</b>	meaningful		<ul style="list-style-type: none"> <li>-preserve existing historic features and encourage the incorporation of historic elements in all public and private streetscape projects</li> <li>-use informational signage</li> <li>-art in the public right-of-way is strongly encouraged</li> <li>-create a progressive street and alleyway hierarchy</li> </ul>	<ul style="list-style-type: none"> <li>-see street and alleyway design criteria</li> <li>-see open space guidelines (landscape, design)</li> </ul>
	positive meaning and spatial configuration		-	<ul style="list-style-type: none"> <li>-see street and alleyway design criteria</li> <li>-see open space guidelines (landscape, design)</li> </ul>
	significant		-	<ul style="list-style-type: none"> <li>-see street and alleyway design criteria</li> </ul>
	sense of longevity		-	-
	comfortable: safety and security		<ul style="list-style-type: none"> <li>-provide open spaces that are clearly visible and easily reached from the street or pedestrian way</li> </ul>	<ul style="list-style-type: none"> <li>-generally accessible from street at grade or not more than 3 feet above or below street level</li> <li>-any plaza or park not at street level should be connected by wide, visible, and inviting stairways or ramps</li> <li>-see open space guidelines (access and other)</li> </ul>
	relaxing: relief and restoration		<ul style="list-style-type: none"> <li>-provide contrast and form by treating open space as a counterpoint to the built environment:</li> <li>-place and arrange open space to complement and structure the urban form by creating distinct openings in the otherwise dominant streetwall form of downtown</li> <li>-introduce elements of the natural environment to contrast built form</li> <li>-provide seating variety</li> </ul>	<ul style="list-style-type: none"> <li>-provide plaza, park or building setback as break in streetwall</li> <li>-balance building mass with built form</li> <li>-include an element of the natural environment in all open spaces</li> <li>-see open space guidelines (landscape, design)</li> <li>-see open space guidelines (seating)</li> </ul>
	stimulating and learning opportunities		-	-
<b>Ecological Needs</b>	controls climate		-	<ul style="list-style-type: none"> <li>-see open space guidelines (landscape, design)</li> <li>-conserve and promote inground street trees for all downtown sidewalks</li> </ul>
	enhances natural process, nature conservation, biodiversity and community health		-	<ul style="list-style-type: none"> <li>-see open space guidelines (landscape, design)</li> <li>-conserve and promote inground street trees for all downtown sidewalks</li> </ul>

Product Analysis (cont.)

<b>Functional Needs</b>	well organized and diverse programming adequate maintenance		- -create aesthetic streetscapes through regular trash removal, sidewalk sweeping and steam cleaning, tree pruning and graffiti removal	- -include a capital improvement maintenance budget and plan for on-going upkeep with every streetscape improvement program -property owners are responsible for the maintenance of the sidewalk area fronting their property
	variety of food/retail outlets		food and beverage service usually should be located in or adjacent to open spaces to facilitate public use and enjoyment	-generally allocate 20% of seating in open spaces for restaurants, but not more than 20% of seating facilities provided -see open space guidelines (commercial services, food)
	appropriate signage		use signage to improve pedestrian orientation and movement	-provide directional signage at intersections and transit stops for key destinations and terraces -provide informational and historical plaques and self-guided tour maps -place directional markers in the sidewalk surface -place banners at alley destinations to highlight and visually connect them to the pedestrian network
<b>Economic Needs</b>	contribution to commercial vitality and greater tax base		-	-
	enhance property values and rental rates		-	-
	provide local employment		-create aesthetic streetscapes	-create privately funded entry-level employment opportunities for a maintenance team to clean downtown streets
	economically responsible		-	-

Source: San Francisco Planning Department

Process Analysis:

Public Space Planning Process, Implementation, Maintenance and Monitoring Strategy

COMPONENTS	GENERAL CRITERIA	DOWNTOWN PLAN	STREETSCAPE PLAN
<b>PLANNING PROCESS</b>			
Players Involved	citizens	X	X
	city staff	X	X
	politicians	X	X
	planning professionals	X-local university, economic consultants	X
	other	property owners and tenants	X
<b>Characteristics of the Process</b>			
<i>Finances:</i>	budget	-	-
	allocation of budget	-	-
	origin of funding	Planning Department	Proposition B sales tax moneys
<i>Time Frame:</i>	plan creation	3 years	1991-1995
	plan implementation	15 years	10 year horizon for city-initiated projects
<i>Plan Creation</i>	steps to create plan	-	Five phases: 1. research, fieldwork and data gathering 2. urban design analysis 3. design charrette 4. design development 5. comment and design revision
<i>Plan Type</i>	comprehensive	X - with focus on growth management	X
	general	-	-
	combination of comprehensive and general	-	-
<b>DESIGN PROCESS</b>			
Role of the Designer/s	analysis	X	X
	testing	X	X
	form-giving	-	X
<b>IMPLEMENTATION</b>			
Implementing Agencies	city	X	X
	planning department	lead role	lead role



Process Analysis (cont.)

	outside agency	-	-	-
	developer	X		X
<b>Implementation Structure</b>	cooperative interaction between agencies	X		X
	leader-oriented	X		X
<b>Implementation Type</b>	planned incremental	-		X
	ad hoc	X (given general deficiency areas)		-
	private project-oriented	X		X
	public project-oriented	-		X
<b>Implementation Strategy</b>		-zoning code requirements -development discussions between planning department and the developer		-discussions and coordination of improvements with planning department and public initiatives
<b>Communication Strategy</b>	target audience	professionals and general public		professionals
	plan form	-photocopied paper with photos, diagrams and maps -incomplete package - is missing overview and implementation strategy		-professional presentation with photos, diagrams, maps, matrices -complete package
	match between form and target audience	good		excellent
<b>MAINTENANCE</b>				
<b>Maintenance Agencies and Their Roles</b>				
<i>Publicly-owned land</i>	streetscape	city and adjacent property owners		city and adjacent property owners
	open space	city		city
<i>Privately-owned land</i>	streetscape	property owner		property owner
	open space	property owner for lifetime of building (in zoning code)		property owner for lifetime of building (in zoning code)
<b>MONITORING</b>				
<b>Monitoring Agency</b>	Planning	-		-
	Parks	-		-
	Engineering	-		-
		-		property owner

Source: San Francisco Planning Department

**Table 1 GUIDELINES FOR DOWNTOWN OPEN SPACE**

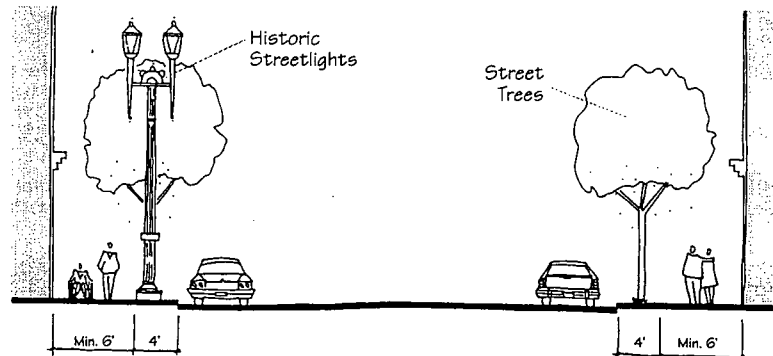
	Urban Garden	Urban Park	Plaza	View and/or Sun Terrace	Greenhouse
Description	Intimate sheltered landscaped area.	Large open space with predominantly natural elements.	Primarily hard-surface space.	Wind-sheltered area on upper level.	Partially or fully glassed-in enclosure.
Size	1,200 to 10,000 sq.ft.	Minimum 10,000 sq.ft.	Minimum 7,000 sq.ft.	Minimum 800 sq.ft.	Minimum 1,000 sq.ft. Min. ceiling height 20 ft.
Location	On ground level, adjacent to sidewalk, through-block pedestrianway, or building lobby.		Southerly side of the building. Should not be near another plaza.	Second floor or above. View terraces should only be located in places which have spectacular views.	Locate in places too shady or windy to be used as open space.
Access	Accessible on at least one side of its perimeter.	Accessible from at least one street at Access from several locations encouraged. Park interior to be visible from entrances.	Accessible from a public street at grade or 3' above or below street level connected to street with generous stairs.	Accessible directly from the sidewalk or public corridors. Must provide adequate signage about location and public accessibility at street level, in hallways and elevators.	Accessible from street at grade or 3' above or below street level. Provide several entrances from public rights-of-way.
Seating, Tables, Etc.	One seating space for each 25 sq.ft. of garden area. One half of seating to be movable. One table for each 400 sq.ft. of garden area.	Provide formal and informal seating, on sculptured lawn. Movable chairs desirable.	One linear foot of seating space per each linear foot of plaza perimeter. One half of seating to consist of benches.	One seating space for every 25 sq.ft. of terrace area.	One seating space for every 25 sq.ft. of floor area.
Landscaping, Design	Ground surface primarily of high quality paving material. Install plant material such as: trees, vines, shrubs, seasonal flowers to create garden-like setting. Water feature desirable.	Provide lush landscape setting with predominantly lawn surfaces and planting such as: trees, shrubs, ground cover, flowers. Provide a water feature as major focus.	Landscaping is generally secondary to architectural elements. Use trees to strengthen spatial definition and to create peripheral areas of more intimate scale.	Terrace may take one of the following forms: o complex architectural setting which may include art works; o flower garden; o space with trees and other planting.	Interior surface may be a mixture of hard surfaces and planting areas. Water features are desirable.
Commercial Services, Food		Provide food service within or adjacent to the park. 20% of space may be used for restaurant seating taking up no more than 20% of the sitting facilities provided.	Provide retail space including food services in space around plaza. 20% of space may be used for restaurant seating taking up no more than 20% of the seating provided.	Provide food service on or adjacent to terrace.	Provide food service within greenhouse; 20% of greenhouse space may be used for restaurant seating occupying no more than 20% of the seating provided.
Sunlight and Wind	Sunlight to much of the occupied area at lunch time. Shelter from wind.	Sunlight to most of the occupied area from mid-morning to mid-afternoon. Shelter from wind.	Sunlight to much of the occupied area at lunch time. Shelter from wind.	Sunlight to most of the occupied area of terrace at lunch time. Shelter from wind.	Sunlight at lunch time highly desirable but not required.
Public Availability	8 AM to 6 PM Monday through Friday.	At all times.	At all times.	10 AM to 5 PM, Monday through Friday.	10 AM to 5 PM, Monday through Friday.
Other	Security gates, if provided, should be an integral part of the design.	Security gates, if provided, should be an integral part of the design.		In wind exposed locations provide glass enclosure to create comfortable environment.	Include large movable windows or walls to open up greenhouse in warm weather.

\* Seating dimensions are as follows:  
Height : 12" to 36"; ideally 17"  
Depth : 14" one-sided; 30-36" double sided.  
Width : 30" of linear seating are counted as one seat

Table 1 (cont.)

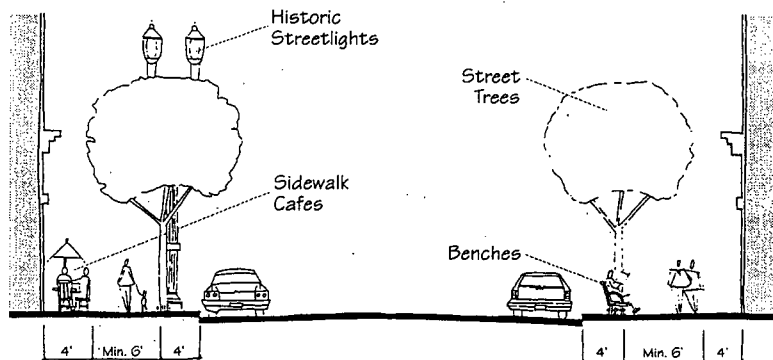
Snippet	Atrium	Indoor Park	Public Sitting Area in a Galleria	Public Sitting Area in an Arcade	Public Sitting Area in a Pedestrian Walkway
Small, sunny sitting space.	Glass-covered central open space in the interior of a building or block.	Interior open space where at least one wall facing the street consists entirely of glass.	Through-block, continuous, glass-covered pedestrian passage lined with retail shops and restaurants.	Continuous, covered passageway at street level, defined by building set back on one side and a row of columns along the front lot line.	Sitting area on a sidewalk of a pedestrian-oriented street in a lunchtime mall or in an exclusive pedestrian walkway.
Varying sizes permitted.	Minimum area 1500 sq.ft.; minimum ceiling height 30 ft.	Minimum area 1,000 sq.ft.; minimum ceiling height 20'. Area to be counted against open space requirement cannot exceed twice the area of the glass wall projected onto the floor plane.	Minimum average height 30 ft.; minimum clear area 12 ft. Only public sitting areas outside the circulation space which are buffered from it by various kinds of design elements will qualify.	Minimum clear width 10 ft.; minimum height 14 ft. Only public sitting areas which are delineated from the circulation space by appropriate means will qualify.	Varying sizes permitted.
On new or existing building site.	Interior of building or block.	Building interior adjacent to sidewalk or public open space.	In any approved galleria.	As identified in the Pedestrian Network Plan. Other locations must be approved.	As identified in the Pedestrian Network Plan. Other locations must be approved.
Accessible from public streets.	On street level or 3 ft. above or below street level. Accessible from one or more sidewalks through generous hallways. Space must be made available and inviting to the general public.	Accessible from street level. Provide several entrances to make the space inviting to the public.	Accessible from public right-of-way or open space at grade or 2 ft. above or below grade level of adjoining public area.	Accessible from sidewalks or public open space at grade level or 2 ft. above or below grade. Connect arcade to public space with continuous stairs.	
If functional for sitting and viewing, seating can be ledges, stairs, benches, chairs.	Provide one seating space for every 25 sq.ft. of floor area, one table for every 400 sq.ft. of floor area. At least one half of seating to consist of movable chairs.	Provide one seating space for every 25 sq.ft. of floor area, one table for every 400 sq.ft. of floor area. At least one half of seating to consist of movable chairs.	Provide sitting ledges, benches, movable chairs and tables in areas outside the pedestrian pathway. At least one half of seating should consist of movable chairs.	Place seating and tables outside the area of pedestrian flow.	If functional for sitting and viewing, seating can be ledges, benches, chairs.
Surface will predominantly be hard pavement. Add planting where appropriate.	Provide attractive paving material to create interesting patterns. Use rich plant material. Incorporate sculpture and/or water feature.	Provide attractive paving material to create interesting patterns. Use rich plant material. Incorporate sculpture and/or water feature.	Use rich paving materials in interesting patterns. Include sculpture or other works of art and water feature.	Arcades should be enhanced by creating attractive paving patterns with rich materials. Incorporate mosaics, murals or three-dimensional elements into wall surfaces, coffering into ceiling surface. Include plant materials where appropriate.	Use rich paving material in interesting patterns. Include plant material.
Encourage food vendors to locate in the vicinity.	Locate food service adjacent to the atrium; 20% of area may be used for restaurant seating taking up no more than 20% of the seating and tables provided.	Provide food service; 20% of area may be used for restaurant seating taking up no more than 20% of the seating and tables provided.	Both sides of galleria should be lined with retail shops and food services. Locate sitting areas near food services. Restaurant seating is not to take up more than 20% of sitting area.	Attractive retail shops, food services and restaurants should front on the arcade. 20% of sitting area to be used for restaurant seating, occupying no more than 20% of sitting facilities and tables provided.	Attractive shops, restaurants, cafes and food services should line the pedestrian walkways and lunchtime malls.
Sunlight to sitting areas at lunch time. Shelter from wind.	Mass buildings surrounding the atrium in such a way as to maximize sunshine in the atrium space.	Orient park to the southeast, south or southwest to insure sunlight at least during lunch time.	Mass buildings surrounding galleria in a way as to maximize sunlight into the galleria space.		Sunlight to the sitting areas at lunchtime. In windy locations provide wind baffles.
At all times.	8 AM to 6 PM Monday through Friday.	8 AM to 6 PM Monday through Friday.	8 AM to 6 PM Monday through Friday.	At all times.	At all times
Credit each seat as 25 s.f. of open space. Buildings up to 100,000 g.s.f. may satisfy 100% of requirement with "snippets"; larger buildings may satisfy up to 20%.	Insure proper ventilation. At least 75% of roof area to be skylit.	Insure proper ventilation. Install heating to make space comfortable in cool weather. Construct glass wall to be fully or partially movable.	Security gates should be integrated into overall design and concealed when not in use. At least 75% of galleria roof shall consist of skylights. Insure ventilation.		Credit each seat as 25 s.f. of open space

Source: San Francisco Streetscape Plan 1995



- Street Trees
- Historic Street Lights
- Fixed Newsracks
- Trashcans
- Standard Sidewalk
- Corner Clear Zone

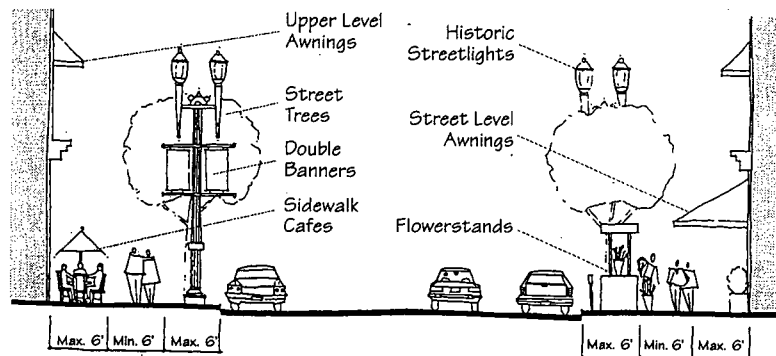
*Typical Base Case Street Diagram*



- |                             |                    |
|-----------------------------|--------------------|
| ■ Street Trees w/uplighting | ■ Paving Variation |
| ■ Historic Street Lights    | ■ Benches          |
| ■ Fixed Newsracks           | ■ Bicycle Racks    |
| ■ Trashcans                 | ■ Sidewalk Cafes   |
| ■ Standard Sidewalk         | ■ Kiosks           |
| ■ Corner Clear Zone         | ■ Sidewalk Vendors |

*Typical Second Level Street Diagram*

Source: San Francisco Streetscape Plan 1995



- |                             |                    |                      |
|-----------------------------|--------------------|----------------------|
| ■ Street Trees w/uplighting | ■ Benches          | ■ Unique Streetscape |
| ■ Historic Street Lights    | ■ Bicycle Racks    | ■ Sidewalk Toilets   |
| ■ Fixed Newsracks           | ■ Sidewalk Cafes   | ■ Special Paving     |
| ■ Trashcans                 | ■ Kiosks           | ■ Awnings            |
| ■ Standard Sidewalk         | ■ Sidewalk Vendors | ■ Banners            |
| ■ Corner Clear Zone         |                    | ■ Flowerstands       |

*Typical Special Level Street Diagram*

#### Base Case

The standard Base Case Street has a 10' sidewalk as an absolute minimum, although 12'-14' is preferable. The streetscape is intended to be the minimum standard for all downtown sidewalks as befitting the importance of these streets as part of the downtown urban fabric.

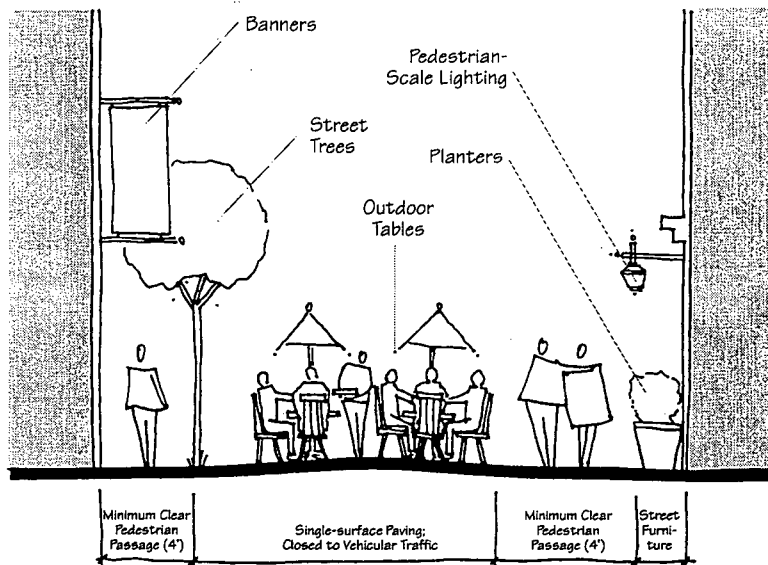
#### Second Level

The standard Second Level Street design conveys the importance of these streets and encourages both through movement and stationary activities. In addition to the Base Case features, the generally wider sidewalks (14'-15') on Second Level Streets facilitate more pedestrian amenities including benches on Front, historical accents on Second, and corner bulbing on Kearny.

#### Special Level

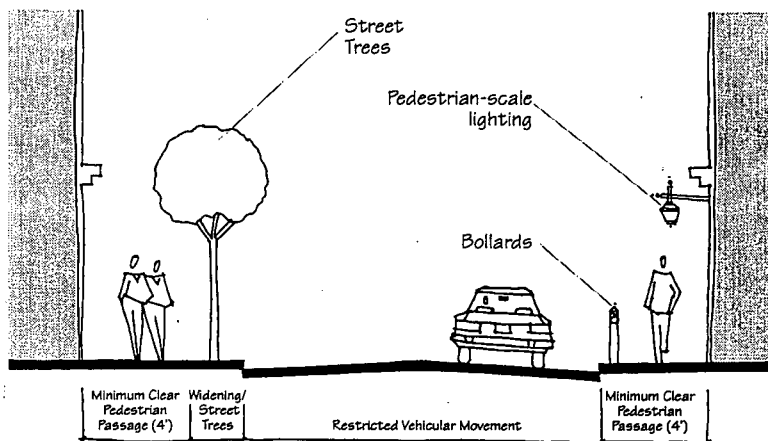
The Special Streets are considered destination streets and would have corresponding wide sidewalks and street furniture. California, Grant, Maiden Lane, Mission, and Montgomery all have memorable, symbolic images that are important within the downtown and for the city as a whole. Typical designs would include Base Case and Second Level improvements with additional elements such as unique paving treatments, flowerstands and other street furniture, and sidewalk widenings (to 18' to match existing sidewalks on Grant and California). However, since each street is distinctive, their designs should be distinctive too. Montgomery Street is a particular challenge since street furniture opportunities are limited due to the existing pedestrian congestion. Nonetheless, the importance of Montgomery as a pedestrian street should be recognized with some unique treatments such as decorative paving, public art, and, eventually, sidewalk widening.

Source: San Francisco Streetscape Plan 1995



- |                             |                            |                     |
|-----------------------------|----------------------------|---------------------|
| ■ Closed to Vehicles        | ■ Informational Signage    | ■ Distinctive Gate  |
| ■ Pedestrian-Scale Lighting | ■ Decorative Signs         | ■ Decorative Paving |
| ■ Corner Clear Zones        | ■ Network Banners          | ■ Banners           |
| ■ Bollards                  | ■ Ped. Serving Retail      | ■ Outdoor Cafes     |
| ■ Street Trees              | ■ Streetsign Consolidation | ■ Vendors           |
|                             | ■ Newsrack Restrictions    | ■ Planters          |

*Typical Destination Alley*



- |                             |                                   |                            |
|-----------------------------|-----------------------------------|----------------------------|
| ■ Limited Vehicular Access  | ■ Street Trees (Space Permitting) | ■ Ped. Serving Retail      |
| ■ Pedestrian-Scale Lighting | ■ Informational Signage           | ■ Streetsign Consolidation |
| ■ Corner Clear Zones        | ■ Decorative Signs on Buildings   | ■ Newsrack Restrictions    |
| ■ Bollards                  | ■ Network Banners                 | ■ Standard Sidewalk        |
|                             |                                   | ■ Sidewalk Widening        |

*Typical Walkthrough Alley*

Source: San Francisco Downtown Plan 1985

## Appendix B:

### PORTLAND:

#### Product Analysis






HUMAN NEEDS	GENERAL CRITERIA	ISSUE ADDRESSED	OBJECTIVES/POLICIES	PERFORMANCE STANDARDS
Community Needs <i>Neighbourhood Needs:</i>	attractive and inviting human-scaled environment	●	<ul style="list-style-type: none"> <li>-create a rich and enjoyable environment for pedestrians</li> <li>-encourage designers of new developments to sensitively enhance the human scale of buildings, streets and open spaces</li> <li>-humanize the downtown through promotion of the arts</li> <li>-reinforce and enhance the pedestrian system</li> </ul>	<ul style="list-style-type: none"> <li>-place utilities underground opportunities and/or public funds become available</li> <li>-use the Design Review to ensure that new development is at a human scale and relates to the character and scale of the area</li> <li>-provide human scale and interest to buildings along sidewalks and walkways by relating door, window and wall treatments to the surrounding context, by providing sensitive detailing within building bases and by encouraging porches and balconies</li> <li>-incorporate works of art or other design features in the development of outdoor and indoor public spaces such as passageways, plazas, parks, waiting places, the street furniture zone, and transit platforms</li> <li>-see street framework plans</li> </ul>
	central location and reasonable walking distance	○		
	close relationship between open space and street	○		

Product Analysis (cont.)








	linked system of public spaces and public ways	<ul style="list-style-type: none"> <li>-build a park and open space system that link downtown neighbourhoods and the surrounding environment</li> <li>-create greenbelts that link existing open spaces together using street trees, plazas, bicycle and pedestrian ways, recreational trails and new parks</li> <li>-establish public transit connections between major recreational facilities</li> <li>-provide convenient pedestrian linkages that facilitate movement to and from the river and to and from adjacent neighbourhoods</li> <li>-reinforce and enhance the identity of neighbourhoods and the pedestrian system</li> <li>-recognize the duality of Tanner Creek Park Blocks as a neighbourhood park and a key link to the downtown</li> <li>-recognize the river basin and its bridges as prominent landmarks which integrate the river with the district</li> </ul>	<ul style="list-style-type: none"> <li>-rehabilitate existing linear block open space system and extend to the waterfront</li> <li>-create a river taxi system with stops at public attractions and existing piers</li> <li>-extend the waterfront trail to connect to the inner-city riverfront loop trail</li> <li>-preserve and enhance existing rights-of-way which extend to the river and encourage the dedication of additional rights-of-way through donations, condemnations, etc.</li> <li>-investigate the feasibility and location of a bridge for pedestrians and bicyclists</li> <li>-create a boulevard system connecting all districts</li> <li>-create pedestrian linkages along and across the avenue adjacent to the waterfront</li> <li>-incorporate design features that enhance connectivity and continuity such as awnings, street banners, special graphics and streetscape color coordination</li> <li>-orient primary building entries at pedestrian circulation points which conveniently and effectively connect pedestrians with transit services</li> <li>-balance the design character of the linear block open space system by incorporating design influences which are both unique to the waterfront and consistent with the larger system</li> <li>-use design relationships such as a transitional water-feature to provide a linkage and articulate the juncture of natural features</li> <li>-see right-of-way performance standards and street framework plans</li> </ul>
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Product Analysis (cont.)

	good local fit		<ul style="list-style-type: none"> <li>-extend the river into the community to develop a functional and symbolic relationship with it</li> <li>-reinforce the identity of the waterfront area</li> </ul>	<ul style="list-style-type: none"> <li>-create a major river inlet which extends into the heart of the district</li> <li>-organize land areas and buildings to visually define the river's linkage to the community</li> <li>-focus and articulate pedestrian ways to emphasize the river</li> <li>-emphasize Portland themes and utilize unifying elements</li> <li>-orient new waterfront park areas to the local community and differentiate them from the more "public" river basin by providing facilities for physical activities and informal social gatherings</li> </ul>
	good regional fit		<ul style="list-style-type: none"> <li>-create a public space system that links neighbourhoods and the surrounding environment</li> </ul>	-
	variety of surrounding land uses		<ul style="list-style-type: none"> <li>-promote a rich mixture of uses (in nonindustrial areas)</li> </ul>	<ul style="list-style-type: none"> <li>-encourage recreationally-oriented retail uses along the river</li> <li>-punctuate ground floors of buildings with many destination points</li> </ul>
	variety of spaces		<ul style="list-style-type: none"> <li>-reuse waterfront industrial sites as public open space</li> <li>-promote interim use of vacant land near housing for community gardens</li> <li>-improve bridges for pedestrians and bicyclists</li> </ul>	<ul style="list-style-type: none"> <li>-investigate the feasibility and location of a bridge for pedestrians and bicyclists</li> <li>-allow for street closures with limited access for residential projects if traffic access and circulation are not adversely affected</li> <li>-widen the space used by pedestrians by using arcades, awnings and widened sidewalks</li> <li>-reclaim or enhance waterfront lands</li> <li>-study the possible designation of the River District as a pedestrian district</li> <li>-provide stopping and viewing places</li> </ul>
Site-Specific Needs:	accommodates a variety of activities and uses		<ul style="list-style-type: none"> <li>-recognize the duality of Tanner Creek Park Blocks as both a neighbourhood park and a key link in the downtown parks corridor</li> </ul>	<ul style="list-style-type: none"> <li>-balance the design character of the linear block open space system</li> <li>-orient new waterfront park areas to the local community and differentiate them from the more "public" river basin</li> <li>-encourage the use of public spaces for ethnic and cultural celebrations and displays</li> <li>-parks may contain below-grade parking</li> <li>-provide multifunctional recreational facilities</li> </ul>

Product Analysis (cont.)

	visual interest		<p>-identify, protect and improve significant public views and view corridors at public streets and parks and toward the river</p> <p>-reinforce and enhance the pedestrian system</p> <p>-recognize the river basin, and its bridges, as prominent landmarks which integrate the river with the district</p> <p>-design parking structures to visually integrate with their surroundings</p>	<p>-build a full size working replica of one of the tall ships important to Portland's history and dock it in the downtown</p> <p>-protect views of the river on existing rights-of-way</p> <p>-establish an urban design awards program</p> <p>-incorporate water features or water design themes to enhance the area</p> <p>-incorporate public art or other special design features in the development of outdoor and indoor public spaces and gateway locations using the City's 1% art program, Percent for Art dollars or the F.A.R. bonus program</p> <p>-provide human scale and interest to buildings along sidewalks and walkways by relating door, window and wall treatments to the surrounding context, by providing variation and sensitive detailing within building bases and by encouraging porches and balconies</p> <p>-design and orient the built form, open space and landscape areas to emphasize and focus on views of the river, its bridges, the skyline, the surrounding hills and views into the adjacent urban fabric</p> <p>-design the sidewalk level of parking structures to accommodate active uses, display windows, public art or other features which enhance the structure's relationship to pedestrians</p> <p>-design and locate development projects to visually link their views to the river and waterway by incorporating plazas, terraces, balconies, roof gardens, and other vantage</p> <p>-see right-of-way performance standards and street framework plans</p>
	internal variety		-	-
	responsive to change		-	-
<i>Social Needs</i>	facilitates active and passive social contact		<p>-provide a balance of passive and active parks and open space</p> <p>-recognize the duality of Tanner Creek Park Blocks</p>	<p>-provide facilities for informal social gatherings</p> <p>-provide benches for casual observation of passers-by</p>
<b>Democratic Needs</b>	freedom of access		-make open spaces available to all citizens including a resident population	-
	freedom of use		-reinforce the identity of the waterfront area	-provide facilities for creative expression
	right to claim		-	-






Product Analysis (cont.)

	user choice			
	user control			-programming and design solutions for the waterfront park area should strive to create a sense of community proprietorship
<b>Physical Needs</b>				
<i>Access</i>	visually and physically accessible public space			<ul style="list-style-type: none"> <li>-establish facilities that access the water's surface and the river bank such as temporary boat tie-ups, swimming areas, a light craft centre, and moorages</li> <li>-orient buildings, building entries and fenestrations toward the waterfront and open spaces</li> <li>-encourage the use of porches, decks, balconies and other transitional elements</li> <li>-provide pedestrian and visual connections through large developments</li> <li>-reduce the divisive role of the railway corridor by creating frequent visual and physical connections across the tracks to the water's edge</li> <li>-design fences, walls and gateways located between buildings and sidewalks to be seen over to allow for social interaction</li> </ul>
<i>Comfort</i>	variety of amenities			<ul style="list-style-type: none"> <li>-provide attended public restroom facilities in parks and open spaces</li> <li>-provide benches, picnic tables and seating to encourage people watching, picnicking and small gatherings</li> <li>-provide weather protection at certain locations</li> <li>-see right-of-way performance standards</li> <li>-avoid undue shading of public spaces by massing buildings to reduce shade</li> </ul>
	sunlight enhancement			-consider sunlight, shadow, glare, reflection, wind and rain and their effect on public spaces
	wind protection			-consider sunlight, shadow, glare, reflection, wind and rain and their effect on public spaces
	comfortable temperature and humidity			





Product Analysis (cont.)

	safe pedestrian environment	●	<p>-assist in creating a 24-hour city which is safe, humane and prosperous</p> <p>-protect the pedestrian</p> <p>-bridge pedestrian obstacles</p> <p>-recognize the river basin , and its bridges, as prominent landmarks which integrate the river with the district</p>	<p>-illuminate bridges with night lighting and provide outdoor lighting at a human scale to encourage evening pedestrian activity</p> <p>-place utilities underground</p> <p>-provide convenient pedestrian linkages that facilitate movement to and from the river and to and from adjacent neighbourhoods</p> <p>-orient entrances, windows, balconies, terraces, and porches of adjacent developments toward public spaces to provide surveillance and a transition between public and private space</p> <p>-maintain visual contact and surveillance between the inside of buildings and the adjacent public right-of-way</p> <p>-buffer and separate sidewalks from vehicular traffic with street trees, plantings and protective bollards</p> <p>-locate driveways and garage entrances on side streets rather than adjacent to pedestrian walkways</p> <p>-see right-of-way performance standards and street framework plans</p>
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Product Analysis (cont.)

<b>Psychological Needs</b>	meaningful		<ul style="list-style-type: none"> <li>-recognize the duality of Tanner Creek Park Blocks</li> <li>-use parks and open spaces as a necessary resource for the evolution of a distinct neighbourhood</li> <li>-promote the formation of a neighbourhood with distinct character</li> <li>-reinforce the identity of the neighbourhood parts</li> <li>-recognize the river basin, and its bridges, as prominent landmarks which integrate the river with the district</li> </ul>	<ul style="list-style-type: none"> <li>-balance the design character by repeating or referring to elements of the adjacent park link such as paving materials, tree species, lighting fixtures and benches while including some features which are unique to the space</li> <li>-orient new waterfront park areas to the local community and differentiate them from the more "public" river basin</li> <li>-emphasize the ambience with visual and cultural design features of each neighbourhood</li> <li>-incorporate water features or water design themes that enhance the quality, character, and image of the neighbourhood</li> <li>-use design to articulate the cyclical essence of natural water features such as the daily and seasonal fluctuations caused by tides, seasonal runoff and changing weather conditions</li> <li>-incorporate public art or other special design features in the development of public spaces</li> <li>-see street framework plans and right-of-way performance standards</li> </ul>
	positive meaning and spatial configuration			<ul style="list-style-type: none"> <li>-create a sense of enclosure along linear public spaces by constructing buildings which are at least two or more stories in height and filling in breaks in the streetwall; keep it penetrable by pedestrians at frequent intervals</li> </ul>
	significant			<ul style="list-style-type: none"> <li>-incorporate water related design elements in developments near the waterfront</li> <li>-use design to articulate the cyclical essence of natural water features such as the daily and seasonal fluctuations caused by tides, seasonal runoff and changing weather conditions</li> </ul>
	sense of longevity			<ul style="list-style-type: none"> <li>-see right-of-way performance standards for street lighting</li> </ul>
	comfortable: safety and security		<ul style="list-style-type: none"> <li>-involve the Crime Prevention Office when reviewing plans for parks and open space</li> </ul>	<ul style="list-style-type: none"> <li>-orient entrances, windows, balconies, terraces, and porches of adjacent developments toward public spaces to provide surveillance</li> <li>-maintain visual contact and surveillance between the inside of buildings and the adjacent public right-of-way</li> </ul>

Product Analysis (cont.)

	relaxing, relief and restoration				<ul style="list-style-type: none"> <li>-incorporate water features or water design themes that enhance the quality, character, and image of the neighbourhood</li> <li>-establish facilities that access the water's surface and the river bank</li> <li>-incorporate water features or water design themes that enhance the quality, character, and image of the neighbourhood</li> <li>-incorporate public art or other special design features in the development of outdoor and indoor public spaces and gateway locations</li> <li>-provide facilities for physical recreation in the waterfront park</li> </ul>
	stimulating and learning opportunities			<ul style="list-style-type: none"> <li>-foster opportunities for touching and entering the river</li> <li>-use urban wildlife habitat areas for educational purposes</li> <li>-reinforce the identity of the waterfront</li> </ul>	
<b>Ecological Needs</b>	controls climate			<ul style="list-style-type: none"> <li>-improve the environment by reducing pollution, keeping the City clean and green, and providing opportunities to enjoy nature</li> </ul>	<ul style="list-style-type: none"> <li>-incorporate water features or water design themes that enhance the quality, character, and image of the neighbourhood</li> <li>-plant street trees along most streets</li> <li>-see right-of-way performance standards</li> </ul>
	enhance natural processes, nature conservation, biodiversity and community health			<ul style="list-style-type: none"> <li>-improve the environment by reducing pollution, keeping the City clean and green, and providing opportunities to enjoy nature</li> <li>-improve water quality in the river to enhance fish and wildlife habitat</li> <li>-reduce noise and create pockets of quiet</li> </ul>	<ul style="list-style-type: none"> <li>-examine water quality and waste discharge controls</li> <li>-daylight waterfront creek and create a park</li> <li>-encourage the enhancement of fish habitat areas and their utilization with projects such as constructing small fishing piers</li> <li>-identify and encourage the use of plant materials which link habitat areas</li> <li>-identify and plant street trees which provide urban wildlife habitat</li> <li>-develop urban wildlife areas in public parks and open spaces</li> <li>-promote the development of employee parking, traffic management and alternative employee transit plans for new and existing businesses</li> <li>-study offering price reductions in the cost of parking for vehicles which pass an annual emissions inspection</li> <li>-study and make recommendations on the potential of electrification and use of alternative fuels for transit to reduce noise and air pollution</li> </ul>

Product Analysis (cont.)

<b>Functional Needs</b>	well organized and diverse programming		<ul style="list-style-type: none"> <li>-encourage the use of public spaces for ethnic and cultural celebrations and displays</li> <li>-encourage riverfront tours</li> <li>-create opportunities to enjoy urban wildlife habitat areas and use them for educational purposes</li> </ul>	<ul style="list-style-type: none"> <li>-develop and distribute brochures and maps on riverfront recreation</li> <li>-develop and publish a brochure on the downtown urban wildlife habitat system and provide interpretive plaques in parks</li> <li>-establish a regular walking tour program which is made available to conventions and tourists</li> </ul>
	adequate maintenance		<ul style="list-style-type: none"> <li>-establish programs which discourage littering and provide increased litter removal</li> </ul>	<ul style="list-style-type: none"> <li>-provide convenient trash receptacles throughout the downtown</li> <li>-provide waste disposal facilities for boats at marinas and tie-up docks</li> <li>-establish a litter clean-up campaign</li> <li>-establish an "adopt a park" program to provide for development and maintenance of special park facilities</li> </ul>
	variety of food/retail outlets		<ul style="list-style-type: none"> <li>-design parking structures to visually integrate with their surroundings</li> </ul>	<ul style="list-style-type: none"> <li>-design and build kiosks and place them in areas of high pedestrian traffic</li> <li>-locate sidewalk cafes and food vendors in wide pedestrian walkways</li> <li>-accommodate vending booths along sidewalks adjacent to parking facilities, when active ground level uses are not possible</li> </ul>
<b>Economic Needs</b>	appropriate signage		-	-
	contribution to commercial vitality and greater tax base		-	<ul style="list-style-type: none"> <li>-install kiosks in high pedestrian traffic areas</li> <li>-locate sidewalk cafes and food vendors in wide pedestrian walkways</li> <li>-accommodate vending booths along sidewalks adjacent to parking facilities</li> </ul>
	enhance property values and rental rates		-	-
	provide local employment economically responsible		-	-

Source: Portland Bureau of Planning

Process Analysis:

Public Space Planning Process, Implementation, Maintenance and Monitoring Strategy

COMPONENTS	GENERAL CRITERIA	CENTRAL CITY PLAN	RIVER DISTRICT DEVELOPMENT PLAN: includes development program, river district urban design plan, river district design guidelines and river district right-of-way framework plans, design criteria and design standards
<b>PLANNING PROCESS</b>			
<b>Players Involved</b>	citizens	-participated in developing citizen planning reports	-citizens developed the River District Vision in 6 mos and presented it to council
	city staff	-synthesis of citizen planning reports, planning analysis and writing of final document	-planning and engineering analysis -report writing
	politicians	-city commissioner initiated the process, organized the citizen steering committee to develop numerous planning reports and generally guided the process	-council directed the Development Plan to implement the citizen vision; appointed the River District Steering Committee (included representatives from property and business owners, neighbourhood associations, social service agencies and the city) to oversee the development of the Plan
	planning professionals	-small professional planning staff facilitated the creation of numerous citizen planning reports	-consultants facilitated the planning and engineering analysis
	other	-	-
<b>Characteristics of the Process</b>			
<b>Finances:</b>	budget	\$1.6 million	-
	allocation of budget	-	-
	origin of funding	city's general fund	-
<b>Time Frame:</b>	plan creation	1984-1988	1991-
	plan implementation	20 years	-



Process Analysis (cont.)

<i>Plan Creation</i>	steps to create plan	-	1.Develop the River District Vision 2.Evolution of a Concept Plan 3.Program for Infrastructure Improvements 4.Program for Development 5.Guidelines for Design and Development
<i>Plan Type</i>	comprehensive	-	X
	general	-	-
	combination of comprehensive and general	X	-
	other	-	-
<i>DESIGN PROCESS</i>			
Role of the Designer/s	analysis	X	X
	testing	some	some
	form-giving	some	some
<i>IMPLEMENTATION</i>			
Implementing Agencies	city	-Parks and Recreation -Police -Transportation, Engineering and Development -Planning -Environmental Services -Buildings -General Services	-Planning -Transportation, Engineering and Development -Parks and Recreation
	outside agency	-Portland Development Commission-oversee plan implementation -Tri-County Metropolitan Transit District -Greater Portland Convention and Visitors Association -Metropolitan Arts Commission -Multnomah County -Port of Portland	-Portland Development Commission-oversee plan implementation
<i>Implementation Structure</i>	developer	X	X
	cooperative interaction	X	X
	leader-oriented	X	X

Process Analysis (cont.)

Implementation Type	planned incremental	-	-
	ad hoc	X	-
	private project-oriented	X	X
	public project-oriented	X	X
Implementation Strategy		development negotiation process	private-public partnership
Communication Strategy	target audience	professionals, developers, general public	professionals, developers
	plan form	single document, professional presentation with maps, drawings, charts.	several documents professionally designed with maps, drawings, diagrams, and photos
	match between form and target audience	good	good-but number of documents is cumbersome
<b>MAINTENANCE</b>			
Maintenance Agencies			
Publicly-owned land	rights-of-way	Transportation, Engineering and Development	Transportation, Engineering and Development
Privately-owned land	open space	Parks Department	Parks Department
	rights-of-way	-	-
	open space	-	-
<b>MONITORING</b>			
Monitoring Agency	Planning	-	-
	Parks	-	-
	Engineering	-	-

Source: Portland Bureau of Planning

## RIGHT-OF-WAY PERFORMANCE STANDARDS

Sidewalk Widths: on existing streets standard width is 12 feet; on typical new or redeveloped streets, 13 feet is recommended; on special function streets 15 feet is recommended

Building Frontage Zone: the area of sidewalk directly abutting buildings is out of the pedestrian zone and typically accommodates pedestrian furniture and minor building projections

Through Pedestrian Zone: space for through pedestrian traffic and without any obstructions are typically 6 feet wide

Furnishings Zone: space for elements supporting pedestrian and vehicular use of the right-of-way including signage, lighting, furniture, soft or hard landscape and transit facilities; is typically 3-4.5 feet wide ; typical street furnishings include benches, planters, trash receptacles, drinking fountains, news racks, kiosks, signage and transit shelters; street furnishings should either be consistent with established precedents for the entire corridor or consistent with established patterns in the immediate area

Curb Zone: space allocated for the curb is typically 0.5-1 feet wide

Street Lighting: use twin ornamental on typical streets at a symmetrical 6 per block, staggered 3 per block and at mid-block one on either side; use single ornamental on special streets at a staggered 4 per block or special pattern 6 per block; use traditional cobra lighting on several streets at a staggered 3 per block

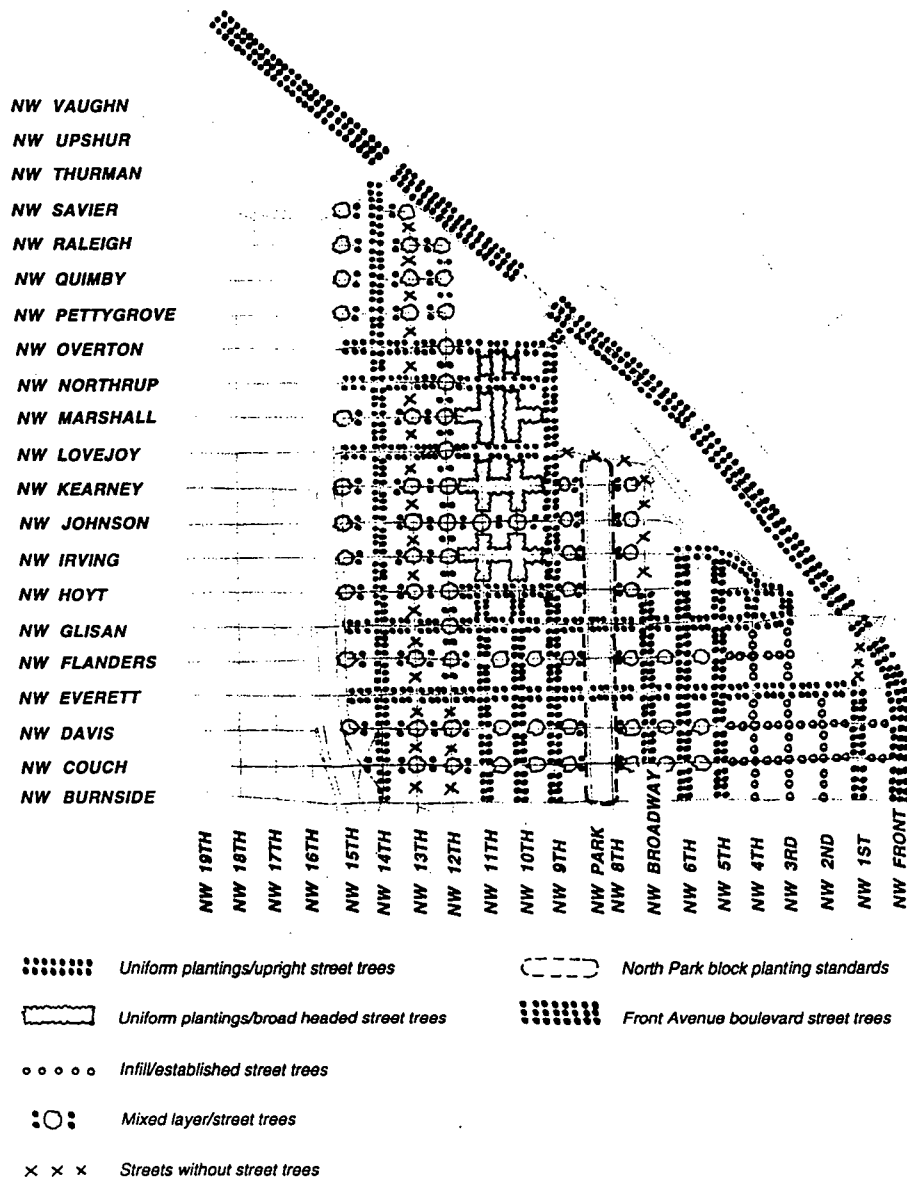
Street Trees: use uniform plantings/Upright Street Trees to provide continuity of form, texture and color where space is constrained, Uniform Plantings/Broad-headed Street Trees to provide a physical and visual link between neighbourhoods and parks, Infill/Established Street Trees to provide infill and reinforce existing street tree plantings, and Mixed Layer Street Trees to provide continuity along the street corridor by a major tree species and visual diversity and rhythm by varying minor tree species as indicated on the street tree framework plan

Special Features: use stand-alone art in the form of gateways and monument type artworks in the street environment at designated intersections, or architecturally integrated artworks such as vault covers, signal cabinets, manhole covers, electrical cabinets; tree grates, etc.; Funding: hire artists with Percent for Art dollars to work as a "design team" member with architects, engineers, landscape architects, etc., use the City's 1% art program to fund public art for public works, or use the F.A.R. bonus for art program

*Source: Portland Bureau of Planning*

## FRAMEWORK PLANS

### Street Trees






Source: River District Right-of-Way Standards 1996

## Appendix C:

### VICTORIA:




#### Product Analysis

HUMAN NEEDS	GENERAL CRITERIA	ISSUE ADDRESSED	OBJECTIVES/POLICIES	PERFORMANCE STANDARDS
Community Needs <i>Neighbourhood Needs:</i>	attractive and inviting human-scaled environment		<ul style="list-style-type: none"> <li>-make the downtown an enjoyable place by providing high-quality architecture, open space, waterfront, mid-block walkways and recreational facilities</li> <li>-maintain the scale and character of the downtown</li> <li>-encourage people-oriented uses such as retail, cafes, restaurants, residential and hotels to front open spaces</li> <li>-upgrade all streets to attractive standards</li> <li>-provide quality furnishings</li> </ul>	<ul style="list-style-type: none"> <li>-where appropriate, include artists in street furnishing design and review</li> <li>-create a public art policy and program using the Percent For Art Policy</li> <li>-encourage commemorations</li> <li>-develop a civic seasonal decoration program</li> <li>-place overhead utilities underground</li> <li>-continue flower basket program and encourage baskets on private property</li> <li>-concentrate planting in open spaces</li> <li>-regulate non-conforming streetscape design</li> </ul>
	central location and reasonable walking distance			
	close relationship between open space and street		-make more effective use of street rights-of-way to complement open space needs	-add medians or widen sidewalks where appropriate










## Product Analysis (cont.)

	linked system of public spaces and public ways	●	<p>-improve pedestrian and cyclist environments</p> <p>-pay special attention to historic alleys and courtyards and enhance secondary access routes as viable pedestrian networks</p> <p>-strengthen the linkage between the downtown and its open spaces with the waterfront</p>	<p>-explore the possibilities of one-way streets</p> <p>-encourage a viable pedestrian network through historic urban spaces</p> <p>-provide more convenient pedestrian access routes to the waterfront such as pedestrian viaducts</p> <p>-extend the mid-block public walkway system to achieve a grid of north-south access modeled after the Old Town's intervals of 300-400 feet</p> <p>-coordinate mid-block walkway system with private interior courtyard development</p> <p>-consider bonus density, the transfer of development rights, density transfers as well as restrictive covenants, easements, air space parcels and heritage designation by-laws to create or extend a mid-block walkway system or arcades</p> <p>-encourage the private sector to work cooperatively with neighbours</p> <p>-acquire public rights-of-way for walkways</p> <p>-use tourism developments to advance walkway creation and enhancement</p> <p>-support the provision of innovative "people movers" to connect important activity centres throughout the downtown</p> <p>-use site-wide system with character-area recommendations to develop a cohesive yet unique network</p> <p>-use distinctive paving, lighting, street trees and color to distinguish character areas and unify them with the downtown</p> <p>-extend shop frontage continuity throughout the downtown</p>
	good local fit	●	-design public space character to fit within the general context of the area	<p>-periodically review quality and design of existing public space to ensure compatibility with development objectives</p> <p>-establish a Technical Committee to oversee working designs</p> <p>-use planters sympathetic to the area</p> <p>-allow for eclectic styles</p> <p>-ensure continuity of design within and between character areas</p> <p>-coordinate design and signage standards</p> <p>-use distinct lighting, street trees, paving and colors within each character area</p>
	good regional fit	O		

Product Analysis (cont.)








	variety of surrounding land uses		<ul style="list-style-type: none"> <li>-encourage residential use throughout the downtown</li> <li>-encourage the region's major institutions to establish a presence in or adjacent to the downtown</li> <li>-encourage people-oriented uses such as retail, cafes, restaurants, residential and hotels to front open spaces</li> <li>-create opportunities for public gatherings, festivals and exhibits</li> <li>-define a hierarchy of open spaces</li> <li>-develop a linear park system -encourage the re-development of existing courtyards and alleyways as pedestrian-exclusive or pedestrian-shared open space and linkages</li> </ul>	<ul style="list-style-type: none"> <li>-develop and promote squares, mini-parks, open courts, building forecourts, decks, terraces, roofdecks, waterfront and mid-block walkways</li> <li>-extend the semi-mall</li> <li>-create a civic open space in deficiency area</li> <li>-consolidate public space and underutilized roadway into larger continuous sites</li> <li>-occasionally close streets for special events</li> <li>-develop inner courtyards and alleyways and link them to pedestrian walkways</li> <li>-design public spaces to accommodate celebratory events</li> <li>-determine a ceremonial route for dignitaries and parades</li> <li>-ensure streetscape improvements or public works can accommodate festival needs such as water and power</li> <li>-use the water as a ceremonial or performance venue</li> <li>-combine parking with public spaces</li> </ul>
	variety of spaces			
Site-Specific Needs:	accommodates a variety of activities and uses		<ul style="list-style-type: none"> <li>-encourage people-oriented uses to front open spaces</li> <li>-use public spaces to enhance heritage landmarks</li> </ul>	

Product Analysis (cont.)







	visual interest		<ul style="list-style-type: none"> <li>-keep and enhance high quality vistas</li> <li>-provide high quality landscaping and viewpoints</li> <li>-extend active, usable open space to accentuate natural features</li> <li>-encourage people-oriented uses to front open spaces</li> <li>-coordinate landscape design to emphasize important components of the downtown's image</li> <li>-create dynamic arrival areas</li> <li>-accentuate diversity in the downtown</li> <li>-enhance special and unique features of streetscapes and open spaces</li> </ul>	<ul style="list-style-type: none"> <li>-vary building heights from the harbour inland to protect quality vistas, landmarks and open spaces</li> <li>-address views in development review process</li> <li>-establish a civic awards program to recognize outstanding improvements to the image of the downtown</li> <li>-utilize Federal and Provincial government programs as well as Victoria's Five Year Capital Program</li> <li>-screen blighted areas</li> <li>-remove overhead wiring</li> <li>-create landmark features along major access routes and streetheads to give a sense of arrival or for orientation, or to mark a vista point at the head of a street through a landscape program</li> <li>-require active windows and doors in most facades along main streets; does not include openings to offices, banks or blank walls longer than 15 feet</li> <li>-to improve sight lines, change stop sign line and use corner setbacks</li> <li>-encourage public art through the Percent For Art Policy</li> <li>-develop a civic seasonal decoration program</li> <li>-visually reduce the width of overly wide streets by adding a landscaped median or increasing streetwall heights</li> <li>-select trees which preserve long-range views</li> <li>-continue flower basket program and encourage baskets on private property</li> </ul>
	responsive to change		-allow for careful design refinements on an ongoing basis for public spaces to ensure its role as a people place is fulfilled	-
	internal variety		-	-concentrate plantings in open spaces
	adequate size		-	-
<i>Social Needs</i>	facilitates active and passive social contact		-	-
<b>Democratic Needs</b>	freedom of access		-	-
	freedom of use		-	-
	right to claim		-	-
	user choice		-	-













Product Analysis (cont.)

	user control		-	-use public art to involve citizens in the design of the public realm
<b>Physical Needs</b>				
<i>Access</i>	visually and physically accessible public space		<ul style="list-style-type: none"> <li>-make public spaces more accessible, especially the waterfront</li> <li>-recognize and enhance historic entries to public spaces</li> <li>-facilitate handicapped access</li> <li>-improve pedestrian access over and under bridges</li> <li>-provide access to the waterfront and marine vessels for servicing and loading</li> <li>-improve and expand sidewalk design and street furniture programs</li> <li>-provide furnishings appropriate to character areas</li> </ul>	-install removable bollards or covered overhead walkways at appropriate access points
<i>Comfort</i>	variety of amenities			-continue the Victoria Streetscaping Program -encourage commemorations for public art
	sunlight enhancement		<ul style="list-style-type: none"> <li>-take advantage of development opportunities to improve sunlight access</li> <li>-prevent excessive shading of public space during high use times</li> </ul>	-use the Development Permit review process and the Advisory Design Panel to prevent overshadowing
	wind protection		<ul style="list-style-type: none"> <li>-take advantage of development opportunities to protect citizens against the effects of high winds in open spaces</li> </ul>	-use plantings to ameliorate climate
	comfortable temperature and humidity			-use plantings to ameliorate climate
	safe pedestrian environment		<ul style="list-style-type: none"> <li>-maximize safety for the pedestrian</li> <li>-use development opportunities to improve the sense of public safety</li> <li>-facilitate the provision of a lively residential community which enhances the security of public places</li> <li>-improve rights-of-way to soften car-oriented appearances and assist pedestrian crossings at key points</li> </ul>	<ul style="list-style-type: none"> <li>-adopt a program of sidewalk upgrading with scheduled priorities based on present structural conditions and redevelopment potential of adjacent properties</li> <li>-improve crosswalks, educate pedestrians and enforce laws</li> <li>-set back main walking area at least 6.6 feet from moving vehicular traffic lanes and provide garbage receptacles, directional signs and other street furnishings to insulate the pedestrian from traffic movement</li> <li>-facilitate residential uses overlooking public spaces</li> </ul>

Product Analysis (cont.)

Psychological Needs	meaningful		<ul style="list-style-type: none"> <li>-coordinate landscape design to emphasize important components of the downtown's image such as gateways, landmarks, streetheads, vistas and nodes</li> <li>-vary streetscape patterns to emphasize the distinct character of certain portions of the downtown</li> <li>-enhance special and unique features of streetscapes and open spaces</li> </ul>	<ul style="list-style-type: none"> <li>-use facade improvements and open space to mark important downtown gateways</li> <li>-use plantings like annual floral displays and landmarks to reinforce arrival points and routes, character areas with thematic planting, define edges and create walls for outdoor rooms, frame desirable views and block undesirable ones, provide rhythm (seasonal change), color and fragrance to the street environment</li> <li>-use historically appropriate street furnishings and paving materials</li> <li>-consider a unifying design theme for "antique row" using sidewalk pavers, trees, iron tree grates, hanging baskets, suspended signs, planters, canopies/awnings, etc.</li> <li>-reinforce character area identity</li> <li>-sponsor competitions for local involvement in floral displays</li> <li>-encourage public art and provide potential landmark features at streetheads such as sculptures and fountains</li> </ul>
	positive meaning and spatial configuration			<ul style="list-style-type: none"> <li>-use facade improvements and open space to mark important downtown gateways</li> <li>-use historically appropriate street furnishings and paving materials particularly in alleyways and courtyards</li> <li>-use plantings to reinforce arrival points and routes</li> </ul>
	significant			-
	sense of longevity			-
	comfortable; safety and security		<ul style="list-style-type: none"> <li>-facilitate the provision of a lively residential community which benefits local businesses and the security of public places</li> </ul>	
	relaxing; relief and restoration		<ul style="list-style-type: none"> <li>-extend active, usable open space and natural features to provide relief and seasonal variation in congested areas</li> </ul>	<ul style="list-style-type: none"> <li>-consider density bonus, transfer, multiple use, restrictive covenants, easements, air space parcels and heritage designation by-laws to extend area or viability of desirable open spaces</li> <li>-establish a program of acquisition and improvements</li> <li>-use plantings</li> </ul>
	stimulating and learning opportunities		<ul style="list-style-type: none"> <li>-encourage people-oriented uses to front open spaces such as storefronts and restaurants</li> </ul>	<ul style="list-style-type: none"> <li>-provide potential landmark features</li> <li>-encourage public art</li> </ul>

Product Analysis (cont.)

<b>Ecological Needs</b>	controls climate		-use plantings to ameliorate climate	-add street trees and shrubs in planters along certain streets -plant street trees based on street importance to reinforce the existing grid pattern and to provide a unifying theme -establish a program of acquisition and improvements -consider density bonus, transfer, multiple use, restrictive covenants, easements, air space parcels and heritage designation by-laws to extend area or viability of desirable open spaces -preserve the natural shoreline where possible
<b>Functional Needs</b>	enhance natural processes, nature conservation, biodiversity and community health		-extend active, usable open space and accentuate historic urban spaces to -extend active, usable open space and enhance historic urban spaces to provide relief in congested areas poorly served by existing open space	
	well organized and diverse programming			
	adequate maintenance		-provide quality landscape and maintenance of public spaces	
	variety of food/retail outlets		-encourage people-oriented uses to front open spaces -create a pedestrian-oriented retail shopping circuit	
	appropriate signage			-coordinate design and signage standards -provide directional signage in main pedestrian walking areas -maintain and expand programs for directional signs, maps, kiosks, and heritage interpretive plaques -do not identify corporate contributions in the streetscape -create a sign plan
<b>Economic Needs</b>	contribution to commercial vitality and greater tax base		-facilitate the provision of a lively residential community which benefits local businesses -provide attractively landscaped public space in conjunction with other aesthetic improvements to improve local commercial vitality	
	enhance property values and rental rates			
	provide local employment			-use public art as a method to stimulate the growth of art-related businesses
	economically responsible			

Source: Victoria Planning Department

Process Analysis:

Public Space Planning Process, Implementation, Maintenance and Monitoring Strategy

COMPONENTS	GENERAL CRITERIA	DOWNTOWN VICTORIA PLAN	DOWNTOWN VICTORIA BEAUTIFICATION STRATEGY
<b>PLANNING PROCESS</b>			
<b>Players Involved</b>	citizens	-open house participation	-open house participation
	city staff	-led process and developed the product	-formed the Downtown Beautification Technical Committee to guide, review and direct the Strategy creation and implementation - includes staff from planning, parks, engineering, administration, art commission and CPTED-trained police representative
	politicians	X	X
	planning professionals	-sub-contracted a designer	-planning consultants devised the Strategy - landscape architects, structural engineers, public art specialist and signage consultants
	other	-	-B.C. Transit review
<b>Characteristics of the Process</b>			
<b>Finances:</b>	budget	-	\$50,000
	allocation of budget	-	-
	origin of funding	-	-
<b>Time Frame:</b>	plan creation	-Planning budget	-Planning budget
	plan implementation	1987-1990 plus ongoing revisions	1991-1992 plus ongoing revisions
<b>Plan Creation</b>	steps to create plan	many years	many years
		1.organize planning team 2.identify issues 3.create preliminary draft 4.public consultation 5.create final draft	1.contract consultants 2.create strategy 3.reviewed by the Downtown Beautification Technical Committee, city staff and other agencies 4.Council adoption January, 1995 5.implementation
<b>Plan Type</b>	comprehensive	-	-
	general	-	-
	combination of comprehensive and general	X	X

Process Analysis (cont.)

<b>DESIGN PROCESS</b>				
Role of the Designer/s	analysis	X		X
	testing	-some		X
	form-giving	-some		some
<b>IMPLEMENTATION</b>				
ON				
Implementing Agencies	city	X		X
	outside agency	-		X
	developer	X		X
Implementation Structure	cooperative interaction	-		X
	leader-oriented	X		-
Implementation Type	planned incremental	-		
	ad hoc	X		X
	private project-oriented	X		X
	public project-oriented	X		X
Implementation Strategy		-development negotiation process -development permit area controls -consider density bonus, transfer, multiple use, restrictive covenants, easements, air space parcels and heritage designation by-laws to extend area or viability of desirable open spaces -establish a program of acquisition and improvements of strategically located public spaces throughout the downtown -for properties fronting on a street intersection, establish a corner setback requirement of 10 feet applicable to the ground floor -for sites adjacent to primary walkway, introduce a grade level passage width requirement of 8-12 feet -relax height limits in special cases to allow the creation of active, usable public space and walkways at ground level -setback building facades to create open plazas		-consultation with the planning department -each year's projects are identified and reviewed by the Downtown Beautification Technical Committee in consultation with the Downtown Advisory Committee; then a proposed budget and list of projects are presented to council for approval - partners to share the costs are sought, e.g. for large projects: 1/3 property owners, 1/3 City and 1/3 grants from other agencies; for small projects: businesses pay for item such as bike rack and the City provides installation and maintenance

Process Analysis (cont.)

Communication Strategy	target audience	professionals, general public	professionals, city staff
	plan form	professional presentation in two booklets with maps, diagrams, photos	professional presentation with maps, diagrams, drawings photos
	match between form and target audience	good	good
<b>MAINTENANCE</b>			
<b>Maintenance Agencies</b>			
<i>Publicly-owned land</i>	rights-of-way	Engineering	Engineering
	parks	Parks	Parks
<i>Privately-owned land</i>	rights-of-way	Engineering	Engineering
	parks	Parks	Parks
<b>MONITORING</b>			
<b>Monitoring Agency</b>	planning	-	-
	parks	-	-
	engineering	-	-

Source: Victoria Planning Department