

State of Diversity of Uses and Activities in the Public Space: The Case of Four Public
Spaces in Downtown Vancouver

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

The roles of urban public spaces in urban cores are being re-assessed across many North American cities. Public spaces within downtown cores are essential in ensuring the long-term viability of such urban centers economically and socially. Public spaces have been researched by utilizing a number of theories and frameworks in the past few decades, most notably through a socio-cultural lens. Another possible method of assessing what makes a great public space in a downtown core is by looking at how diverse a range of activities and uses it provides.

The City of Vancouver's downtown core has undergone massive redevelopment schemes in the past two decades. The downtown area has been transformed into a hub that not only retains major commercial and retail functions in the City but also boasting an active and increasing residential population living in mixed-use high density condominiums. Downtown Vancouver's public spaces have also been increasing in number during the past two decades, on par with promoting a more active outdoor lifestyle for both residents and visitors. Assessing the degree to which the range of uses and activities meet the diverse range of users' expectations and requirements is a possible method of analyzing these spaces' viability in the public realm.

Data for this research was collected by reviewing previous literature, unobtrusive observation and mapping of activities, compiling contextual maps of surrounding areas and usage maps for each selected public space, administering on-site user surveys, and conducting semi-structured interviews with professional and academic actors involved with planning, maintaining, and designing public spaces.

Through conducting this research, it was found out that while some public spaces in Downtown Vancouver are more successful in terms of being used in a variety of ways, others are less so. Downtown Vancouver was also found to be lacking central public spaces such as plazas and squares, as these spaces would provide for a wider range of activities in the public realm. A number of strategies need to be taken by planners, officials in the City, and other actors in order to ensure more diverse range of activities in Downtown Vancouver's public spaces in the future.

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Table of Contents

List of Figures.....	viii
List of Tables.....	x
Chapter 1: Introduction	1
1.1 Research Background	1
1.1.1 Current Definitions of Urban Public Spaces	1
1.1.2 Factors Affecting Usage of Urban Public Spaces	3
1.1.3 Current Trends of Public Space Revitalization	5
1.2 Study Rationale	7
1.3 Research Objectives and Questions.....	13
1.4 Layout of Thesis.....	13
Chapter 2: Literature Review.....	15
2.0 Introduction.....	15
2.1 Importance of Public Spaces in Urban Settings.....	15
2.1.1 Social importance of public spaces in urban environments	16
2.1.2 Environmental and economic importance of public spaces in cities	20
2.1.3 Vitality of public spaces to downtown cores' success.....	21
2.2 Role of Public Spaces in a Good Urban Form.....	25
2.3 Perceptions of Public Spaces by Users.....	32
2.3.1 Human perceptions of the urban environment	32
2.3.2 Differences and similarities between users' and political, bureaucratic, and economic actors' perceptions of the public space	35
2.3.3 Perception of safety through appropriate design and regulations in the public space	36
2.4 Accessibility and Usage through Close Proximity to Public Spaces	40
2.4.1 Proximity of public spaces to users' residential dwellings	40
2.4.2 Proximity of public spaces to retail and other urban facilities.....	43
2.5 Relationships Between Design and aesthetic features and Types of Uses and Activities Observed in Public Spaces.....	44
2.5.1 Relationships between design features and aesthetic characteristics with types of functions observed in public parks.....	45
2.5.2 Increased and higher diversity of uses and activities in redesigned public spaces.....	48
2.6 Edge and Central Public Spaces.....	51
2.6.1 Current state of edge and central public spaces in Downtown Vancouver.....	52
2.6.2 The need for providing central gathering places in Downtown Vancouver	54
2.7 Conceptual Framework.....	56
2.8 Conclusion	59
Chapter 3: Research Methodology.....	61
3.1 Methodological Approach	61
3.1.1 Researcher's Role	61
3.1.2 Triangulation	62
3.2 Case Study Framework.....	62
3.2.1 Case studies' selection	63

3.3 Data Collection Strategy.....	66
3.3.1 Observation and mapping of activities and urban context of each public space	67
3.3.2 On-site survey of users of selected public spaces.....	69
3.3.3 Semi-structured interviews with bureaucratic, political, economic, and academic actors.....	71
3.4 Data Analysis Strategy.....	72
3.4.1 Raw data organization, coding, and preparation for analysis.....	72
3.4.2 Strategies for reliability, internal validity, and generalizability.....	74
3.5 Limitations and Opportunities.....	77
3.6 Ethics Approval.....	79
3.7 Summary.....	79
Chapter 4: Case Study Profiles.....	80
4.1 Introduction.....	81
4.1.1 Granville Street Corridor.....	82
4.1.2 Emery Barnes Park.....	84
4.1.3 Creekside Park.....	86
4.1.4 North False Creek waterfront walkway (the portion intersected by Cooper’s Park and David Lam Park).....	88
4.2 Summary.....	90
Chapter 5: Findings.....	92
5.1 Observation of Activities.....	92
5.1.1 Distribution of uses and activities in Granville Street corridor.....	93
5.1.2 Distribution of uses and activities in Creekside Park.....	94
5.1.3 Distribution of uses and activities in Emery Barnes Park.....	95
5.1.4 Distribution of uses and activities in the North False Creek Waterfront walkway.....	98
5.2 Contextual Maps and Maps of Activities Within the Selected Public Spaces.....	99
5.2.1 Contextual map of Granville Street corridor.....	100
5.2.2 Contextual map of Creekside Park.....	101
5.2.3 Contextual map of Emery Barnes Park.....	102
5.2.4 Contextual map of North False Creek Waterfront walkway.....	103
5.2.5 Map of locations of activities within Granville Street corridor.....	105
5.2.6 Map of locations of activities within Creekside Park.....	110
5.2.7 Map of locations of activities within Emery Barnes Park.....	111
5.2.8 Map of locations of activities within the North False Creek Waterfront walkway.....	114
5.3 Survey Results.....	119
5.3.1 Granville Street corridor.....	119
5.3.2 Creekside Park.....	123
5.3.3 Emery Barnes Park.....	127
5.3.4 North False Creek Waterfront walkway.....	131
5.4 Semi-structured Interviews.....	135
5.4.1 Strength of the selected public spaces.....	136
5.4.2 Importance of design and placement of amenities in relation to types of usage	138

5.4.3 Issues of user safety in the selected public spaces.....	141
5.4.4 Future physical modification of the selected public spaces in order to accommodate higher variety of activities and functions for users.....	144
Chapter 6: Analysis.....	148
6.1 How Are the Selected Public Spaces in Downtown Vancouver Being Primarily Used?.....	149
6.2 To What Extent Does Diversity of Uses and Activities in Each of the Selected Public Spaces Help to Meet the Diverse Expectations and Requirements of Their Users?.....	152
6.2.1 Study sites ranked according to diversity of uses observed and recorded in surveys and semi-structured interviews.....	152
6.2.2 Why is Emery Barnes Park used in more diverse ways than Granville Street corridor and the other study sites?.....	153
6.2.3 Do contextual factors of location within the urban landscape, as well as proximity to residential, retail, and other urban services explain levels of diversity of usage within the study sites?.....	158
6.2.4 Do existing physical factors of design and aesthetic characteristics (including the amount and placement of amenities) within public spaces explain state of diversity of usage?.....	160
6.2.5 Is it necessary for all public spaces in Downtown Vancouver to be used through more diverse types of uses and activities? Differences and Similarities between users and professional/academic/political actors.....	163
6.2.6 Are the goals and objectives of the CityPlan 1995 being met in the studied public spaces?.....	166
6.3 To What Extent Does Perception of Safety, Quality of Amenities, and Opportunities for Usage Satisfy the Expectations And Requirements of Users?.....	168
6.3.1 Specific safety issues in the public spaces under study.....	168
6.3.2 Relationships between general perceptions of safety and opportunities for usage as determined by physical and contextual factors of design, aesthetics qualities and proximity to other urban amenities.....	171
Chapter 7: Recommendations and Conclusions.....	179
7.1 Recommendations for the City of Vancouver, other municipalities in North America, and other actors involved with public space planning and design.....	179
7.1.1 Planning public spaces within close proximity to residential, retail, and other urban areas.....	179
7.1.2 Plan more central public spaces in the Downtown core.....	180
7.1.3 Provide as many amenities and aesthetically pleasing features within existing and future public spaces as is economically and physically possible.....	180
7.1.4 Plan public spaces that are designed for both current and future users.....	181
7.1.5 Partition the public space, when possible, into both flexible and programmed sub-areas.....	182
7.2 Recommendations for future research and studies of public spaces.....	182
7.3 Conclusions.....	184
References.....	187
Appendices.....	197

List of Figures

Figure 1: Elements influencing usage and success of the public place. Source: Madden & Wiley-Schwartz, 2002, p. 21); Project for Public Spaces [PPS].....	4
Figure 2: Abraham Maslow's hierarchy of needs. Source: Maslow, 1970.....	8
Figure 3: The translation between the provisions of public space into building a sense of community. Source: Talen, 2000, p. 348.....	29
Figure 4: Map of Downtown Vancouver and its public spaces. Source: Vancouver Public Space Network, 2010.....	54
Figure 5: Conceptual framework for Downtown Vancouver public spaces' diversity of activities' evaluation. Source: Behnia, 2011.....	58
Figure 6: Historical trend of condo towers and residential units' density in the GVRD from 1981 to 2006. Source: Czypya, 2010, p. 29.....	64
Figure 7: Map of the City of Vancouver, showing all neighborhoods and highlighting the downtown core. Source: Boyd, 2010, p. 171.....	80
Figure 8: Location of the selected sites within the downtown core. Source: Behnia, 2011.	81
Figure 9: Granville Street corridor (between Smithe and Georgia streets). Source: Behnia, 2011.	83
Figure 10: Granville Street corridor, showing location of benches, sidewalks, and programmable space after redevelopment for the 2010 Winter Olympic Games. Source: Behnia, 2010.....	84
Figure 11: Emery Barnes Park site. Source: Behnia, 2011.	85
Figure 12: Emery Barnes Park site map. Source: Behnia, 2011.....	86
Figure 13: Creekside Park site. Source: Behnia, 2011.....	87
Figure 14: Creekside Park site, highlighting different subsections and overall functions. Source: Behnia, 2011.....	88
Figure 15: the North False Creek Waterfront walkway site. Source: Behnia, 2011.....	89
Figure 16: the North False Creek Waterfront walkway, showcasing pathways for pedestrians and cyclists along the waterfront corridor. Source: Behnia, 2011.....	90
Figure 17: Distribution of observed activities in Granville Street corridor.....	93
Figure 18: Distribution of observed activities in Creekside Park.....	95
Figure 19: Distribution of observed activities in Emery Barnes Park.....	97
Figure 20: Distribution of observed activities in North False Creek Waterfront walkway.....	98
Figure 21: The urban context of Granville Street corridor within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.....	101
Figure 22: The urban context of Creekside Park within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.....	102
Figure 23: The urban context of Emery Barnes Park within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.....	103
Figure 24: The urban context of the North False Creek Waterfront walkway within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.....	105
Figure 25: Map of location of activities and uses in Granville Street corridor. Source: Behnia, 2011.....	107

Figure 26: Zoomed subsection (a) of locations of activities and uses in Granville Street corridor. Source: Behnia, 2011 108

Figure 27: Zoomed subsection (b) of locations of activities and uses in Granville Street corridor. Source: Behnia, 2011. 109

Figure 28: Map of locations of activities and uses in Creekside Park. Source: Behnia, 2011. 111

Figure 29: Map of location of activities and uses in Emery Barnes Park. Source: Behnia, 2011. 113

Figure 30: Map of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011..... 116

Figure 31: Zoomed subsection (a) of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011..... 117

Figure 32: Zoomed subsection (b) of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011..... 118

List of Tables

Table 1: Categories and corresponding variables for evaluating good urban form. Source: Talen, 2005, p. 210.....	29
Table 2: Requirements for making great streets. Jacobs, 1993, p. 270.....	31
Table 3: The Preference Matrix. Kaplan and Kaplan, 1989, p. 53.....	33
Table 4: Categorization of public spaces for this study based on all possible four-combination types. Source: Behnia, 2011.....	66
Table 5: Golicnik and Ward Thompson's tabulated results of activities observed and recorded in three public spaces in Scotland and Eastern Europe. Source: Golicnik & Ward Thompson, 2010, p. 42.....	68
Table 6: List of participants for the semi-structured interviews with job titles and professional affiliations. Source: Behnia, 2011.....	72
Table 7: Summarized results of user surveys for Granville Street corridor. Source: Behnia, 2011.....	120
Table 8: Summarized results of user surveys for Creekside Park. Source: Behnia, 2011.....	124
Table 9: Summarized results of user surveys for Emery Barnes Park. Source: Behnia, 2011.....	128
Table 10: Summarized results of user surveys for North False Creek Waterfront walkway. Source: Behnia, 2011.....	132
Table 11: Ranked study sites according to diversity of activities within site boundaries. Source: Behnia, 2011.....	153

Chapter 1: Introduction

A great public space is the place where a great deal of social interaction and cultural vitality become manifested. One of the key aspects of successful public spaces is their continued and optimal usage. The way urban residents utilize a public space can shed light on its state of usage at present and how it can be redesigned or left unchanged in order to meet the requirements and expectations of its residents in the future. The life of a city can be best illustrated in its public spaces, and lack of diverse forms of usage of these spaces might have long-term negative consequences for the city's social and economic well-being.

1.1 Research Background

Research on the state of diversity of uses and activities within a selected number of public spaces provides the main framework for this thesis. Details of the research and its framework will be discussed in detail in the following chapters.

1.1.1 Current Definitions of Urban Public Spaces

A great public space is a place where people can mingle, interact, and spend time pursuing a wide range of activities. The vibrancy and popularity of a city's urban landscapes can be said to be proportional to the amount of space devoted to her public realm and subsequent uses and activities promoted within them.

The city's economic and cultural vitality are also correlated with provision of great and inviting public spaces for its citizens. Public spaces can be outdoor urban facilities such as

parks, plazas, beaches, and streets. The public space is to some extent the embodiment of the community's character and, as stated by Staiger (2009), "Public space is the everywhere of modern thought" (p. 310). The cultural values of a city, its urban communities, and its aspirations could certainly be seen more vividly in the public sphere rather than the private realm, making the former that much more vital and significant as an indicator of urban social well being. The public space does indeed encourage "regimes of collective and cultural belongings" (Staiger, 2009, p. 324).

It is also imperative to note that many spaces used by the public are actually private spaces. As will be discussed in the next chapter, numerous plazas and other spaces accessible by the public could be within the private domain or managed by private entities, and yet be perceived by users as public. The fact that a majority of these spaces are located within downtown areas only adds to the belief that these spaces are public (Byers, 1998). Numerous such spaces are controlled and monitored to limit access to only selected groups and individuals deemed as fitting and appropriate, a matter which will be discussed in more detail in the next chapter (Karrholm, 2007). Being able to access the public space is itself influenced by measures and tactics employed by space 'managers' who are usually private entities. Usage of surveillance cameras, armed security guards, and postage of rules and regulations on-site are some of the measures that inhibit and restrict access and usage of these seemingly public spaces (Nemeth, 2009).

The most important and recurring definition for public spaces seems to be the matter of place attachment. Most residents and users in the public realm develop some form of affinity towards certain public spaces, and place attachment is used as a method of

defining what is public space or which spaces belong to a community. Through the concept of place attachment, people develop their own distinct definitions of their surrounding environments, labeling what spaces are public and communal and what spaces are private (Lewicka, 2010).

The definition of what makes an urban space public is itself influenced by the ways that space is used. The degree and types of usage in a public space are shaped and formed through a number of factors. These factors are discussed in the next section.

1.1.2 Factors Affecting Usage of Urban Public Spaces

There are many factors that can make a particular public space successful. Some of these factors are connectivity, enclosure, aesthetic qualities, being close by to other urban amenities and users' residential dwellings, being accessible, places where people can mingle and interact, as well as being busy and boasting a variety of activities.

The urban public space is used effectively through viable connectivity with other sites, its accessibility and proximity to urban residents, and its design layout and built form(s). There are a number of possible factors that can promote or discourage the use of urban public spaces. Recognizing and studying factors behind levels and types of uses and activities in public spaces requires a multi-disciplinary approach, borrowing ideas and techniques from urban planning, landscape architecture, geography, environmental psychology, anthropology, and sociology (Gouveia et al., 2009). In all, a great public space such as an urban park or a plaza should provide a variety of options in terms of activities and uses (Great Parks Great Cities, 1999). Figure 1 below illustrates the

complexity and variety of factors and issues that possibly contribute to more successful or widely used public spaces. The figure shows four main criteria that influence public spaces: uses and activities (a lot of things to do in the space), comfort and image (safe and clean space), accessibility (the space being easy to get to and connected to the nearby community), and sociability (being a place to meet people) (Madden & Wiley-Schwartz, 2002).

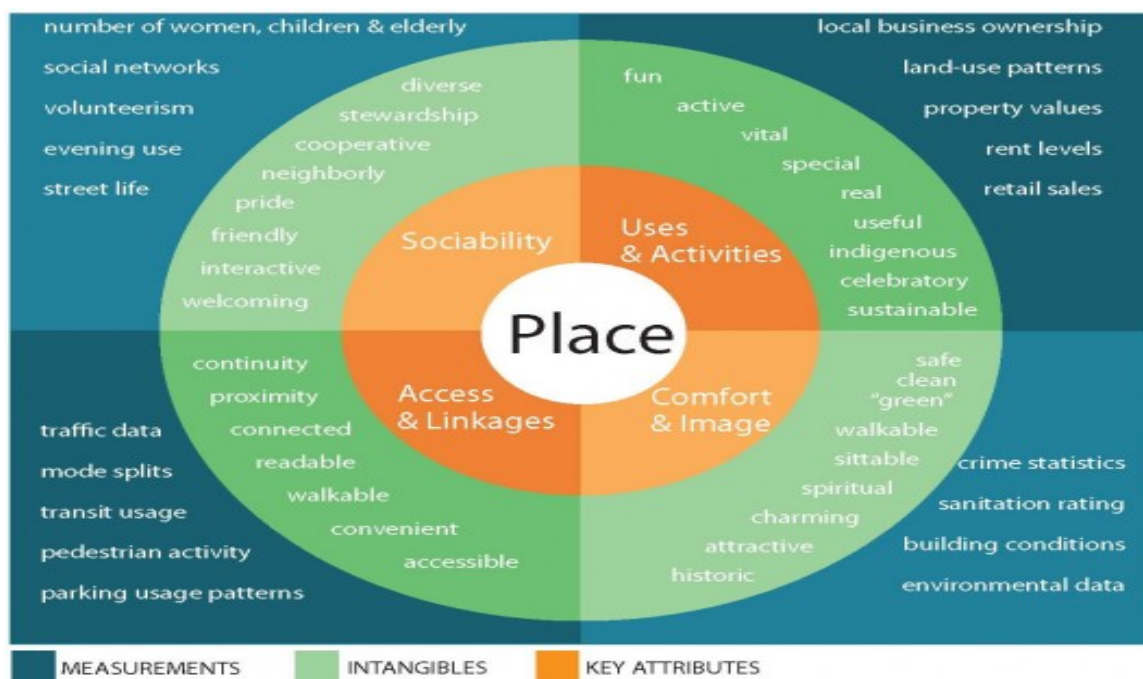


Figure 1: Elements influencing usage and success of the public place. Source: Madden & Wiley-Schwartz, 2002, p. 21; Project for Public Spaces [PPS].

Contextual factors of proximity to residential spaces and location within the urban landscape can influence types of uses and activities in public spaces. There is also the physical factor of design layout and aesthetic qualities of the public space, determining how and to what extent one can pursue different types of activities. Aesthetic details and design layouts of public spaces such as urban parks have been shown to be influential in

how people use and inhabit these spaces (Golicnik & Ward Thompson, 2010, p. 38).

Urban planners and designers need to look at both contextual and physical factors with regards to public space functions. The said factors can possibly influence uses and activities. Through analyzing the role of contextual and physical factors, a methodology for meeting users' diverse expectations and requirements in a public space could be developed. Meeting users' diverse expectations and requirements is certainly a matter that deserves attention in an era of public space revitalization programs across numerous North American cities.

1.1.3 Current Trends of Public Space Revitalization

A number of cities are increasingly striving toward improvement and betterment of their public realms, attempting to create and recreate their public spaces into places where urban dwellers can pursue a variety of activities.

Large cities in North America and the industrialized world are incorporating revitalization programs and projects around their cultural and recreational hubs. Many of these cities are promoting usage of their public realms through encouraging retail, recreational, and other commercial activities within or near public spaces (Thorsson et al., 2007). Specifically speaking, the North American public space has been cited as less utilized as the plazas, squares and parks seen in Western Europe. In order to make public spaces more usable, many planners and urban designers have employed a number of strategies. Building public spaces on more human scales, locating more retail and commercial opportunities nearby, incorporating suitable venues for entertainment, and

making such spaces more safe are some of these strategies (Goodsell, 2003). The trend of locating retail and commercial activities in and around public areas reinforces public spaces' vitality to the city's economic health and prosperity (Pugalis, 2009).

Aside from economic vitality, numerous successful public spaces are located close to residential areas. According to many planners, the contextual factor of proximity to nearby residences is crucial for sustained and increased usage levels (Pasaogullari & Doratli, 2004). Many urban centers in the U.S and other Western countries have endured less utilized public spaces due to suburbanization and movement of residential enclaves away from the center since the end of World War II. Currently, some cities are investing more on developing their waterfronts and other public spaces at the edge while some such as Valencia, Spain, have turned to planning central spaces within their urban cores and drawing people back to the center (Salazar & Menendez, 2007).

The design of the public space is also taking a central role in many North American cities. Public spaces are being revitalized not only through being located in close proximity to retail stores, residential dwellings, and other urban amenities, but also through the quality of their designs. Pedestrianization of major streets through widening sidewalks and creating more consistent lighting concepts are some of the design measures aimed at making public spaces more attractive and usable (Barnett, 2008).

It is important to note that designing public spaces is not without its own set of challenges, and tensions between the designers of the public space and the expectations of those who use them. The new trend of designing and redesigning public spaces in North American and Western European urban cores is an arduous process, involving many

stakeholders, posing many challenges as well as opportunities.

The fact that numerous cities are undertaking efforts to retain the social and economic roles of their public realms illustrates the importance of studying public spaces' viability. Upcoming in the next section is the rationale for choosing the research on a selected number of public spaces in the City of Vancouver's downtown core.

1.2 Study Rationale

Realizing how a selected number of public spaces function in the City of Vancouver's downtown core and how these spaces and others like them could be modified to meet the diverse expectations and requirements of their users comprise the primary inspiration for having pursued this research. This is of course not to suggest that meeting the diverse expectations and requirements of users is the only viable method for making great public spaces but rather to suggest that this approach has fundamental values that have been vindicated and applied in the past.

The principles of good urban form, pioneered by Kevin Lynch (1981), point to both the physical and contextual factors of design and aesthetic qualities, proximity to other urban amenities, and location within the urban landscape as critical to viability of public spaces, influencing how such spaces function. Contextual and physical factors mentioned above can influence users' perceptions of public spaces qualities thus affecting how these spaces are used at the moment.

Most importantly, this study is based on the premise that high levels of uses and activities within urban public spaces are the ideal to which the researcher, numerous academics, city planners, urban designers, and city officials strive towards. The

importance for satisfying diverse expectations and requirements of users in a public space can arguably be seen as a derivative of Abraham Maslow's concept of hierarchy of needs in the 1970's. Maslow (1970) states that humans have diverse needs and that these needs can be categorized on a pyramid according to their corresponding priority levels. Maslow's hierarchy of needs is illustrated in figure 3. At the same time, previous literature has indeed identified the issue of uses and activities as an integral aspect of many successful public spaces where the diverse expectations and requirements of the users are met. The importance of uses and activities is perhaps explained by Carr et al. (1992) and Jacobs (1961), who state that as well as being meaningful and democratic forums, public spaces need to be responsive and designed in order to fulfill diverse needs and expectations of their users.

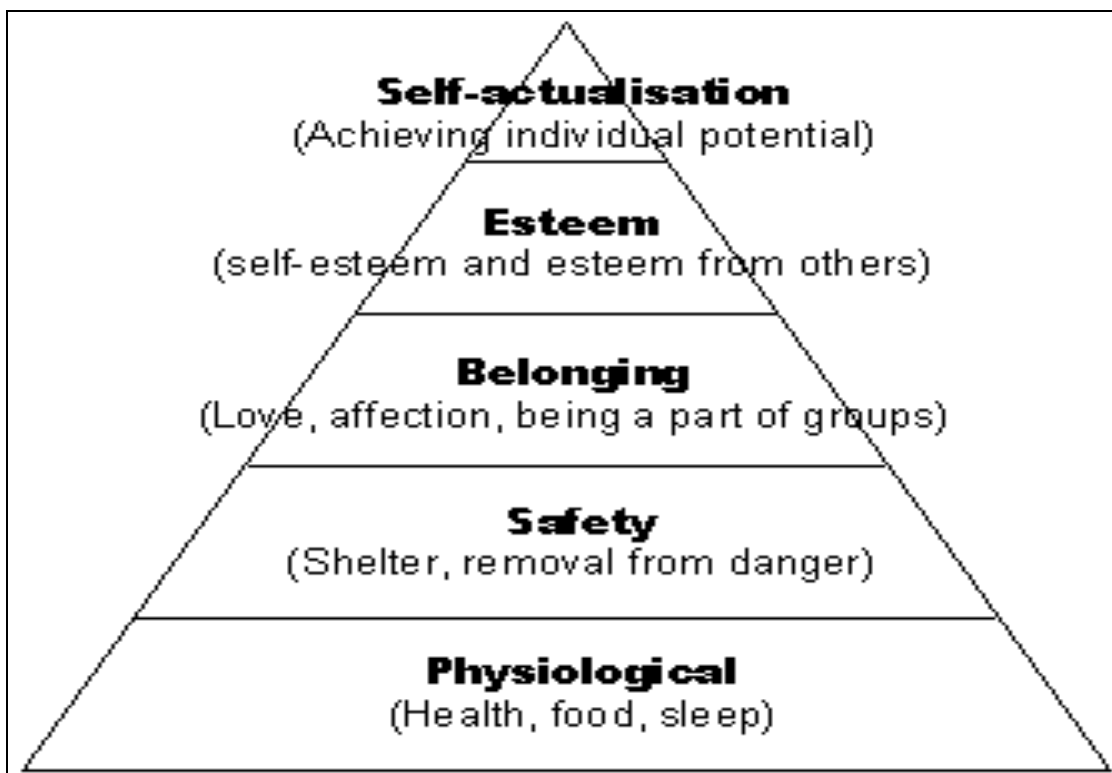


Figure 2: Abraham Maslow's Hierarchy of needs. Source: Maslow, 1970.

The research's primary context is focused on the City of Vancouver rather than another North American city. Vancouver is an excellent context for this research due to a number of reasons.

The City of Vancouver, aside from being one of the largest Canadian cities and growing in size and population, was also dubbed the most livable city for a number of years. Vancouver has certainly captured the attention of many planners, architects, and academics in the past two decades. According to Grant (2009), Vancouver has "topped the *Economist's* list of the most livable cities in the world since 2002" (p. 358). An assessment of a selected number of public spaces' viability for their users' diverse expectations and requirements within the context of Vancouver is an appropriate way of testing the City's public realm, which is arguably an integral part of any city's livability.

The City of Vancouver has also established a reputation as one of the best-planned cities in North America (Punter, 2002). Studying the degree to which a selected number of public spaces meet their users' diverse expectations and requirements could shed light on whether this reputation of being a best-planned city is well deserved in terms of the city's public spaces.

The downtown core of Vancouver was chosen as the context for selecting study sites for a variety of reasons. Vancouver's downtown core is one of very few North American downtowns that has an active and thriving residential population, being touted a model of high-density sustainable living. A vital part of Downtown Vancouver's model is the adequate provision and distribution of public spaces, comprising a critical aspect of this livability model (Laski, 2009). The core is also the most residentially dense area in the

entire city and the surrounding region, housing a little less than 80,000 residents and expected to grow to 100,000 residents by 2021 (Downtown Vancouver BIA, 2010). Aside from being the economic nerve center of the City, Downtown Vancouver is also the cultural and social hub of the metropolitan region. Lastly, the greatest concentration and number of public spaces are located in Downtown Vancouver. All the mentioned reasons make Downtown Vancouver the most appropriate research context for public space selection and studies. Also, studying the degree to which a selected number of public spaces in Downtown Vancouver meet their users' diverse expectations and requirements can test the reputation of the area as a desirable model of high-density living in terms of public space provisions and qualities.

The City of Vancouver's community plan called CityPlan, which was approved in 1995, also calls for creation of new and diverse public spaces in the downtown peninsula (CityPlan Overview, 1995). The policy framework set by CityPlan recognizes the need to create diverse types of public spaces in order to meet the diverse needs of a growing population. With regards to public spaces, the specific strategy of CityPlan for the city and the downtown core is to create a variety of welcoming spaces with diverse shapes and uses. Assessing a selected number of public spaces through studying the degrees to which their diversity of uses and activities satisfy their users' diverse expectations and requirements is thus useful for investigating whether the objectives and goals of the CityPlan have been met in the downtown core.

This framework takes into account the importance of other possible factors influencing the degree of diversity of uses and activities meeting users' diverse expectations and requirements. Analyzing whether diversity of uses and activities meet the diverse

expectations and requirements of users of selected public spaces in Downtown Vancouver is an entry point through which other potential issues can be investigated as well. This will be accomplished by taking into account the ideas, comments and recommendations of both users and actors responsible for designing, planning, studying, and maintaining the selected study sites. This is perhaps best explained by Pugalis (2009), who stated, “the knowledge, wisdom, expertise and creativeness of the everyday user appear crucial to development of culturally vibrant and economically active urban spaces” (p. 228). The values associated with analyzing users’ perceptions about their public spaces are significant due to the fact that such spaces are meant to be designed for these users first and foremost. The outcomes of ordinary users’ evaluation and reading of their urban environments, including public spaces, are also shown to be somewhat different than design professionals (Nasar, 1998). Such findings suggest a possible need to pay more attention to the inputs of ordinary users’ perceptions and evaluations for a study of this magnitude. This approach is further made valuable due to its exploratory nature laying a foundation for potential future research directions regarding the studied public spaces and others like them in Downtown Vancouver and possibly other North American cities.

While academics such as Lynch (1981), Talen (2000; 2005) and Jacobs (1961) study diversity of uses and multi-functionality at larger scales, the relevance of diversity of uses and activities on the smaller scale of local public spaces are underdeveloped. This is especially true with regards to public spaces in Downtown Vancouver.

As mentioned in the previous section, the downtown core is not only the most residentially and commercially dense area in the City of Vancouver, but is also geographically limited and constrained by bodies of water on three sides. Arguably, a

public space that is multifunctional can meet multiple expectations and requirements of its users. This is especially relevant in a spatially constrained and dense environment such as Downtown Vancouver. As Rypkema (2003) has suggested, North American downtowns are important in that they have the largest concentration of buildings and spaces with symbolic meanings and values plus containing the largest number of public spaces where people gather to “celebrate or mourn or protest” (p. 10).

Previous studies of public spaces have shed light on the possibility of tension and contestation over space appropriation when incompatible uses and activities are mixed. Previous literature has indeed indicated that conflicts can occur when there is not enough space for a user to carry a desired activity without interfering with other users (Ostermann & Timpf, 2007; Forsyth & Musacchio, 2005). As a result, studying and analyzing the state of diversity of uses and activities in a selected number of public spaces in Downtown Vancouver becomes more critical as a tool for formulating recommendations that could result in a more proper mixing of uses and activities in the future.

Academics such as Sennett (1990) have argued rather successfully that the city and its streets and buildings are meant to be natural places for accommodating differences of experiences between people and yet the history of urban design for the past two centuries has been shaped by efforts to move people away from such differences and experiences. Studying the degree to which diversity of uses and activities satisfy and meet the diverse requirements and expectations of their users can shed light on whether Sennett’s argument holds up in the case of the studied public spaces in Downtown Vancouver. From this research, possible methodologies might be developed and/or suggested that

could ensure these spaces and others like them could organize rather than discourage differences of expectations and requirements.

1.3 Research Objectives and Questions

The specific objectives of this research are as follows:

1. To assess and observe current functions of four pre-selected public spaces in Downtown Vancouver
2. To analyze whether each of the selected public spaces in Downtown Vancouver are accommodating a diverse range of activities in accordance to the range of expectations and requirements of their users

Through conducting this research, the following questions will be answered in detail:

1. How are the selected public spaces in Downtown Vancouver being primarily used?
2. To what extent does diversity of uses and activities in each of the selected public spaces help to meet the diverse expectations and requirements of their users?
3. Furthermore, to what extent does perception of safety, quality of amenities, and opportunities for usage satisfy the expectations and requirements of users?

1.4 Layout of Thesis

This thesis is made up of seven chapters. The topic is introduced and discussed briefly in chapter 1. Research rationale, research objectives, and questions are stated in chapter 1 as well. Chapter 2 is comprised of literature reviews and discussions on uses and activities in urban public spaces and factors affecting usage within these spaces. Research methodology is explained in detail in chapter 3. The case study for this research is outlined and introduced in chapter 4. Chapter 5 discloses findings and some analysis from site observations and mapping of activities in study sites, on-street survey of users, and

semi-structured interviews with bureaucratic, academic, and professional actors. Chapter 6 is comprised of detailed analysis and interpretation of data, while recommendations and conclusions are given in chapter 7.

Chapter 2: Literature Review

2.0 Introduction

Review of the literature examines the importance of public spaces in urban areas and their roles within a good urban form. Users' perceptions of the public space and looking at how the design of such spaces can promote or hamper diversity of uses and activities are also reviewed. The role of proximity of the public space to users' residences and other urban amenities, as well as relationship(s) between design features and aesthetic qualities and types of uses and activities within public spaces are examined next. Finally, the effects of public spaces being located on the edge or the center of Downtown Vancouver is visited, showcasing the historical trend of public space functions in the downtown core as a product of location within the urban landscape. The conceptual framework drawn from the review of literature is explained in detail at the end of the chapter.

2.1 Importance of Public Spaces in Urban Settings

The urban landscape is ripe with a great array of public spaces. Such spaces are vital in encouraging social interactions. The importance of public spaces within urban settings becomes even more paramount in an age when the issues of sustainable living and design are more crucial and important to bear than ever. Public spaces are the hearts of cities and urban areas, also being the primary mediums for cultural and economic activities (Hepcan et al., 2006). Through its cultural, social, and economic significance, a public space can potentially be the place for pursuing many activities outside of the home. To remain a desirable place to live, to attract business, and invite nearby residents and

tourists, the city must continue to retain and develop a variety of open spaces to allow for a wide range of activities and possibilities (Vancouver Public Space Network, 2009). A method through which one could term a public space as successful is its functioning as a ‘third space’. As David M. Hummon states (Tiemann, 2008) in his review of *The Great Good Place*:

“[Third places] provide the individual with stimulation and the joy of shared fellowship, while enriching a person’s perspective on life through conversation with diverse others. They serve society by offering settings for ritualized revelry, teaching skills necessary for association beyond private life, developing political consciousness, and nourishing a broader appreciation for public life and space.” (p. 471).

2.1.1 Social importance of public spaces in urban environments

Vitality of public spaces in urban areas has been stressed by academics such as Peter Calthrope (1993) and William H. Whyte (1988). It has been shown that what attracts people to public spaces is primarily the presence of other people in those spaces (Whyte, 1988). The importance of public spaces in the urban landscape is pictured more vividly in the theory of New Urbanism which grants public spaces a central role in the production of a sense of community in the metropolitan sphere (Talen, 2000).

Social encounters and being able to pursue a variety of activities are two major functions of numerous public spaces, but these could arguably occur in more private spaces such as shopping malls as well. The shopping mall, however, is an environment that is catered towards a few select consumer-based activities and cannot really function as a true public space (Banerjee, 2012; Gutierrez, 2010).

Another facet of public spaces is their functioning as spaces of ‘shared memories’ and shared identities. Some argue that the ‘publicness of the space’ is reinforced by users time and time again (Sorenson, 2009). These identities and meanings can be local or global in context (Okano & Samson, 2010). Shared identities and meanings are possibly significant due to their effects on shaping the public space in ways that meet users’ social and economic requirements (Passaogullari & Doratli, 2004).

Some of the discourse on public spaces has focused on the role of cultural backgrounds and ethnicity in determining activity and usage types. Some research suggests that particular ethnic minorities tend to conduct more social activities within public spaces such as parks. Studies of major U.S cities’ public parks have shown that Latinos often use parks in large family groups through pursuing social activities. At the same time, African Americans are found to be using such spaces mainly for exercising and Whites tending to use such spaces alone (Forsyth & Musacchio, 2005). Such findings, however, might not necessarily be easily transferable to cities and urban areas within Canada. The evolution of ethnic relations/tensions and its subsequent effects on public space usage and activities are arguably different within the Canadian context. This is perhaps one of the reasons why the vast majority of literature on gender and ethnic factors within public space studies has been concentrated within American and European settings.

Findings with regard to diversity of uses and activities due to ethnic and cultural backgrounds, however, further strengthen the premise that a public space needs to be designed in order to facilitate a diverse range of expectations and requirements. This reality is congruent with Ward-Thompson’s assertion that “the park or square as a public

place for the meeting of strangers is also a place where people can be intimate, anonymous, and therefore private” (2002, p. 66).

The fact remains that no one public space can ever completely meet the requirements and expectations of the community such as forming social cohesion or a sense of well-being. Also, a public space may not necessarily meet the requirements and expectations of some potential users due to the existence of by-laws and regulations that inherently limit the types of uses and activities they might wish to pursue. Seattle’s Stay out of Drug Areas ordinance in the past few years has discouraged usage of many public spaces by potential drug users, further marginalizing their role and presence in the public realm as a result (England, 2008).

Designing the amenities of the public space in ways that discourage long term usage by the poor and criminalizing informal economic activities such as food vending and street markets are some of the numerous examples that discourage usage less affluent individuals (Davis, 1992). To counter this existing restriction of usage and an apparent lack of democracy in many public spaces, Goodsell (2003) suggests an approach to public space planning that accepts the role of the state in participating but not dominating the discourse of such spaces’ functions in the 21st century.

While ethnicity and other social factors such as gender and socio-economic status have been successfully argued as influencing types of uses and activities in urban public spaces, they also require a complex ethnographic approach that is beyond the scope of the research at hand. Through an exploratory investigation such as the one pursued in this research, the possibility of factors beyond the original premise of the thesis can be outlined and potential lines of inquiry for future research established.

For now, a more direct method of assessing the connection between citizens and the public realm might be to observe and analyze the state of uses and activities within public spaces (Whyte, 1988). Looking at how people appropriate and use a public space could shed light on what people need and expect from their public spaces, possibly showcasing ways to modify and redesign the space to serve users' needs better in the future.

A possible threat to the social values of public spaces might be the ongoing revolution in information and telecommunication technologies. Some academics argue that the rise in new modes of telecommunication technology has made it possible for people to isolate themselves from each other (Mitchell, 1995). New methods of shopping, working, and socializing through the Internet, for example, might make the concept of face-to-face meeting in a physical public space unnecessary (Banerjee, 2001). Banerjee's argument might have to be taken with a grain of salt since one can find numerous examples of public spaces in North America that have incorporated some aspects of recent telecommunication technologies while retaining, if not actually enhancing, their traditional functions. As an example, Bryant Park in New York City facilitates a wireless hotspot for Internet users and this complements its traditional role as a gathering urban park with a range of other amenities for various pursuits. These findings indicate a need for future research regarding possible relations between telecommunication technologies and their effects on human habitation of physical urban spaces. Such research is, of course, beyond the scope of this study.

Arguably, no study of urban public spaces can be complete without looking at the role of environmental and economic forces, and these will be reviewed shortly.

2.1.2 Environmental and economic importance of public spaces in cities

A high quality public space is the one that is first and foremost pedestrian-friendly. Many streets and public squares in Europe, Asia and North America have been undergoing pedestrianization schemes in the last decade (Sorensen, 2009). Realizing the need for sustainable and eco-friendly urban settings, these revitalized pedestrian spaces have been shown as critical in reducing cities' greenhouse gas emissions, contributing to cleaner air and less polluted urban environments. Open public spaces such as plazas and urban parks have been shown as instrumental in reducing emissions of greenhouses and promoting less to the creation of Heat Islands in places such as Downtown Tel Aviv, Israel (Hart & Sailor, 2009).

Urban public spaces in North America and Europe have also kept some of their original functions as places of social and economic interactions, fostering more diverse range of leisure activities as well as opportunities for nearby shops and cafes on street levels to thrive and boost local economies (Yuen & Chor, 1998). Economic activities, to a large extent, do still happen in and around public spaces. Innovative economic activities are primarily supported and conducted within public spaces such as plazas, squares, and streets (Talen, 2002). Some academics state that the current role of the public space is to adhere to a strict set of uses based on consumption, and that today's public spaces reflect the values of a 'consumer society' (Zukin & Maguire, 2004). This assessment, while valid, is perhaps overlooking the fact that a major function of many public spaces has been to facilitate economic consumption and related activities. The Greek Agora and the Middle Eastern Bazaar are but some of the examples of historic public spaces that catered

to buyers and sellers of goods, attracting business and a variety of related uses and activities for centuries. Such historic functions of public spaces are perhaps being relearned. A number of communities in North America have recently begun to revitalize their downtown cores through encouraging economic development, creating both employment and bringing more people to the public realm. This economic development in and around public spaces has been focused on increasing retail activities on streets and near parks and plazas. The City of Vancouver' land use policy, approved in 1991, states the need to develop a network of street-oriented shopping districts in the central area of the city, focusing retail activities on key pedestrian streets as a strategy of making an "alive downtown" (Central Area Plan, p. 8, 1991).

Cities develop and redesign downtown public spaces due to the critical role of such spaces in ensuring continued usage and success of downtown cores.

2.1.3 Vitality of public spaces to downtown cores' success

Provision of public spaces in a city's downtown core is a critical factor in the center's survival and continued role as the most important social and economic hub of the urban landscape. As well as being the traditional meeting place, the downtown core is also the most diverse part of most cities. The greatest diversity of functions is observed within downtowns: economic, cultural and social, and recreational (Rypkema, 2003). The aforementioned functions are the types of activities and uses we can observe in many public spaces. The city center has historically been the most vital part of the city, being the primary space for "exchange of social activities" (Kosnoski, 2011, p. 62). City centers have, however, been neglected for the past few decades in North America. Part of this

neglect of the city center was manifested through less investment and lack of opportunities in the public realm. Some of the current thinking in planning literature stresses the lack of well-utilized public spaces in downtowns as a result of postwar suburbanization (Goodsell, 2003). It seems, however, that lack of well-utilized public spaces in downtown cores could be resulted from a number of factors including privatization of many older public spaces and increased restrictions on usage and types of permissible activities. Though now realized as an integral part of downtown revitalization, many North American public spaces are only quasi-public in reality, being controlled and run by private entities as opposed to public authorities. These spaces are more often catered towards only a few specific functions, namely that of shopping, thus providing a few set of specific services to those who can afford them (Byers, 1998). Spaces such as streets and squares are fighting to find more holistic roles in urban areas due to more focus being given to quasi-public spaces such as underground malls or food courts. Streets, and the public realm in general, are under increasing control and management schemes, having resulted in the creation of gated neighborhoods and fenced communities rather than true public spaces for people pursuing a variety of activities (Bromley, 2000). Privatization of public spaces or production of quasi-public spaces has helped increase social tensions, creating social issues regarding accessibility. Arguably, current quasi-public spaces are less diverse than more traditional public spaces. Some research indicate that the very design of such spaces encourage a few types of short-staying activities that do not meet potential users' demands for long term engagements (Loukaitou-Sideris, 1993).

Research findings on the diminished role of downtown public spaces is a continuation of earlier assertions that state the role of a public culture in the public realm is irrelevant and under attack in modern cities. The quasi-public spaces in skyways and underground tunnels also promote very few active functions, encouraging shopping and consumption of material goods to a specific set of middle-class shoppers and rarely acting as true public spaces (Byers, 1998). The quasi-public spaces in shopping malls, corporate plazas, and other privately managed spaces have not been welcoming of many older and traditional public space uses such as political activism, speeches, political discussions, or even sales of home-baked cookies. Perhaps not surprisingly, these spaces are catered towards those who adhere to a strict set of rules and regulations, comprised mostly of shoppers and consumers rather than people in search of ‘third places’ (Banerjee, 2001).

The design and placements of quasi-public spaces in many North American CBDs is seen, however, as not entirely a movement of public space destruction. In a study of shopping malls near pedestrian streets, many people who were surveyed reported that they felt the new shopping mall increased the pleasantness of the urban space (Gifford, 2007). It is important to note that many quasi-public spaces are in fact connected to streets and outdoor plazas through tunnels and entry/exit points, providing circulations for pedestrians and potential users. Presence of security measures such as video-surveillance cameras and guards can also create a sense of safety for some (Atkinson, 2002). The danger associated with semi-public spaces and privately managed urban spaces is the possibility that their associated sets of rules and regulations may make the downtown core less ideal as a social and cultural hub. This possibility can lead to downtowns losing their traditional roles as both the economic and social hubs in the

future, leading to a migration of social and even economic interactions into the peripheries of the urban region (Byers, 1998).

Many Western downtowns are increasingly hiring and investing in semi-private security agents such as ‘Downtown Ambassadors’. These agents are used as a counter to the private security guards seen in the semi-private malls and shopping centers of downtown cores. The ambassadors, though sometimes cited as discriminatory towards certain groups such as the homeless, have helped increase security in public spaces of downtown cores for consumers of the streets, putting forth a notion of a “clean and safe” downtown (Sleiman & Lippert, 2010, p. 332). Increased surveillance and usage of security force in a public space such as a street can lead to a less diversity of activities, leading to confinement and limitation of ‘acceptable’ and ‘appropriate’ uses (Boyd, 2010). This control of the public realm by private actors is indeed the concern of Davis (1992) who points out that such manipulation of urban politics and methods of managing public spaces can diminish the influence of ordinary individuals and users.

New immigrants and newcomers to North America are also changing the way public spaces are utilized. Immigrants and newcomers are increasingly using inner-city public spaces. This trend of usage by immigrants has helped create a revival of public spaces in the downtown cores of a number of cities in Canada and the U.S (Benarjee, 2001).

Being vested in the downtown, especially for families and those who want to work and live in the center, is partially influenced by the amount of public amenities and common spaces that are available within the downtown core (Groe, 2007). The diversity of downtown cores has always been the key to their continued reputations as places for attracting social, political, and economic activities. A great public space in the downtown

core can “entice city dwellers through offering exciting and provocative encounters”, retaining the force that kept people being drawn to the city center (Kosnoski, 2011, p. 54).

An important matter to note is that downtown public spaces need to “evolve” in order to serve changing needs and expectations of their users (Cooper Marcus & Francis, p. 155, 1998). By allocating funds for future modifications, cities can ensure that their public spaces will not only serve current but future needs as well.

Employment of strategies to bring the majority of the public to downtowns’ streets, plazas, and parks, can go a long way in ensuring that CBDs will remain vibrant and socially healthy hubs in the near future. A city center with greater and more diverse use of its public spaces can arguably have a better urban form in the long term.

2.2 Role of Public Spaces in a Good Urban Form

The urban form is embodied in the physical layout and location of all the amenities and facilities that make up cities. The configuration of streets, lots, buildings, parks and plazas make cities function the way they do. Kevin Lynch wrote the first normative contextualization of urban form in his book *A Theory of Good City Form* (1981). The essence of a good urban form is “to know a good city when you see one” (Lynch, 1981, p. 37).

The public space is an essential element of constructing good urban forms. A proposed definition for a good urban form is the provision of good public spaces. A good public space is stated as one that is visually, socially, psychologically, and physically accessible (Childs, 2004).

The three main features of a good urban form are compactness, diversity, and walkability. Features of good urban forms can be achieved through responsible planning of public spaces. Compactness, diversity, and walkability are not, however, observed in many Canadian and American urban centers. Lack of these features has arguably resulted in a neglect of the relationship between the human and urban landscapes. Such neglect is perhaps being realized at the level of the public space most especially since planners and designers are increasingly being asked to focus on larger neighborhood scales (Talen, 2005; Talen, 2009).

The need for neighborhoods to be socially and economically diverse, comprising a mix of uses and activities and bringing people of different backgrounds together could potentially be met at the scale of the public space as well. Planning should not only be about creating a “container for peoples’ activities”, but about creating spaces that have peoples’ desires, expectations, and actual behavior built into their design (Weszkalny, p. 268, 2008).

As places of shared usage, the public space within a good urban form should adhere to a variety of functions, and this outcome is in conjunction with achieving urban forms that celebrate diversity rather than homogeneity. Some planning documents suggest that public spaces that have heterogeneous characters can also encourage more varied types of uses and activities. A “divergent and flexible character” within the public space is stated as chief foci in public space planning in some Nordic cities such as Kristiansad, Norway (Jacob & Hellstrom, 2010, p. 662). At the same time, public spaces that are popular are usually the ones that offer a variety of activities to their users. It would of course be premature and naïve to believe that every single public space could or should encourage

the same range of uses and activities. The shape, location, and design of each public space can determine to a great extent, the types of activities that might occur. A small neighborhood park might be used for a variety of activities such as sports, play, and resting, while a corridor space might be more catered towards more short term and passive uses. Subsequently, the types of activities happening in an urban park might not occur in an urban plaza (Cooper Marcus & Francis, 1998; Guide to Neighborhood Placemaking in Chicago, 2008). It might, however, be prudent to design or redesign public spaces in ways that make them adhere to as many uses and activities as is physically, socially, and economically possible.

A framework for measuring the public realm, illustrated below in table 1 (Talen, 2005), does note the importance of physical dimensions as the primary reason for usage or lack thereof, but it measures social interaction as a vector towards providing a sense of community. This illustration looks at a sense of community as the crucial factor present in great public places. Figure 3 below states the importance of the physical dimension of the public space as a first step in influencing usage. This is a framework of measuring and conceptualizing the “sense of community” within a given public space. This approach, however, is an illustration of only one major desirable outcome in the public space: creating a sense of community. Assessing the degree of diversity of uses and activities provided within a public space, however, is perhaps a more holistic approach since it accepts the possibility that not everybody in the public space wants to socially interact with others, and as such, a sense of community, while a critical aspect of some public spaces, might not necessarily make that space more successful. Arguably, the most important matter with regards to users in the public space is that the needs of users within

the public space can be diverse (Talen, 2000). An argument for diversity of uses in streets sits on the premise that more diverse uses can not only make an area vibrant but also help bring people of different backgrounds and with different purposes (Jacobs, 1993). Figure 3 (Talen, 2000), through stating the importance of public spaces' physical dimensions, demonstrates that the correct path for studying and analyzing public spaces' state of usage needs to be addressed through looking at design, size, and dimensions. Others agree that the physical dimensions and certain physical qualities are required for making public spaces such as streets successful. Jacobs (1993) states that public spaces such as streets can create a sense of comfort and be used more effectively through having appropriate curb heights, aesthetic features such as trees, as well as having been designed to create comfort for their users. Table 1 (Talen, 2005) is significant in illustrating the proximity of retail and residential areas to the public space as crucial to usage levels. The tabulations of factors that determine the existence of good urban form in table 1 show the importance of contextual factors in successful usage within public spaces. Table 1 and figure 3, together, show a useful framework for evaluating usage of public spaces by looking at physical dimensions of the public space. The aforementioned table and figure also indicate the need for paying attention to the context of the public space in terms of its proximity to other urban amenities such as retail and residential areas. The public realm variable in table 1 is of particular importance to the development of this research since it has not been utilized in any known prior studies of the City of Vancouver's downtown public spaces. The other variables, while significant in a study of good urban form, might not be completely applicable within the scale of individual public spaces.

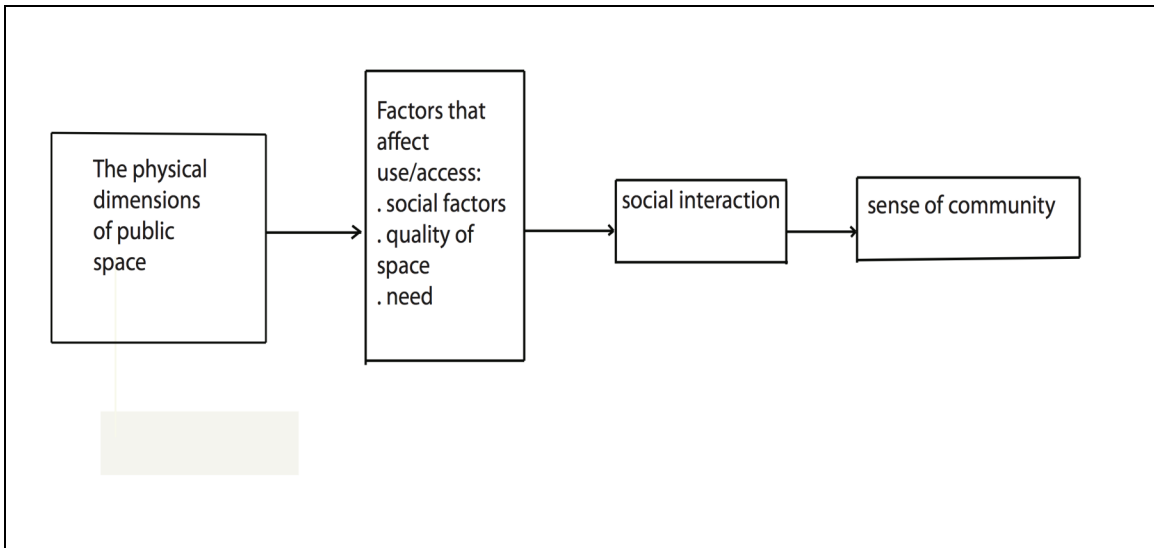


Figure 3: The translation between the provisions of public space into building a sense of community. Source: Talen, 2000, p. 348.

Spatial enclosure and definition: (1) whether the public realm is enclosed, by either buildings or street trees (2) whether space is defined and structured vs. undefined and residual
The public realm: (1) the presence of sidewalks (2) the presence of public space structured as buildings, parks, plazas, or squares
Spatial suitability: (1) whether building use is suitably matched to street type (2) whether lot dimensions are suitably matched to neighborhood type
Spatial diversity or mix versus homogeneity: (1) whether retail and public space are proximal to residential uses (2) whether there is a sufficient mix of land uses

Table 1: Categories and corresponding variables for evaluating good urban form. Source: Talen, 2005, p. 210.

William H. Whyte analyzed the nature of uses and activities within public spaces most comprehensively. Unlike Talen who looks at the issue of diversity of uses on larger neighborhood scales, Whyte's research is based on analysis on a smaller scale of individual public spaces. This analysis is based on the notion that it is imperative for researchers and planners to monitor and understand peoples' behavior in the urban

environment at smaller scales in order to create places that suit their needs better (1988). There is a movement towards making multi-use public spaces, as these spaces have been observed to be the most successful in recent years in places such as Granville Island in the City of Vancouver (The Magic is in the Mix, 2011). Some such as Cooper Marcus and Francis (1998) agree that variety of activities is more important in neighborhood parks than other types of public spaces such as plazas and/or smaller pocket parks.

As mentioned before, there are many other factors that can help make a public space more or less successful. Allan Jacobs (1993) has mentioned seven criteria for making great streets. These criteria are noted below in table 2. Arguably, the criteria for making great streets are not only limited to public streets, but need to be assessed in other types of public spaces as well. Providing leisure, creating comfort, having high qualities of aesthetic features, and being well maintained, are the types of factors that a public space such as a square and an urban park could also provide (Forsyth & Musacchio, 2005). The criteria for making great streets will not necessarily assure great spaces, however, and this emphasizes the possibility that there will always be some unexplored factors beyond the immediate understanding and comprehension of planners and designers. Another framework for creating successful public spaces is explained through the chart created by Projects for Public Spaces, illustrated previously in figure 1. Uses and activities within the public space constitute one major factor that can make public spaces more successful within the PPS framework, adding to previous theories and approaches by Talen, Lynch, and Jacobs.

Requirements for Making Great Streets
1. Places for people to walk with some leisure
2. Physical comfort
3. Qualities that engage the eyes
4. Transparency
5. Complementarity
6. Maintenance
7. Quality of construction and design

Table 2: Requirements for making great streets. Jacobs, 1993, p. 270.

The degree to which diversity of uses and activities in the public space can satisfy diverse requirements and expectations of users could be influenced by how potential users perceive that space's quality of facilities, opportunities for activities, and levels of safety. Having a range of spaces and facilities available for use by the public is stated as a critical element of improving cityscapes, ensuring that various events, programs and functions desired by the public, are taking place (Linton, 2009).

Utilizing a methodology of observing and assessing the state of uses and activities within a public space through incorporating a framework that is partially based on user inputs could be a more appropriate way of interpreting the degree to which a given public space's range of uses and activities is meeting the diverse requirements and expectations of those users. Such approach will become more holistic by taking into account the connection between the degree of diversity of uses and activities and the users' perceptions of safety, quality of public space amenities, and opportunities for usage. This methodology might not have been necessary if urban planners and other design professionals shared the values and outlooks of the general public. Much research has shown the opposite to be the case, adding virtue to additional efforts in understanding and analyzing the 'evaluations' by the public (Nasar, 1998).

Perception of safety, quality of amenities, and opportunities for usage are additional factors that have been cited as crucial in public space viability. Arguably, these factors need to be analyzed as an interconnected layer in a study of public spaces. The users' perceptions of public space qualities are themselves related and influenced by many physical and contextual factors such as design features, aesthetic qualities, proximity to residential and retail areas, and location within the urban landscape. The aforementioned issues and factors in public spaces will be discussed and reviewed in the upcoming sections.

2.3 Perceptions of Public Spaces by Users

How people perceive qualities of a space can in a large part determine whether they will decide to frequent that space in the first place. The mental image created by users and urban dwellers will help determine the levels of quality and accessibility people will assign to certain spaces within their urban environments (Lynch, 1960). Perceived opportunities and safety levels of a public space in an urban setting will influence the degree and type(s) of uses and activities that will occur in them. The more diverse a range of opportunities and functions a public space is perceived to provide the more utilized that space will be by a broader range of people with a wide range of requirements and expectations.

2.3.1 Human perceptions of the urban environment

The relationship between the human being and the urban environment is a subject within the realm of environmental psychology. The perception of the urban environment is about the perception of 'qualities' that one assigns to his or her urban realm. Lefebvre

(2003) argues that the perception of the person with regard to the urban environment, and the public space specifically, is a product of an animated theatre that is the urban public space. This animated theatre facilitates interactions, encounters and movements of everyday urban life.

There is also another method of analyzing human perception of the environment. The Preference Matrix has been utilized in numerous studies in recent years. The Matrix is predicated on the analysis of human preference of the environment. Kaplan and Kaplan discuss the merits and useful attributes of this approach in great detail, illustrating how the Preference Matrix can help understand what environments people are more likely to prefer over others (1989). Table 3 below illustrates the Preference Matrix. Perhaps the greatest attribute of this framework is its dynamic nature. Previous research has suggested that coherence and mystery are two of the most significant predictors of people’s preference while the roles of legibility and complexity are less understood. This framework is an evolving tool that may not be complete yet. Though possibly useful in a study of urban public space uses and activities, the matrix seems to have been mostly used within more natural settings.

	Understanding	Exploration
Immediate	Coherence	Complexity
Inferred, predicated	Legibility	Mystery

Table 3: The Preference Matrix. Source: Kaplan & Kaplan, 1989.

It is debatable that urban public spaces can endow subjective meanings for their users because human perceptions of their urban environments are subjective in nature. Cattell et al. (2008) argue that public spaces possess subjective meanings that can accumulate over time and this process can contribute to such spaces meeting diverse needs. This

argument, while very powerful in scope, might be somewhat simplistic. A number of studies have shown clearly that residents and visitors to urban environments can give similar likeability evaluations. Ultimately, the evaluations seem to show users' tendency to like certain general features while disliking certain other attributes or lack thereof (Nasar, 1998). Kaplan and Kaplan (1989) also state that humans consistently generate favorable responses to areas that are open and yet defined, suggesting some generality in terms of perceptions.

Not every single person could perceive the same urban public space the same way and this can influence how such spaces are used. As the needs of the urban population are diverse, so are perceptions of the urban environment(s) (Madge, 1996). Planning for a high quality public space requires "capturing and providing for multi-dimensional perceptions and qualities" (Pugalis, 2009, p. 228).

One thing that seems to be more universal in the field of planning and urban design is aesthetics and beauty. Beauty of the environment of man, including urban settings, is a characteristic that is instantly recognizable, also absolute (Berridge, 2000). With regard to aesthetic qualities, people generally prefer landscapes with scattered trees, smooth ground covers, and water and visual depth, as one would witness in a typical "Olmstedian Park" (Forsyth & Musacchio, 2005; Kaplan et al., 1998). Appropriate aesthetic features such as people-friendly street furniture can entice a sense of belonging in the public space, helping create more successful spaces (Pugalis, 2009). The need to recognize the significance of users' evaluative response to the many features of their urban environments, including public spaces, seems to be paramount. This suggests that

planners and designers might be able to create more great public spaces by studying and understanding the everyday users' appraisals.

In all, the review of previous literature regarding perception of people toward their urban environments suggests that one can encounter both varieties and similarities of evaluations.

2.3.2 Differences and similarities between users' and political, bureaucratic, and economic actors' perceptions of the public space

There are differences and similarities between users' and politico-bureaucratic-economic actors' evaluation and ideas for making great public spaces. While surveying pedestrians and users in a number of public spaces in Northern England, it was found out that people perceived their public spaces desirable and interesting because of proximity to other urban amenities, their residences, presence of others, and cultural aspects. The same research revealed that architects, council members, and other members of local governments paid more attention to design standards and aesthetic qualities. This finding corroborates earlier assertions that the everyday user evaluates their surrounding urban spaces in ways that are somewhat different than those who are experts (Kaplan et al., 1998; Pugalis, 2009).

Negative perception of public spaces by users does point finger at a lack of sufficient urban design standards. Such findings indicated many users complaining about lack of lighting, amount of sitting areas, height of street curbs, and texture of sidewalks. Some research shows that as much as there are differences and variations of perceptions with regard to public space design qualities and provided opportunities; there are also general

universal trends. Aesthetics, location, and proximity to urban services are factors that most users value in an urban public space.

Other researches seem to indicate a more positive perception of the everyday user towards a public space that offers a variety of uses and activities, promoting more than just a few choices (Oguz, 2000). A starting point for creating more vibrant public spaces seem to be a need for a framework that includes or facilitates more consultation and open partnership between the designers of the public space and the community for which the public space is designed for.

The need to pay more attention to the evaluative response of the everyday user is perhaps a most important lesson. Numerous research, time and time again, points to the need to pay particular attention to how an average user might perceive and evaluate their daily urban spaces differently than design professionals. At the same time, the impact on design, management and planning public spaces have, for the vast majority of time, been shaped and influenced by those who have expertise (Kaplan et al., 1998). Indeed, as Nasar (1998) suggests, research on the evaluation of city spaces in general would have little value if design professionals actually shared the values of the public. Ultimately, the most appropriate approach might be one that employs multiple strategies of inquiries that pay attention to both the everyday users of the public space and the politico-bureaucratic-economic actors.

2.3.3 Perception of safety through appropriate design and regulations in the public space

Feeling uneasy or unsure about one's safety in any space can be a great deterrent towards one's venturing into that space. Perceiving a public place as unsafe has been

shown as a major barrier against successful and continuous usage. Perception of safety can be a precondition of usage in a public space, shaping people's decisions on whether to visit or not (Van Herzele & Wiedemann, 2003). Public space designers might have an easier time creating great projects if they were to pay more attention to the perception of safety of potential users.

People, when having a perception of fear regarding a public space such as a park, will usually not venture into that space. At the same time, perception of insecurity and lack of safety should not be treated as a singular element inhibiting usage of a public space. There is usually a culmination of factors that inhibit and discourage public space usage. Ethnicity, age, and gender have also been shown as influential in experienced levels of fear and insecurity regarding public space usage. Employing long term social strategies such as creating multicultural parks and gardens and determining the "aggressors of the public space" can help make public spaces such as urban parks safer (Madge, 1996, p. 246). The research by Madge (1996) indicates a need to take note of social factors such as gender and age when analyzing the viability of public spaces. Madge's conceptual approach, however, does not pay much attention to the actual types of uses and activities within public parks, although she does refer to increased community participation and social usage as the important function of public spaces. This reference to usage does seem to suggest a need to assess the actual types of uses and activities within public spaces through studying how they are influenced by perceptions of safety. Four elements are stated as crucial in making potential users feel safe and secure in a public space: wide range of uses and activities, being easy to get to and connected to the surrounding

community, being clean and attractive, as well as a place for chance encounters and sociability (Madden & Wiley-Schwartz, 2002).

Some public spaces have arguably been redesigned to become unattainable for some groups such as the homeless and persons of certain cultural backgrounds. Indeed, the experience in Los Angeles of the 1980's and the 1990's was one of "an urban renaissance" which was aimed for creating comfortable spaces for "respectable people" (Davis, 1992, p. 160). Davis' claim that militarization of the public space is accompanied by a wave of strict compartmentalizing of activities under the gaze of the authorities sheds light on a possibility that such actions might result in less diversity of uses and activities meeting less of the expectations and requirements of users.

Some studies, on the other hand, suggest that people seem to have a more positive sense of security in public spaces that are 'manicured' and more heavily designed than the ones that look more 'wild' and 'natural' (Ozguner & Kendle, 2006). A number of studies indicate that people have negative perceptions of opportunities for usage and safety in public spaces that do not invoke a 'sense of place' through appropriate aesthetic features. Lack of good aesthetic qualities has been shown to incite negative perceptions for opportunities in public spaces without heterogeneous design features and aesthetic qualities (Pugalis, 2009; Jacob & Hellstrom, 2010).

Diversity of design elements within and around public spaces could also help increase social cohesion and interaction, helping discourage perceptions of insecurity even among the most vulnerable segments of society. Greater presence of policing and security programs, however, has been shown as decimating people's perception of safety towards public spaces. More police and security measures has been shown as promoting increased

perception of insecurity and lack of safety for some groups while creating some sense of safety for others (Atkinson, 2002). Making public spaces visible through appropriate lines of sight is shown as a barrier against increased criminal activities in neighborhoods and public spaces. Designing seating areas next to plants, walls and solid edges could achieve a greater sense of security for those wishing to use and stay within the public space for prolonged periods (Cooper Marcus & Francis, 1998; Gifford, 2002).

Design features alone, however, may not necessarily result in more positive perceptions of safety for all potential users. Different social and cultural groups can have different perceptions of what behaviors are safe and appropriate in a public space, and this can create tension and conflict when using a space such as a park (Thompson, 2002).

It might also be rather naïve to believe that a positive perception safety will always guarantee high levels of uses and activities in every public space. A study of numerous public parks in Southern California in 2006-2008 showed no significant correlation between high levels of uses and activities and perception of safety by users (Cohen et al., 2009).

Municipal, regional, and provincial laws and by-laws can help discourage certain activities and certain groups of people from using some urban public spaces. As mentioned previously, the politico-bureaucratic-economic actors do not necessarily have the same principals and ideas as actual users (Pugalis, 2009; Nasar, 1998).

Morally speaking, no public space should be designed for and catered towards only one social group of people. Being perceived as the preserve of another social group could potentially insert a feeling of insecurity in other groups, inhibiting their active participation in the public space (Carr et al., 1992). Promoting as diverse a range of

opportunities in a public space as is possible is needed so that no one group can lay claim to the entire space. A balanced range of activities can decrease the perception of exclusivity in a public space, potentially helping more people of different social and economic backgrounds use that space.

Close proximity of a public space to residential areas of the users, retail areas, and other urban areas could partially influence how the space will be used.

2.4 Accessibility and Usage through Close Proximity to Public Spaces

The relative proximity of public spaces to other areas within the urban landscapes is crucial in their functions and possibly influencing the range of activities one can observe. An important planning principle, according to Gehl (2010) is to locate the city's functions carefully in order to "ensure shorter distances between them and a critical mass of people and events" (p. 232). Accessibility of public spaces to users can be determined through a variety of methods, and the most widely used methodology is to look at accessibility as a product of proximity. Although most academics agree on the need to maximize access to public space, some have stated the need to be able to shut access or limit access at certain spaces and during certain times (Lynch, 1981).

2.4.1 Proximity of public spaces to users' residential dwellings

Location of the public space within the urban setting has direct influence on the quality of life for residents. Urban and suburban sprawl since the late 1970's has resulted in creation of environments devoid of the many public spaces city centers used to have. Sprawl has created the need for greater travel time due to greater distances, and this has

been a barrier to public space development, utilization, and growth. Closer distances between a resident and a public space have been determined as effective in increased utilization. If the public space is in close proximity to a residential area then there will be more incentives for residents to enjoy and frequent that public space. Some studies have shown that numerous residents would directly support and fund the development of public spaces that are close to their homes (Salazar & Menendez, 2007).

People also show willingness to use a public space that is close to their work place and services such as retail stores. In a study of activity types and levels in public spaces of a Tokyo neighborhood, Japan, it was found out that almost half of the people interviewed and surveyed were either living very close, or in the immediate neighborhood. The same study also revealed that almost half of the interviewees worked nearby (Thorosson, et al., 2007).

Proximity to residential areas, however, does not necessarily guarantee utilization. For example, the perception of insecurity and fear of crime have been shown to deter usage by some residents living within walking distances of a number of urban parks. Being within the walking distance of public spaces is, nevertheless, a requirement for good public space design (Lotfi & Kooshari, 2009).

In terms of walking distance, a distance of no more than 15 minutes is stated as an indicator of good accessibility through proximity (Pasaogullari & Doratli, 2004). Distance wise, a walking distance of between 800 meters and 1,200 meters is stated as within the range of appropriate proximity between residential areas and urban public spaces (Lotfi & Kooshari, 2009). Within a North American context, the City of Vancouver's 1992 'Living First' strategy established a walking distance of no more than

800 meters, or about 10 minutes, as the appropriate distance between residential developments and other urban amenities such as community centers and common spaces (Price & Reis, 2010).

One effective method for achieving greater accessibility through proximity to residential areas is to have many dispersed small public spaces. A concentration of public spaces in one small part of the city seems to do little in the way of increased accessibility, since many residents from distant parts of the city will not bother using these sites (Pasaogullari & Doratli, 2004).

Some studies have shown that the effects of greater distances on actual types of uses and activities are not necessarily linear in nature. While greater distances between the home and the public space might create a “friction effect” for potential users, other factors such as motivation to use the specific space and a commitment to visit should be taken into account as well. Kaczynski et al. (2009) have argued successfully that individuals with higher levels of attachment to a public space would also be more likely and more willing to travel greater distances to use it. Also, individuals traveling to farther public spaces might be pursuing types of activities that might not be available nearby. Such findings and assertions suggest that any study of public spaces’ distances to users’ residences needs to be accompanied with the premise that other factors might be influential in shaping the actual types and patterns of usage.

Proximity to other urban areas, especially closer distances to retail stores, is another factor that can partially influence state of uses and activities within public spaces.

2.4.2 Proximity of public spaces to retail and other urban facilities

Close proximity of public spaces to shopping areas, retail stores, and other urban amenities, creates increased incentives for usage. A number of pedestrian streets in the Nordic countries of Denmark, Norway, and Sweden, have become very successful public spaces due in part to boasting a diverse range of activities, including nearby shopping opportunities plus seasonal and weekly public markets on the street level (Karrholm, 2007). Many North American downtowns are currently being revitalized through placing retail stores and other urban services near cultural and entertainment areas, creating diverse spaces where people can pursue their desired public activities (Field, 2008).

Numerous cities in North America and Western Europe have undergone massive deindustrialization since the early 1980's. With the decline of industrial activities in these urban areas, planners and city officials have had to create other economic opportunities, and the rise of retail amenities is seen as a natural adjustment due to a new economic reality. Within the Canadian context, the City of Vancouver's downtown transformation has been accompanied the rise of new retail and civic spaces on former industrial lands. These new spaces in Vancouver are located within close proximity to one another and to new residential enclaves (Hutton, 2004). Retail stores and other amenities near and within public spaces increase incentives for usage, contributing to a wider range of things one can pursue on site and resulting in the creation of more multifunctional spaces. Some of the public spaces in North America are utilized more actively due to their close proximity to entertainment and cultural centers. Granville Street in Downtown Vancouver has become more actively used throughout an average week due the presence of clubs, pubs, and other entertainment centers nearby. This street corridor has been named the major

entertainment/cultural district of the City of Vancouver (Boyd, 2010). By creating a comfortable setting for shopping as well as strolling and relaxing, Granville Street and other shopping streets in the City of Vancouver can enhance the role of the public realm (CityPlan Overview, 1995). Another study of proximity to retail stores and other urban amenities in the Twin Cities' downtown cores in Minnesota confirmed that individuals living within 200 meters or less of neighborhood retail stores had a higher likelihood of walking to such places (Krizek & Johnson, 2006).

Aside from proximity, the physical structure in and around the public space can also hinder or encourage usage (Pasaogullari & Doratli, 2004). Design and aesthetic characteristics of the place comprise another factor that could influence types of uses and activities within public spaces.

2.5 Relationships Between Design and aesthetic features and Types of Uses and Activities Observed in Public Spaces

Design features and aesthetic elements can influence types of activities and uses taking place within public spaces. People react and use spaces through interacting with the physical elements around them.

The form of design, according to Lynch (1960) should be used to “reinforce meaning”, not overlooking it (p. 46). Good design can help foster more people friendly public spaces, playing an integral role in shaping the city's urban fabric (Vancouver Public Space Network, 2009). It is important to note that some academics have stated that too much focus has historically been given to design elements and aesthetic qualities of public spaces in the past, and this can make public space research based more on description rather than actual use (Golicnik & Ward Thompson, 2010). Design features

and aesthetic qualities, however, could potentially influence the degree of diversity of uses and activities in the public space. A positive quality of a public space is users pursuing a variety of activities, taking advantage of the amenities that are available, and making use of the different areas within that space (Low et al., 2005). One could argue rather successfully that the major goal of public space design is to create spaces that increase the quality of life for users and residents: this is characteristic of a city with a good urban form.

2.5.1 Relationships between design features and aesthetic characteristics with types of functions observed in public parks

Types of usage in a public space have been shown as partially a result of that space's design features and aesthetic characteristics. Some public spaces are designed to take people away from their daily lives, giving them opportunities for "playful design" (Cybriwsky, 1999, p.228). With their many seating facilities, interesting lighting effects, and walkways, these spaces can entice users in a variety of ways. By evoking a "theme park" simulation and breaking from local history, some new public spaces have become less widely utilized while others such as Battery Park in New York City have seen a resurgence of usage in recent years. Incorporating too many design features and amenities in open public spaces that are too large for pedestrian scales have resulted in "new urban deserts" in cities like Tokyo. At the same time, a space such as Battery Park in New York City, with an appropriate amount of amenities and opportunities for usage, has seen an upsurge of activities (Cybriwsky, 1999, p. 228).

A current trend of thought among many academics and urban designers is based on the idea that people prefer urban spaces with more design details than the older pedestrian

streets and highways built during the middle of the last century (Robertson, 1991). Having good aesthetic qualities through usage of good materials, providing fine views, as well as adequate trees, plants, and water features, can improve sensory experiences of users (Gehl, 2010). Lynch argues for the imageability of the urban space rather than just high standards of aesthetic qualities. By “evoking a strong image in any given observer”, the mental image of the physical environment can be strengthened, adding identity to that space as a result (Lynch, 1960, p. 9). The visual connections between the pedestrians and the aesthetic features of a public space such as a sidewalk on a busy street could influence usage levels. Interesting art pieces, flowers, trees and other elements of visual interest can entice more foot traffic, resulting in positive economic outcomes for on-street retail.

Aesthetic qualities of public spaces can be divided into ‘naturalistic’ elements and ‘formal’ elements. Research shows that people prefer and recognize the values of both types of open public spaces in urban areas, but usually prefer a few specific aesthetic features that are present in both: trees, plants, and art installations or sculptures (Ozguner & Kendle, 2006). Consequently, a natural-looking public space might offer a different set of incentives to its users than would a formal looking and heavily designed public space.

Inducing a positive imagery due to high quality aesthetic features, however, does not necessarily mean that the public space will be used more heavily. A study of public art in urban spaces in the Netherlands indicated that while many users had positive reaction to aesthetic qualities of public art pieces, they did not necessarily ‘convene’ or use the nearby area as meeting spaces (Zebracki, 2011). The same study by Zebracki showed that corridor public spaces, even if boasting a number of interesting sculptures and other art installations, failed to act as meeting points, being used mainly as transit spaces.

Visual complexity is noted as important for higher usage levels. A study of reactions of users in ten Downtown Vancouver plazas during the 1990's revealed that sites with more variously shaped sculptures, varied colors, shrubs, fountains, and trees, scored higher (Cooper Marcus & Francis, 1998).

The aesthetic qualities of the public space are known as a factor that can influence usage and enjoyment of urban spaces (Cooper Marcus & Francis, 1998). Public spaces such as urban parks play a great role in showcasing and shaping the identity of the communities in which they are located. Such spaces' aesthetic features might send a strong message regarding their functions. Aesthetic qualities of public spaces can be tied to the natural views they could provide. Many cities have started to invest in their waterfronts, creating parks and tree-lined pedestrian walkways in order to bring people back to the edge (Mack, 2006). Developing greenways and increasing the number and variety of trees in public spaces such as streets is a specific goal of the CityPlan with regard to creating vibrant public spaces in Downtown Vancouver. The report also acknowledges the importance of maintaining public views to the mountains and the water in order to enhance the role and quality of public spaces in the downtown peninsula (CityPlan Overview, 1995).

More traditional spaces such as city parks could also be used according to the placement and orientation of seating amenities and the physical dimensions of their open spaces. People have been shown to use these spaces through their interaction with benches' orientations. Studies have indicated that seating areas need to be varied, as "different people need different forms of seating" (Cooper Marcus & Francis, p. 41, 1998).

Exercise-oriented activities tend to occur in larger open areas within the public space, and other uses such as reading, conversing with other people, and eating, occur near edges and closer to art installations and trees (Golicnik & Ward Thompson, 2010). Users tend to utilize wider open spaces more often in groups and through group activities than alone. Users will appropriate sub-areas within a public space through defining their personal space(s). Open spaces will grant more personal space to users, thus promoting active engagements such as playing, and conducting exercise, whereas smaller sub-areas with defined edges are used for activities such as sitting, chatting with friends, and reading. Sitting, reading, and other similarly passive activities require less personal space (Ostermann & Timpf, 2007). By creating a setting for a multitude of uses and emphasizing on the authentic aspects of the place, that public space can become more successful in the long term (The Magic is in the Mix, 2011). Ultimately, a diverse range of both programmed and un-programmed areas in the public space are arguably influential in fostering wider types of uses and activities.

2.5.2 Increased and higher diversity of uses and activities in redesigned public spaces

The public spaces of the city can attract more users and encourage more diverse activities through appropriate redesigning. By linking one public space to other spaces within the city, increasing levels of flowers and landscaping, incorporating water features, and providing some height and topography differences, the public space can provide more opportunities of usage (Gehl, 2010). Consequently, through providing more bicycle lanes and pedestrian walkways, the redesigned public space can become more attractive as a hot spot. The open spaces within a public space should be redesigned by

ensuring that enough spaces are devoted to socio-cultural events, eating and sitting, and through preserving green spaces for environmental and aesthetics reasons (Hepcan, 2006). Parks and other public spaces should also be recreated with age of users in mind. A space should contain amenities such as playgrounds and interactive art pieces so that children as well as adults and seniors can use the space with minimal conflicts of interest. Forsyth and Musacchio (2005) also suggest that a method of minimizing tensions and conflicts over space appropriation might be to clearly demarcate each sub-area within a given public space.

Having a variety of amenities and a diverse landscape within the public space makes it easier for users to pursue a variety of activities by having an “adaptable” space that serves not only current and traditional users, but future potential users as well (Ward Thompson, 2002, p. 60). Some public spaces can be divided into sub-areas that would be designed for many different types of uses and activities. These demarcated sub-areas might need to be large enough so as to maintain the sense that the space is public and not private (Cooper Marcus & Francis, 1998).

Paying attention to the local climate is stated as another important factor in designing great public spaces. Human comfort levels are influenced by temperature and sunlight levels as much as the physical dimensions and overall context of the place. People stop using open public spaces when sunlight and temperature levels rise dramatically, and the same has been observed when temperature levels drops near freezing. Taking note of climatic conditions when redesigning a public space could potentially influence the degree of diversity of uses and activities (Zacharias et al., 2001). Features such as awnings and shaded walkways can result in better-used public spaces (Robertson, 1991).

Weather protection should be part of the design process of any public space. Through including design features such as canopies, shelters, or glazed trellises, the public space can keep functioning as a rest stop or a waiting point at the very least, especially during harsher weather conditions (Plaza Design Guidelines, 1992). Providing for human comfort does not necessarily mean that comfort is being provided for all people from all walks of life. Seating amenities, as an example, while making an urban park or street more comfortable, might not have been designed to accommodate just about any type of user(s). The case in point is the design of public benches in Los Angeles' poorer neighborhoods where seating amenities were clearly designed to make sleeping and long term usage by the homeless uncomfortable, if not impossible (Davis, 1992).

Making sure that the space is designed at the eye level and on a human scale is another crucial principal to bear in mind (Gehl, 2010). Public spaces need to engage the pedestrian at the street level. As a result, a potential user can assess a broader range of functions within reach.

It would of course be naïve to state that design and aesthetic qualities could result in great public spaces in every case. These spatial qualities, in the words of Ward Thompson (2002) are important, but other “non-spatial qualities of landscape are just as important as any spatial qualities” (p. 61). Furthermore, citing earlier research by Corraliza in 2000, Ward Thompson states that the non-spatial qualities such as engaging with other people and using cafes, shops and shady boulevards might suggest that the street is a more true form of public space while urban parks are “becoming places for special categories of people” (2002, p. 61).

The context of the public space is a critical factor in how that space functions, going beyond only proximity to residential enclaves, retail stores, and other urban amenities. The specific location of the public space within the urban landscape as an edge or central space can be influential as a contextual factor, possibly influencing the degree of diversity of uses and activities.

2.6 Edge and Central Public Spaces

The public space' location within the city is an important contextual factor. People use a space located at the center of an urban area more differently than they would a public beach or an urban park at the edge of the city. Location might help determine the variety of activities one could and would like to pursue. Historically, the vast majority of European, Middle Eastern, and even North American public spaces were central. Numerous North American cities have witnessed a trend of edge-oriented public space design during the past few decades (Goheen, 1998).

Some such as Sennett (1990) have argued that the center has been declining for the past one hundred years because of design practitioners such as Olmstead. This decline was fostered when public space designers managed to disperse crowds away from the central public space and into the peripheries of the public sphere. This contention, however, is somewhat simplistic since it fails to account that many urban spaces in both the United States and Canada have maintained some of their most iconic central spaces.

Many North American urban waterfronts are being recreated through designing edge-oriented public spaces. Cities such as New York, Nashville, and Cedar Rapids are spending billions of dollars in planning and redesigning their downtown waterfronts. It is imperative to note that places like Manhattan, now investing more on their waterfront

parks and edge public spaces, have already had a long history of boasting central gathering spaces. Development of green public spaces along the water's edge in Manhattan and other downtown cores has been praised as effective in bolstering the downtown and helping reach urban sustainability targets (Greco, 2010). Some cities are, on the other hand, realizing the need to boost their economies through redeveloping their central public spaces. Public squares have been noted as the kinds of spaces that can not only influence cities' economies, but also offer people a comfortable venue for social, cultural, and political activities. Successful public squares will be the ones that can not only draw in all sorts of users, but will offer them many choices such as chances for socializing, eating, reading, playing games, and interacting with art installations (Projects for Public Spaces [PPS], 2010).

A great city, therefore, should theoretically boast public spaces at different locales within its urban landscape in order to provide as diverse a range of uses as possible. In reality, however, some cities have more central gathering spaces such as squares and plazas, while others, such as Vancouver, B.C, cater toward edge spaces in the form of public parks and waterfront corridors (Czypyha, 2010).

2.6.1 Current state of edge and central public spaces in Downtown Vancouver

The City of Vancouver has one of the most aesthetically pleasing sceneries of any North American cities. The downtown core is bounded by a unique geography, being bordered by water on three sides and connected to the rest of the city through a narrow corridor to the east. Downtown Vancouver has a strong sense of place due to its dramatic physical setting (Berelowitz, 2005). Consequently, it is the waterfront public spaces of

Vancouver and its CBD that have undergone the most dramatic transformations of “the relationships between society, nature, and the economy” (Kear, 2007, p.324). Some argue that what makes Vancouver such a success story is Vancouverism, which is a planning and architectural approach comprised of mixed-use buildings with a variety of medium and high-rise towers accommodating higher residential populations while preserving view corridors. As such, the success of Vancouverism depends on keeping views of natural landscapes intact through promoting public waterfronts and green spaces near the edge of urban areas (Roehr et al. 2007).

Due to its geography, and probably as a result of pursuing the ideals of Vancouverism, the CBD has been defined not for its central plazas and squares, but for its waterfront parks and edge public spaces. The downtown public realm is composed of parks, streetscapes, and open spaces that are mostly on the waterfront or very close to the downtown edge. Vancouver’s city center lacks the types of central gathering places one would encounter in many European and American cities such as Milan, Italy, Washington, D.C., and Philadelphia, Pennsylvania (Berelowitz, 2005). Around 40 percent of the public places in the City, and an even greater portion in the downtown core, are located on or very close to the waterfront (Punter, 2002). Public spaces within Downtown Vancouver are usually located at the edge near the water, providing scenic opportunities as well as walking, biking, and seating amenities. In all, the downtown lacks that everyday gathering place that draws people in and fosters interaction among public space users (Vancouver Public Space Network, 2009). It is important to note that The City of Vancouver’s CityPlan (1995) does call for many different types of public spaces such as parks and plazas at various areas throughout the CBD.

The map of Downtown Vancouver, shown below, clearly demonstrates how the majority of the parks and green spaces in the CBD are located along the waterfront.

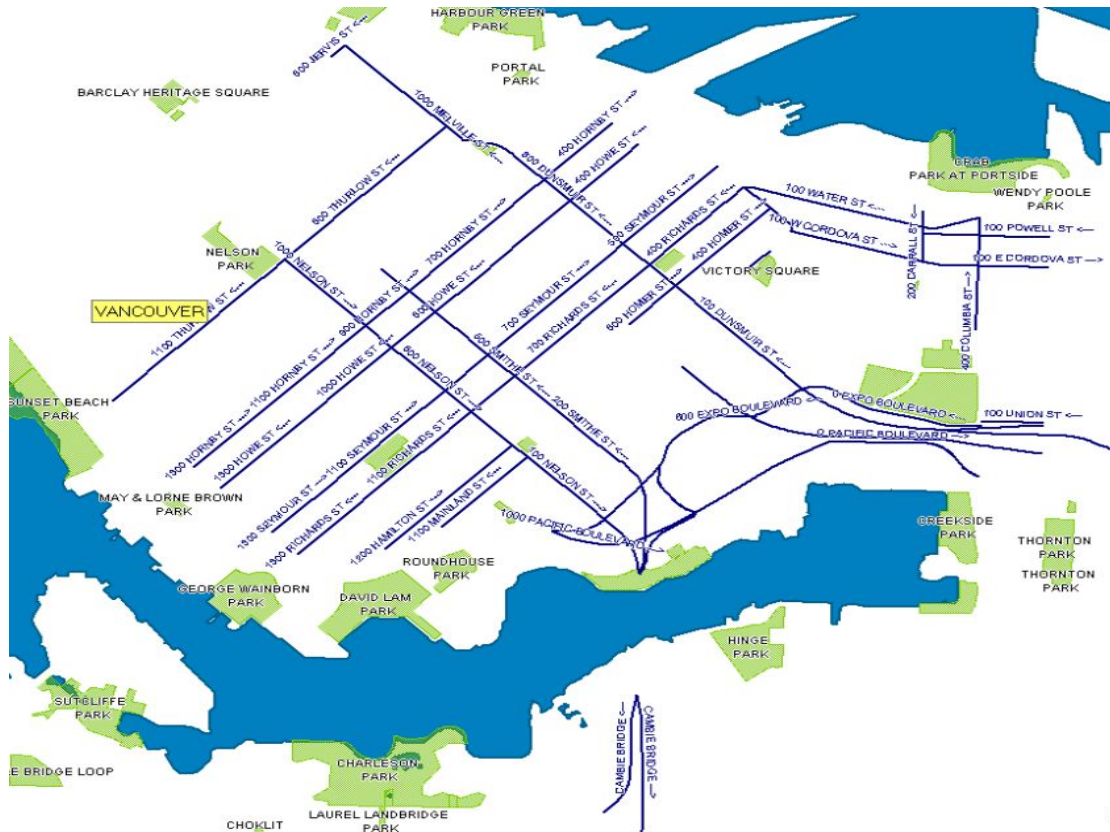


Figure 4: Map of Downtown Vancouver and its public spaces. Source: Vancouver Public Space Network, 2010.

2.6.2 The need for providing central gathering places in Downtown Vancouver

At the moment, Vancouver’s CBD has very little in a way of a central public space, and that will need to change in the future (Czypyha, 2010). Vancouver is currently undergoing a revitalization program of its central public squares, whereby the role of a public space such as Robson Square in the downtown is reframed (Madden & Kent, 2009).

The difference between Vancouver’s downtown core and other city centers such as Downtown Toronto has been the fact that Downtown Vancouver has already had the

investment and the time to develop its waterfront parks. Toronto's downtown, like many other North American CBDs, boasts a number of successful central open spaces, but it has lacked access to the waterfront due to previous development of highways and transit routes near its waterfront (Mack, 2006). While other downtown cores strive to develop their neglected waterfronts and downtown edges, Downtown Vancouver needs to develop its central gathering spaces. At present, the public space in Downtown Vancouver is attuned to celebrating the natural landscape of the distant mountains and the ocean and not the urban landscape. The challenge for planners, architects, and urban designers will be to aim "for a combination of the obvious virtues of natural setting with the equally obvious ones of urbanism" (Berelowitz, 2005, p. 168). Developing more centrally located gathering spaces in Downtown Vancouver is also in line with the goals and aims of the CityPlan (1995), which states the need to create attractive downtown plazas and parks as well as increasing access to the waterfront.

The evolution of the public realm requires the creation and development of public spaces throughout the urban landscape, and an unbalanced concentration of such spaces at the expense of other types of spaces will result in a lower grade of urban form, increasing access by proximity for only those who live the closest. A more dispersed network of public spaces is a critical aspect of good urban forms. These dispersed public spaces need to be located throughout the downtown landscape, increasing access by proximity as well as providing a higher variety of uses and activities.

The factors of design characteristics, aesthetic qualities, and proximity to residential areas, retail stores, and other urban amenities, as well as being an edge or central type of public spaces were reviewed. Review of the literature shows an interconnected nature

between the state of uses and activities within public spaces and the factors already mentioned above. This interconnection indicates first and foremost the importance of the perceptions of potential users based on safety levels, quality of amenities, and opportunities for uses and activities. The reviewed literature indicates that such perceptions can potentially influence the state of uses and activities in the public space. A conceptual approach to assessing the degree of diversity of uses and activities meeting the diverse requirements and needs of users within a selected number of public spaces can thus be used based on the reviewed interconnected factors.

2.7 Conceptual Framework

Review of the literature indicated that many factors could account for what makes a public space great and more successful.

Authors such as Talen (2000), Jacobs (1961), and Whyte (1988) believe that people have diverse set of expectations and requirements from their urban spaces. At the same time, perceptions of safety and quality of amenities and opportunities for usage in the public space can possibly influence the diversity of uses and activities witnessed in the public space.

The degree to which diversity of uses and activities in a selected number of Downtown Vancouver's public spaces meet the requirements and expectations of their users is based on utilizing and testing a two-tiered premise. This is based on people's diversity of expectations and requirements from public spaces; and furthermore, the provisions and quality of amenities, safety levels, as well as opportunities for usage can influence the diversity of uses and activities.

This research is based on the conceptual framework that takes into account the two-tiered premise that is developed from reviewing previous literature with regards to urban public spaces. This conceptual framework acknowledges the influence on perception of quality of amenities, safety levels, and available opportunities for usage by a set of contextual and physical factors from the reviewed literature.

The conceptual framework in this research is illustrated in figure 4 below. The connections between both physical and contextual factors to perception of safety, quality of amenities and opportunities for usage in the public space show a dependent relationship. In essence, connections between the contextual and physical factors in figure 4 show that perceptions of safety, quality of amenities and opportunities for usage are dependent on the design features, aesthetic qualities, location as an edge or central space, and proximity to residential and retail areas.

As shown during the review of previous literature, the degree to which the diversity of uses and activities in the public space meet their users' diverse expectations and requirements is potentially influenced by the perception of safety, quality of amenities and opportunities for usage. This relationship demonstrates diversity of uses and activities meeting higher levels of users' diverse expectations and requirements as a product of more positive perceptions of safety levels, quality of amenities, and opportunities for usage. Through applying this conceptual framework on a selected number of public spaces in Downtown Vancouver, it can be found out which spaces boast more varied types of uses and activities, thus meeting their users' diverse expectations and requirements, and why. Applying this framework is predicated on the crucial need for evaluating the inputs and comments of actual users of each study site to

complement the research process. The merits of taking inputs from everyday users of public spaces have already been discussed in previous sections.

Other factors that could result in great public spaces, such as those mentioned by Jacobs in table 2 (1993) can also be assessed due to the exploratory nature of the research. It can then be assessed how these spaces and others like them could potentially be modified and designed in order to boast more types of activities in the future for a population with diverse needs and expectations.

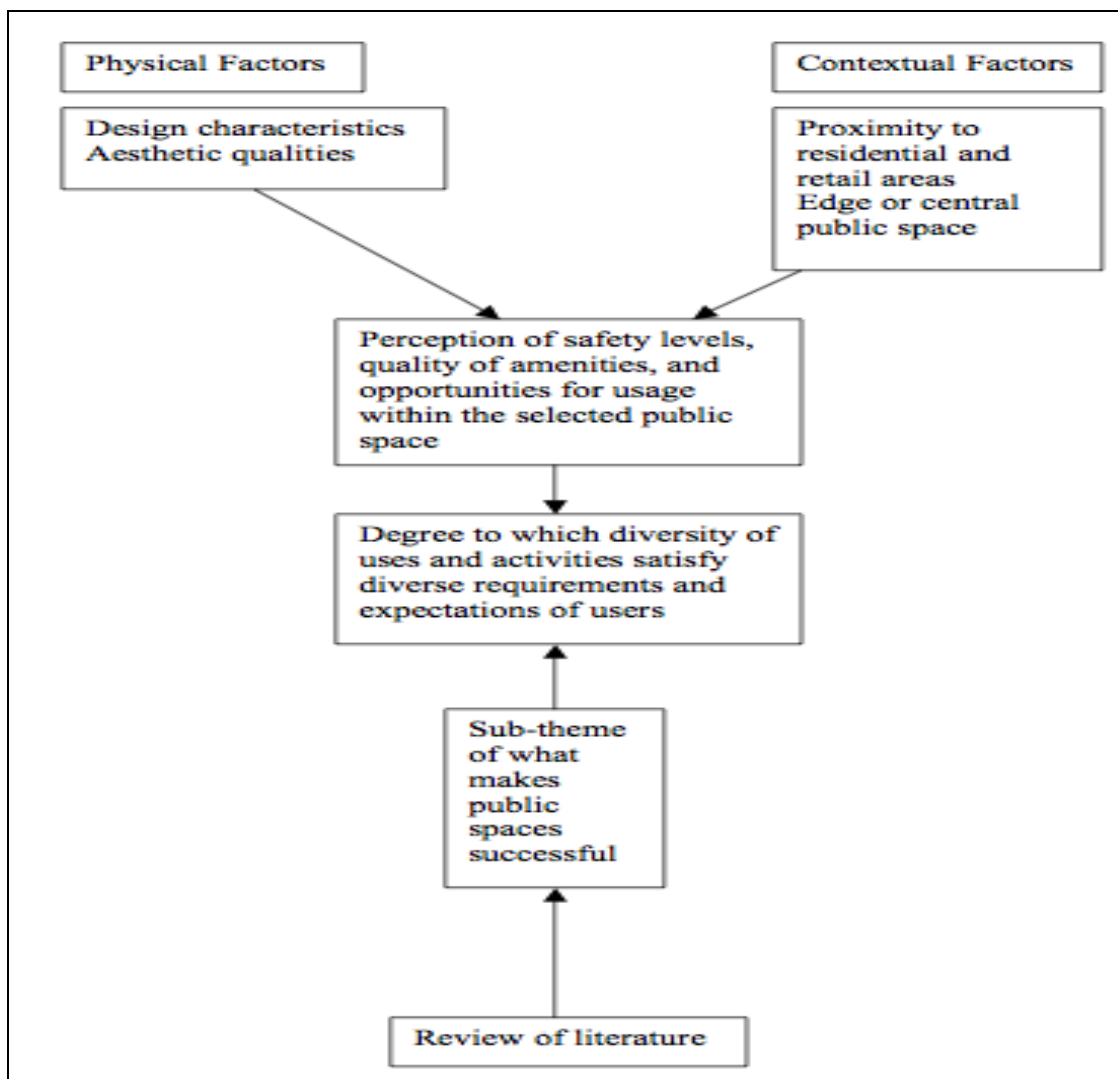


Figure 5: Conceptual framework for Downtown Vancouver public spaces' diversity of activities' evaluation. Source: Behnia, 2011.

This conceptual framework might potentially be useful in other Canadian and possibly American cities' downtown cores in the future. Such usefulness might be more appropriate in similarly sized Canadian downtowns with somewhat similar urban morphologies and historical/physical developments than some American urban centers with different historical and physical developments. Findings from this research could potentially shed light on how the politico-bureaucratic-economic actors can approach public space planning and design in downtown cores similar to Vancouver's, ensuring each public space meeting more of the diverse requirements and expectations of its users.

2.8 Conclusion

Review of previous literature demonstrates that diversity of uses and activities in public spaces can be influenced by a number of contextual and physical factors. The role of the public space in a good urban form is slowly being realized and reaffirmed. Some public spaces are used more than others, and it seems design characteristics, aesthetic qualities, being an edge or central public space, proximity to residential areas, retail stores, and other urban amenities, can influence perceptions of safety, quality of amenities, and opportunities for activities.

In summary, there is a clear need for further studies with regard to how public spaces are evaluated in terms of the degree of uses and activities they offer their users. Creating landscapes that are enjoyed by a greater majority of residents pursuing a wide range of activities is one method through which the public space could become more successful.

This thesis combines both contextual and physical factors in a methodology that is designed for evaluation of four pre-selected public spaces in Downtown Vancouver. The review of previous literature demonstrates a need for using a variety of research methods

while conducting analysis of public space usage. This can be achieved through on-site observations, as developed by Whyte (1988) and Golicnik and Ward Thompson (2010), as well as through interviews and surveys of both users and politico-bureaucratic-economic actors as demonstrated by Pugalis (2009). The appropriate research methodology needs to take into account both contextual and physical factors of design features, aesthetic qualities, and locations of the space within Downtown Vancouver; all of which are to be evaluated through their connection and influence on users' perception of safety, quality of amenities, as well as opportunities for usage. The methodological approach in this research cites users' perceptions as a dependent variable that affects state of diversity of uses and activities. Specific details of research methodology will be discussed in detail in chapter 3.

Chapter 3: Research Methodology

The research methodology used in this research is explained in detail in the upcoming sections.

3.1 Methodological Approach

The research approach in this study is of a qualitative nature. This strategy of research has been promoted for a number of years due to fewer discussions regarding its legitimacy in literature (Cresswell, 2009). Cresswell writes that qualitative research “employs different philosophical assumptions; strategies of inquiry; and methods of data collection, analysis, and interpretation” (Cresswell, 2009, p. 173). The qualitative approach is best suited for an urban planning research of this scope, especially since public space usage will be analyzed in a way that can best be illustrated through multiple methods of data collection. At the core of the research lies the exploration of data collection and interpretation, which defines the qualitative nature of this methodology (Rashan, 2009). Research will be based on data collected in the field by the researcher. The researcher will rely on both the participants’ subjective ‘meanings’ as well as establishing a connection with the conceptual framework (Cresswell, 2009). As Cresswell suggests, developing a holistic account of the problem under study involves “reporting multiple perspectives, identifying the many factors involved in a situation, and generally sketching the larger picture that emerges” (Cresswell, 2009, p. 176).

3.1.1 Researcher’s Role

Qualitative research is an interpretive methodology in nature. It is imperative for the researcher in a qualitative study to state their biases, views, personal backgrounds and

values in an explicit way (Cresswell, 2009). This topic was chosen due to the belief of the researcher in the importance of a public space meeting the diverse expectations and requirements of its users. This belief in the importance of diversity of uses and activities in public spaces is shaped by past experiences through living and spending time in busy European and Middle Eastern metropolises that boast busy public spaces where people pursue a wide variety of activities on a daily basis.

3.1.2 Triangulation

A combination of methods is used in this research. This approach is referred to as triangulation. Triangulation involves “complementary methods or data sources to circumvent the potential inadequacies of single data sources” (Hoggart et al., 2002, p. 312).

Triangulation is a superior form of research methodology in that more than one line of investigation is employed. The researcher can cross reference results of one method with another in order to see whether the derived results can be interpreted in more than one manner, and whether there is something that the researcher might have missed before. The merits of triangulation will be discussed in more detail in section 3.4.2.

3.2 Case Study Framework

Research is framed around a multiple case study approach. Specifically, the research is centered on four specific public spaces within Downtown Vancouver. Cresswell (2009) defines case studies as:

“...a strategy of inquiry in which the researcher explores in depth a program, event, activity, process, or one or more individuals. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time” (p.13).

Four Downtown Vancouver public spaces were selected as the case studies in this research. The reasons for selecting these spaces are discussed below.

3.2.1 Case studies' selection

Four public spaces within the downtown core of Vancouver were chosen. Downtown Vancouver, as the most residentially and commercially dense area of the city, boasts the highest number of public spaces in both the city and the rest of the Greater Vancouver Regional District. Downtown Vancouver is the most ideal area for public space studies due to its commercial and social significance in the City and the region and for having the greatest number of public spaces. A great portion of the city and the region's residential development has also been taking place in the downtown core since the early 1980's; adding relevance to the downtown core as the place for public space assessment due to close proximity to a high residential population. As an example, figure 6 will demonstrate the historical trend of condo and residential dwelling concentration in the downtown core since 1981, showcasing the importance of the downtown as both a residential and a commercial core. With regards to the four specific public spaces, there has been no comprehensive study in terms of how the spaces function, and how diverse a range of users' expectations and requirements are met.

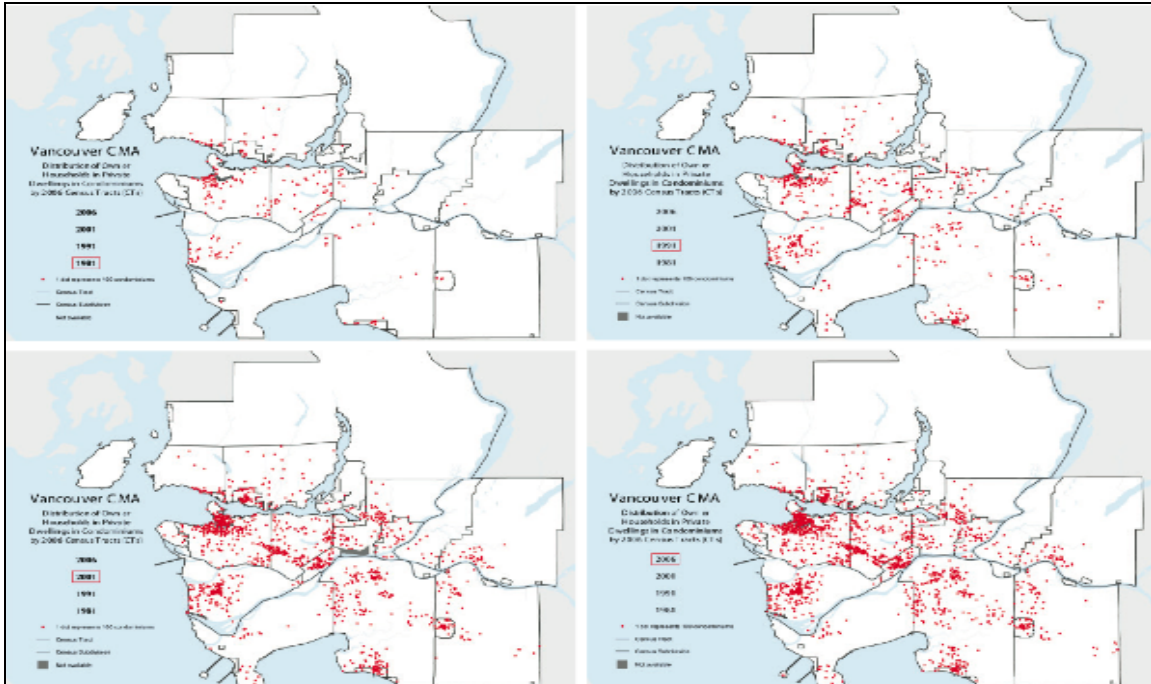


Figure 6: Historical trend of condo towers and residential units' density in the GVRD from 1981 to 2006. Source: Czyzyha, 2010, p. 29.

The method of site selection for this thesis lies on a careful review of the literature, examining how different researchers have identified urban spaces as public in the past. The first step taken was to include public spaces that were physically located in Downtown Vancouver. Through a careful examination of previous literature, a two-tier approach for space selection was devised.

This approach first relies on both geography and location of the spaces within Downtown Vancouver. The geography of public spaces in Downtown Vancouver is understood in terms of either being centrally located, or being located along the waterfront as edge spaces. For the context of Downtown Vancouver, it has been noted that being an edge or central public space could have varying consequences in terms of usage types, making geographic location an important criterion. Lance Berelowitz has

conducted a detailed research on Vancouver's public spaces. As mentioned previously, the author has categorized Vancouver's public spaces as either central or edge-oriented (Berelowitz, 2005). The review of previous literature has indicated that most of Vancouver's public spaces, including the downtown core, are located along the waterfront.

Secondly, through reviewing previous literature, it became evident that public spaces were defined mostly in the forms of sidewalks/streets or structured spaces such as urban parks, plazas, or squares. Talen (2000; 2005) formulated a comprehensive categorization of public spaces in good urban forms through measuring the public realm. In her evaluation, the second variable for evaluating good urban form, are "defined within two criteria: sidewalks/streets or structured spaces such as parks, plazas and squares" (Talen, 2005, p. 210). It is crucial to recall that Talen stresses the importance of streets as public spaces, writing, "they are to be thought of as public space" (Talen, 2000, p.347). For the second criterion of selection, it was deemed only appropriate to ensure that case studies in this research were either sidewalks/streets or structured such as urban parks. Other types of structured spaces such as plazas and buildings were not chosen for this study due to the probability that many of these spaces are actually located in the private domain and managed/maintained by private companies, not qualifying as truly public.

Due to the specific nature of Downtown Vancouver's public spaces, it was necessary to find public spaces that satisfied definition(s) of places deemed as public by Emily Talen, but also conforming to a contextual definition of being edge or central spaces. Talen states that structured public spaces could be in the form of parks, buildings, plazas, and squares. For the purposes of this research, all of the structured public spaces selected

were open urban parks. The reason for selecting parks as the only type of structured public spaces was due to the fact that these are the only known spaces that were truly public, being located on public land. At the same time, all the structured public spaces in this research were either managed/maintained by the City of Vancouver, or by Vancouver Board of Parks and Recreation.

The four public spaces selected for this research are Granville Street corridor, Creekside Park, Emery Barnes Park, and the North False Creek Waterfront walkway. Granville Street corridor, satisfied both Talen’s definition of the public realm as a street, as well as Berelowitz’ definition as a central space. Creekside Park, also a structured and waterfront space, is a classic definition of a Vancouver public space on the edge. Emery Barnes Park is a central neighborhood park, and being a smaller and structured space, it conforms to both Talen’s and Berelowitz’ definitions. The last combination for site selection requires an edge space that is of a sidewalk/street nature, and the North False Creek Waterfront walkway satisfies these characteristics. The criteria of selection for the four public spaces are illustrated below in table 3.

Central/sidewalk-street	Granville Street Corridor
Edge/sidewalk-street	North False Creek waterfront corridor
Central/structured	Emery Barnes Park
Edge/structured	Creekside Park

Table 4: Categorization of public spaces for this study based on all possible four-combination types. Source: Behnia, 2011.

3.3 Data Collection Strategy

A multi-faceted research strategy was chosen for this study. Research methodology was comprised of on-site observations and mapping of activities in each public space, on-

site surveys, and semi-structured interviews with bureaucratic-politico-economic and academic actors. This section will explain the research strategy in detail.

3.3.1 Observation and mapping of activities and urban context of each public space

The researcher undertook regular observation of activities of users in each of the pre-selected public spaces, recording the different types of activities that were undertaken by users throughout the day. This form of environment-behavior analysis has been shown as a very effective tool in understanding the relationship between people and places (Golicnik & Ward Thompson, 2010). Bechtel et al. (1987) write about the value of observational methods in environment-behavior research for gaining insight into research questions and problems, identifying kinds and frequencies of behavior and illustrating relationships with the specific portions of the study site.

Observation and recoding of activities took place between spring and summer of 2011. Observation of each of the selected four public spaces was scheduled and distributed evenly through the study period. Taking queue from Golicnik and Ward Thompson's methodology (2010), each space was observed during four time periods: 10 am - 12 pm, 12 - 2 pm, 2 - 4 pm, and 4 - 7 pm. In order to account for all possible variations, spaces were observed during both weekdays and weekends. Five observation sessions were scheduled for each of the four public spaces under study, yielding a total of twenty observation sessions. Using the table of activities prepared by Golicnik and Ward Thompson shown in table 4 (2010), each type was recorded and mapped at each sub-area of the public space(s), and new types of activities not previously recorded in the literature were recorded and mapped as well. It was deemed only appropriate to record the

activities not only through their frequencies of occurrence, but also through a gender-based approach, thus increasing validity of the data gathered. As noted in previous literature by Golicnik and Ward Thompson (2010) and Ostermann et al. (2007), activities were also mapped with relations to specific sub-areas of each public space, helping to show possible relationships between function and design of amenities and features in each space.

Table 2
Sum of number of people involved in activities per day for all three large observed parks in Edinburgh and Ljubljana.

No. of people involved in activity per day	Princes st. gardens				The Meadows				Tivoli			
	Male	Female	All	%	Male	Female	All	%	Male	Female	All	%
Bmx acrobatics					6	0	6	0.2	1	0	1	0
Climbing	6	2	8	0.2	5	0	5	0.2	4	3	7	0.2
Cycling					75	44	119	4.3	187	143	330	9.1
Exercising									6	0	6	0.2
Fishing									4	0	4	0.1
Flying a kite					2	0	2	0.1				
Jogging					58	52	110	4	34	30	64	1.8
Jumping	1	0	1	0								
Lying down	26	12	38	1.2	12	5	17	0.6	67	48	115	3.2
Lying on a bench	1	0	1	0					8	2	10	0.3
Performing street theatre					11	6	17	0.6				
Playing	25	17	42	1.3					22	19	41	1.1
Playing badminton									1	1	2	0.1
Playing baseball					2	0	2	0.1				
Playing cricket					35	6	41	1.5				
Playing football	16	0	16	0.5	545	16	561	20.3	21	4	25	0.7
Playing frisbee					34	6	40	1.4	12	2	14	0.4
Playing golf					3	0	3	0.1				
Playing in a playground (no fence)	13	6	19	0.6								
Playing volleyball									3	2	5	0.1
Playing with a ball					14	7	21	0.8	6	2	8	0.2
Propelling scooter									1	2	3	0.1
Pushing a pram	4	9	13	0.4	0	7	7	0.3	39	83	122	3.4
Pushing a pram + walking a child					0	1	1	0	1	1	2	0.1
Roller-skating	1	0	1	0	2	2	4	0.1	53	75	128	3.5
Rolling down	1	0	1	0								
Running					2	0	2	0.1	1	1	2	0.1
Sitting	372	329	701	21.5	81	83	164	5.9	199	260	459	12.7
Sitting around a table	12	14	26	0.8					226	231	457	12.6
Sitting on a bench	564	556	1120	34.4	41	34	75	2.7	204	281	485	13.4
Sitting on a bench with a dog					1	0	1	0				
Sitting on a bench with a pram					0	1	1	0	0	8	8	0.2
Sitting on the tree									0	5	5	0.1
Sitting while roller-skating									1	2	3	0.1
Sitting with a dog	1	0	1	0					0	1	1	0
Sitting with a pram	1	7	8	0.2								
Skateboarding	4	0	4	0.1	7	0	7	0.3	1	0	1	0
Standing	47	35	82	2.5	18	9	27	1	51	27	78	2.2
Standing-talking	6	1	7	0.2	3	5	8	0.3				
Stopping/talking-walking a dog					1	3	4	0.1				
Using wheel chair									1	3	4	0.1
Walking-pass through	609	544	1153	35.4	774	699	1473	53.2	442	463	885	24.5
Walking a child	6	2	8	0.2	3	4	7	0.3	79	118	197	5.5
Walking a dog	4	0	4	0.1	25	16	41	1.5	67	71	138	3.8
Walking faster					2	0	2	0.1				
			3254	100			2768	100			3614	100

Table 5: Golicnik and Ward Thompson's tabulated results of activities observed and recorded in three public spaces in Scotland and Eastern Europe. Source: Golicnik & Ward Thompson, 2010, p. 42.

Observation was not only limited to place-based activities. The context of the public spaces in this study were also observed and mapped. Location of residential enclaves and other urban amenities near each public space were mapped to add insight into the context of the study sites. A zoning map of the City of Vancouver was used, and areas near each public space were investigated according to the zones and zoning guidelines that were set in place, helping to better understand the possible role(s) of context in types of uses and activities and meeting users' diverse expectations and requirements. Through this approach, residential and retail areas were mapped, and their proximity to each public space was measured through using the City of Vancouver's VanMap software. Two radiuses of 800-meter and 1200-meter distance were drawn from the center of each space to show appropriate distance and proximity of residential, retail and other urban services. The appropriate distance measurement approach is the one developed and used by Lotfi and Kooshari in their research of public spaces in Tehran, Iran (2009).

3.3.2 On-site survey of users of selected public spaces

Following observation of activities and mapping of contexts, the researcher conducted on-site surveys of users at each study site. This method was chosen in order to provide additional data and potential insights into space usage, illustrating how users perceived the spaces they frequented, and what they expected to see change to make these spaces serve their expectations and requirements better. Cresswell (2009) writes that surveys and their design are used as means that "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population," (p.145). The merits of gaining insights from the everyday users of the public space are

many. This methodology is rooted in the belief that investigating what people prefer and do not prefer about a public space is inherently important in designing and creating public spaces that will serve their diverse expectations and requirements better. As mentioned in previous chapter, professional actors, when compared to the everyday users, have been shown to have somewhat different values and ideas for creating great public spaces. Such findings have made it necessary to gather inputs from the everyday users for this research on a selected number of public spaces in Downtown Vancouver.

The main method of administering the surveys was conducted through the face-to-face approach. The advantage of conducting a face-to-face survey lies in its simplicity and fast pace, enabling the researcher to obtain data more readily and in a short sequence of time. Survey sheets were handed out to users at each of the pre-selected public spaces during the spring and summer of 2011. The surveys focused on investigating the types of activities users were pursuing in each study site, the perception of users with regard to design features, safety, quality of amenities, how far away the respondents lived, and how these spaces could be redesigned to serve the respondents needs better in the future.

For every public space, a total of 25 users were surveyed, corresponding to a total of 100 survey respondents. The targeted survey time frames were set up according to the time frames used for observation of activities, comprising of four time periods. Time frames were divided as follows: 6 survey handed out at the first time period (10 am – 12 pm), 6 surveys handed out at the second time period (12 pm – 2 pm), 6 surveys handed out during the third time period (2 pm – 4 pm), and 7 surveys handed out during the fourth time period (4 pm – 7 pm). To account for any possible variations of usage and discrepancies between weekdays and weekends, 1 survey out of every time period (for

example, 1 out of the total of 6 surveys for the first time period of 10 am – 12 pm) was collected during weekends.

The researcher planned to approach prospective respondents on-site, inform them of the purpose of the research, and disclose the ethics approval paper granted by the Office of Research Ethics in order to proceed and hand out the survey sheets. The respondents' full names and addresses were not collected during contact. All respondents were provided with full name of the researcher and all the other relevant information in order to ensure transparency, comfort, and trust.

3.3.3 Semi-structured interviews with bureaucratic, political, economic, and academic actors

Asking a few open-ended questions from some of bureaucratic-politico-economic and academic actors was the last method of data collection. No study of public spaces would be appropriately complete without the acknowledgement of those actors who are involved with their design, planning, and management. Professional actors come from a variety of backgrounds and their knowledge and expertise of the public spaces under study are crucial in developing recommendations and strategies for serving users' diverse expectations and requirements better. The questions were more general in scope, allowing the researcher to gain more insight into the public spaces' functions and how their function(s) are related to their design elements and locations within the downtown core. Key individuals from the City of Vancouver's planning department, the Downtown Business Improvement Association (BIA) and the University of British Columbia's School of Community and Regional Planning were interviewed.

The potential interviewees were contacted in the summer of 2011 and informed of the

research, being confirmed for a later meeting during the summer of 2011 after obtaining clearance from the Office of Research Ethics at the University of Waterloo. Table 5 provides a description of the interview participants' backgrounds.

Interviewee Name	Job title/professional affiliation(s)
Interview participant 1	Planner/ Vancouver Public Space Network (VPSN)
Interview participant 2	Planner/ Downtown Vancouver Business Improvement Association (DVBIA)
Interview participant 3	Planner/ City of Vancouver Planning Department, UBC SCARP
Interview participant 4	Yaletown Business Improvement Association
Interview participant 5	Council member/ City of Vancouver
Interview participant 6	Downtown Ambassador (Security)/ Downtown Vancouver Improvement Association (DVBIA)
Interview participant 7	Planning researcher/ UBC SCARP program

Table 6: List of participants for the semi-structured interviews with job titles and professional affiliations. Source: Behnia, 2011.

3.4 Data Analysis Strategy

Steps taken to organize and analyze raw data are outlined below. Strategies for confirming reliability, internal validity and generalizability of findings are discussed as well.

3.4.1 Raw data organization, coding, and preparation for analysis

The data gathered from every method was organized through a coding process. Coding raw data is a method of arranging things in a systematic manner in order to segregate, group, regroup and re-link to develop meanings and explanations (Grbich, 2007).

Data coding started from the very beginning of the fieldwork and was ongoing throughout the research process. In all, three main columns of data were created. The first column comprised raw data; second column contained the preliminary codes, while the final codes were organized under the third column. Coding was first done manually on hard copies and only electronically afterwards. Manual coding has been praised as an effective way for achieving “more control and ownership of the work” (Saldana, 2009, p. 22).

Recorded and observed activities were organized first through the same process shown on table 4. Data from on-site surveys were categorized through a descriptive coding system in order to be condensed and summarized for further review and analysis. The opportunity to pre-code some of the survey data was not passed up. As suggested by Saldana (2009), a number of participant quotes and passages that were deemed significant for later analysis were pre-coded as “quotes” for future retrieval. Audio recordings from semi-structured interviews were first transcribed, and the transcriptions were also coded descriptively for better cross-examination and analysis with data from other methods and the previous literature. In order to provide high quality data for coding, details such as observer commentary on the field and reflective memos were included as well. Such details have indeed been argued as possibly influential in producing quality data for analysis in qualitative research (Saldana, 2009).

The outcome of the coding process and subsequent categorization was to develop a few major themes. The developed themes were then cross examined with previous literature for further analysis and in order to arrive at a beneficial set of recommendations and conclusions for multiple actors plus laying a possible direction for future research.

3.4.2 Strategies for reliability, internal validity, and generalizability

Reliability in any form of research is an inherently important strategy. While mostly used in quantitative studies, reliability in a qualitative study indicates that the researcher's approach is consistent when compared with different researchers and different projects (Gibbs, 2007).

A number of methods were undertaken in order to ensure reliability for the research and the data gathered. The researcher rechecked sorted and coded data from observation sessions, on-site surveys, and semi-structured interviews to make sure mistakes were not taken during the sorting and coding process. Semi-structured interview transcripts were checked and rechecked to ensure no mistakes had been made. The iterative nature of the research process combined with coding, analysis, and cross examination occurring throughout the work, increased reliability of the coded and interpreted data and the final recommendations and conclusions.

The issue of internal validity within qualitative research is very crucial in that it is one of the strong points of such types of research methodologies. Validity strategies will determine whether the findings are accurate from the point of view of the researcher, the participants, or the readers (Cresswell, 2009).

The most important strategy for enhancing validity was to triangulate the research. This approach to data collection strategy has been cited as an appropriate test to improve validity and reliability of qualitative research (Golafshani, 2003). Cresswell also writes that this method is advantageous because it “can result in well-validated and substantiated findings” (Cresswell, 2009, p. 215). Jick (1979) writes that triangulation is a “vehicle for cross validation when two or more distinct methods are found to be congruent and yield

comparable data” (p. 602). Through such approach, the data obtained can be explored and interpreted in a manner that will enhance research findings as well as setting a solid foundation for further research in the field. Given the reviews of previous literature, it was deemed only appropriate to use triangulation. Nasar (1998), Kaplan and Kaplan (1989), and Pugalis (2009) have mentioned the merits of analyzing the knowledge of everyday users of urban spaces. Developing frameworks and recommendations that guide public space designs towards serving users’ needs better, however, cannot be simply complete without the inputs of professional designers and actors. Whyte (1989) and Golick and Ward Thompson (2010) also cite the need for conducting on-site observations to understand people’s behavior in public spaces better and in order to design better-utilized spaces in the future. Such suggestions by different researchers in the past only solidify the need to conduct a research that is based on multiple methodologies in order to obtain substantive and valid results.

At the same time, the research bias, namely the researcher’s focus on using and testing the two-tiered premise mentioned in the previous chapter as a factor in achieving successful public spaces, has already been disclosed. The bias was mentioned in order to reflect the researcher’s own history and background, helping to create an honest narrative with the readers.

A prolonged period of time was spent in the field to not only gather the necessary raw data for analysis, but to also develop an in-depth understanding of the case studies. Having gathered 100 survey results from pre-scheduled time frames with the addition of conducting 5 observation sessions per space, help show a wider picture of uses and activities. For the surveys, both males and females were approached, and the age class of

each individual was recorded in order to allow for more in-depth cross-examination, analysis and interpretation(s). The interview participants were chosen from a variety of professional backgrounds in order to show possible similarities and/or differences of ideas and values. The researcher gained more experience with the participants through the number of survey sheets gathered, the amount of time spent recording activities per study site, and the diversity of interview participants.

Generalizability, also known as external validity, has been limited in qualitative research (Cresswell, 2009). Being able to generalize the finding of any research is argued as making that research's findings more defensible and credible (Johnson, 1997). While generalizability is often not achieved to great degrees in qualitative studies, it does apply somewhat to findings in this research. Findings from this research can be externalized to many other public spaces within Downtown Vancouver. The reason for this generalizability is the fact that most of the public spaces in Downtown Vancouver can be categorized within the selection criteria utilized and organized in table 4. These public spaces, for the most part, fall under any combination of the edge spaces, central spaces, structured or streets. The findings can arguably be externalized to some other Canadian downtown cores such as Toronto's due to the similar spatial layouts and historical developments present in both cities.

Findings could be externalized to similarly sized downtowns in the U.S in more limited ways. As previous literature suggests, urban contexts of Canadian cities are somewhat different than their American counterparts. Historical issues such as segregation and accessibility based on ethnicity, gender, and cultural backgrounds are arguably more acute in U.S cities than many Canadian cities; and most of the literature

reviewed in this research does look at the American context when studying the social issues mentioned above. The urban morphology of most medium and large sized American cities and their centers are also different to some degree when compared with their Canadian counterparts, and these physical differences in urban layouts might have impacts on the influence the state of uses and activities actually have on meeting users' expectations and requirements.

3.5 Limitations and Opportunities

There were a number of limitations in this research. The first limitation in this research was the fact that the research framework focused on diversity of uses and activities as a factor in making public spaces more/less successful. Other possible factors such as socio-economic status, scale, multi-seasonality, and microclimatic conditions were not included in this conceptual approach.

Another limitation was the unavailability of one particular public space as a case study: Robson Square. As a viable public space, Robson Square was under an upgrading phase during the period of 2009-2011. Having been able to include Robson Square as a case study would have given additional insights into one of few central spaces in Downtown Vancouver.

The researcher could not map the specific location of every single user's activity within the sub-areas of the study sites due to the sheer number of users at specific time periods, making mapping of all related activities impossible. The researcher mapped the location of as many activities within the sub-areas of each study site as possible. This procedure helped to show any possible correlation between types and diversity of uses

and activities and the design and aesthetic features.

Survey respondents could have been residents of Downtown Vancouver, tourists, or residents of other parts of the GVRD. Lack of knowledge of the residences of survey respondents beforehand could have skewed the results due to varying levels of their familiarity with the study sites.

In terms of the semi-structured interviews, the persons being interviewed from the Downtown BIA could not provide much insight about Creekside Park and the North False Creek Waterfront walkway since the neither monitor nor manage them. Some of the bureaucratic-politico-economic and academic actors, who were initially contacted for interview, opted not to participate, thus limiting gathered data.

This research aimed at finding out how a specific number of public spaces in Downtown Vancouver function, formulating a set of recommendations for more successful space design and planning based on meeting more of the diverse expectations and requirements of users. Findings from this research can not only help Downtown Vancouver's public space planning in the near future by ensuring more diversity of uses and activities, but the conceptual framework used here could potentially be applied with regard to other Canadian and American CBDs' public spaces as well. Future directions of research can arise from findings from this study. Through triangulating the results, other possible directions for further research can be realized, as users and interview participants had the opportunity to not only respond to specific questions, but to provide much individual insights and ideas into what can make the selected public spaces function more successfully.

3.6 Ethics Approval

The research was reviewed by the Office of Research Ethics at the University of Waterloo, and received full ethics clearance on June 23rd, 2011.

3.7 Summary

This chapter began by explaining the overall type of research methodology that would be employed. The nature of the research, criteria used in selecting each case study, strategies for data gathering and analysis, as well as strategies for making sure the research is reliable, internally valid, and generalizable, were discussed as well. This research methodology will help demonstrate how the selected downtown public spaces could potentially become more successful through meeting more of the diverse expectations and requirements of their users. The approach is also useful in assessing public spaces' success based on higher diversity of activities in other North American downtown cores. The author attempted to explain the research approach as vividly as possible, citing details of the research in the process. Data gathering strategies, limitations and challenges were also discussed at the end of the chapter. The case studies' profiles will be explained in the next chapter.

Chapter 4: Case Study Profiles

This chapter introduces the selected case studies, providing an overview of the context and the location of each one. As mentioned earlier, the sites are all located in the downtown core, an area which is geographically bounded by water on three sides and connected to the rest of the city through a narrow corridor to the east. A map of the city is provided below, illustrating the geographic context of the downtown core. Figure 7 highlights the downtown core of Vancouver, while figure 8 highlights the selected public spaces in this research.

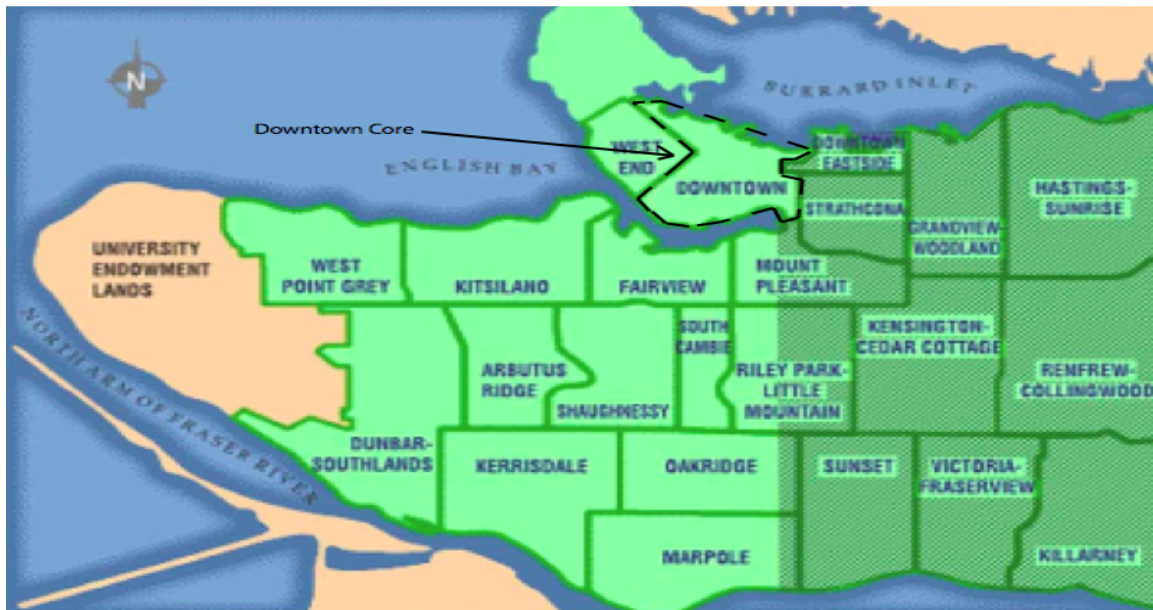


Figure 7: Map of the City of Vancouver, showing all neighborhoods and highlighting the downtown core. Source: Boyd, 2010, p. 171.

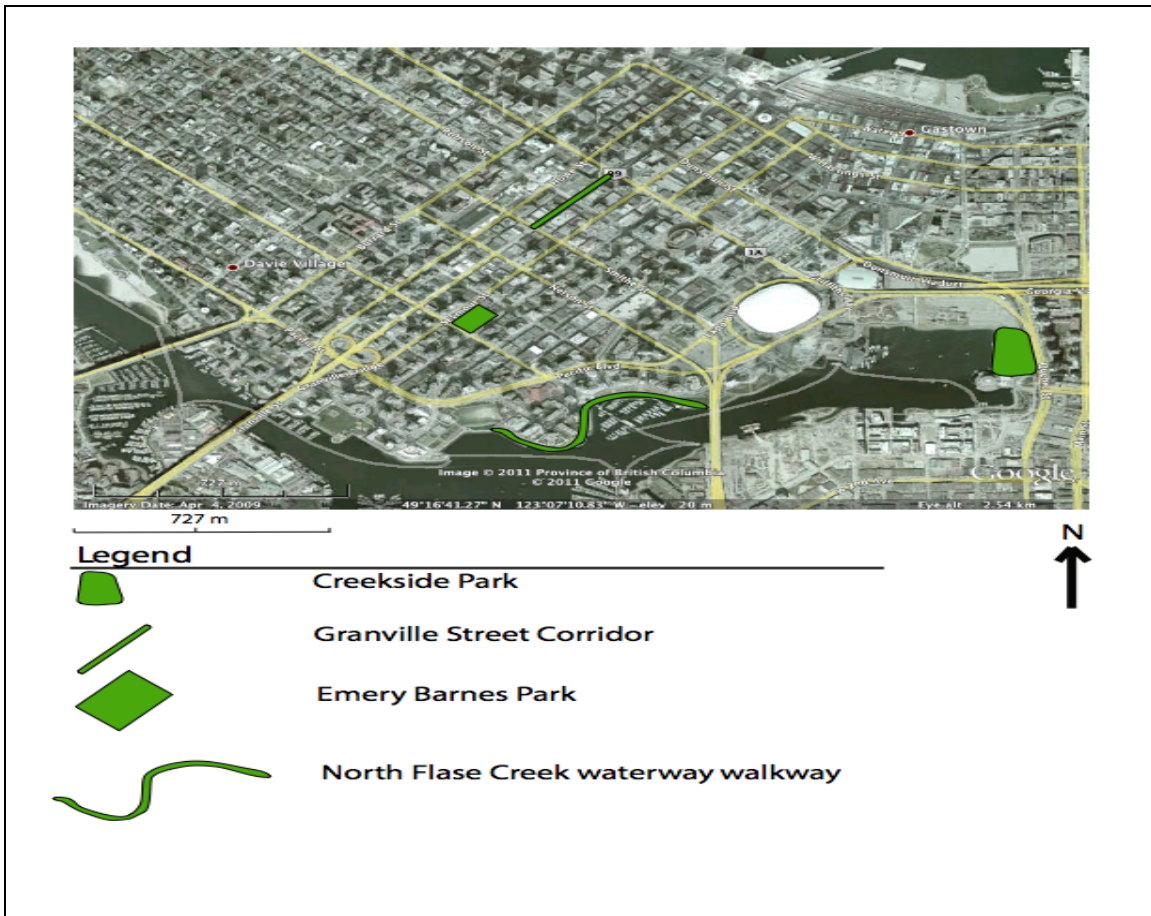


Figure 8: Location of the selected sites within the downtown core. Source: Behnia, 2011.

4.1 Introduction

Aside from being the commercial and economic center of the city, Downtown Vancouver boasts a high proportion of residential dwellings as well. The residential population of the downtown core was more than 60,000 people in 2004, projected to reach more than 100,000 by 2020 (DVBIA, 2010).

The first space is the major transit area named Granville Street corridor, specifically the portion bisected by Smithe and Georgia streets (illustrated in figure 9). The second public space is a neighborhood pocket park named Emery Barnes Park. The third public space is Creekside Park on the southeastern edge of downtown. Finally, the fourth space

is the portion of the North False Creek waterfront walkway intersected by Cooper's Park to the East and David Lam Park to the West, illustrated in figure 14.

Aside from being located in the densest residential and commercial area, there are other crucial factors in the selection of the public spaces for this research. An overview and background of each site will follow in the immediate subsections.

4.1.1 Granville Street Corridor

The major transit corridor of the downtown core is located along Granville Street. The street is one of the most widely used public spaces in the city. As well as being a major shopping area, the area boasts numerous sitting amenities. The study site has undergone recent redesigning schemes during the past few years. City planners, in conjunction with a local landscape architecture firm called PWL Partnership Landscape Architects Inc., have made the area north of Smithe and south of Georgia streets more pedestrian oriented through sidewalk widening and phasing out private automobile access (City of Vancouver, 2010). The area under study has been redesigned with the goal of creating a central gathering space for the downtown core and in order to enhance street retail activities (City of Vancouver, 2010). One block under study (between Robson and Smithe streets) houses retail stores and entertainment amenities such as clubs and pubs. Photographs in figure 9 will showcase the site in more detail. The area underwent its last redesigning phase before the start of the 2010 Winter Olympics Games in order to facilitate the many thousands of visitors. The city decided to leave the new benches, lightings, and other street furniture after the games in order to accommodate more programmed events throughout the year. Today, the area still remains one of the most crowded of public spaces in the downtown core, keeping its original function as the

transit hub of the city.

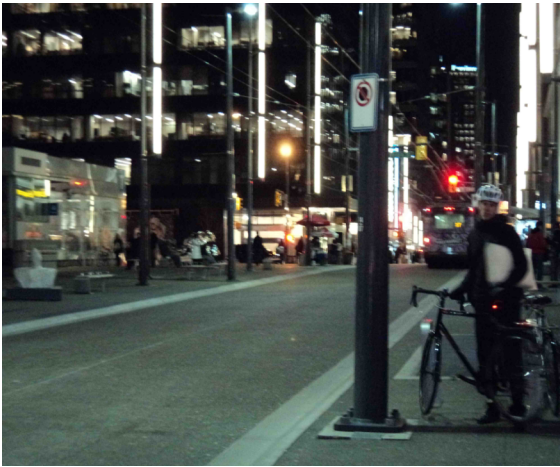
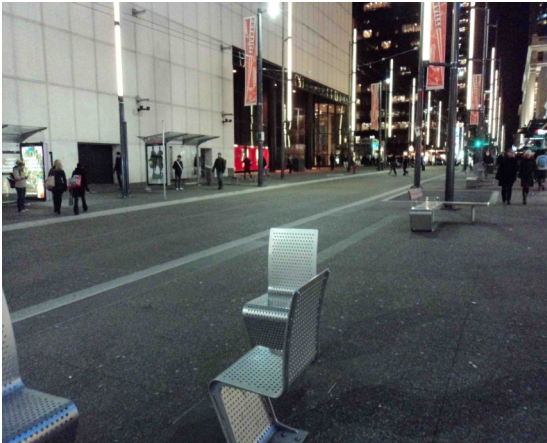


Figure 9: Granville Street corridor (between Smithe and Georgia streets). Source: Behnia, 2011.

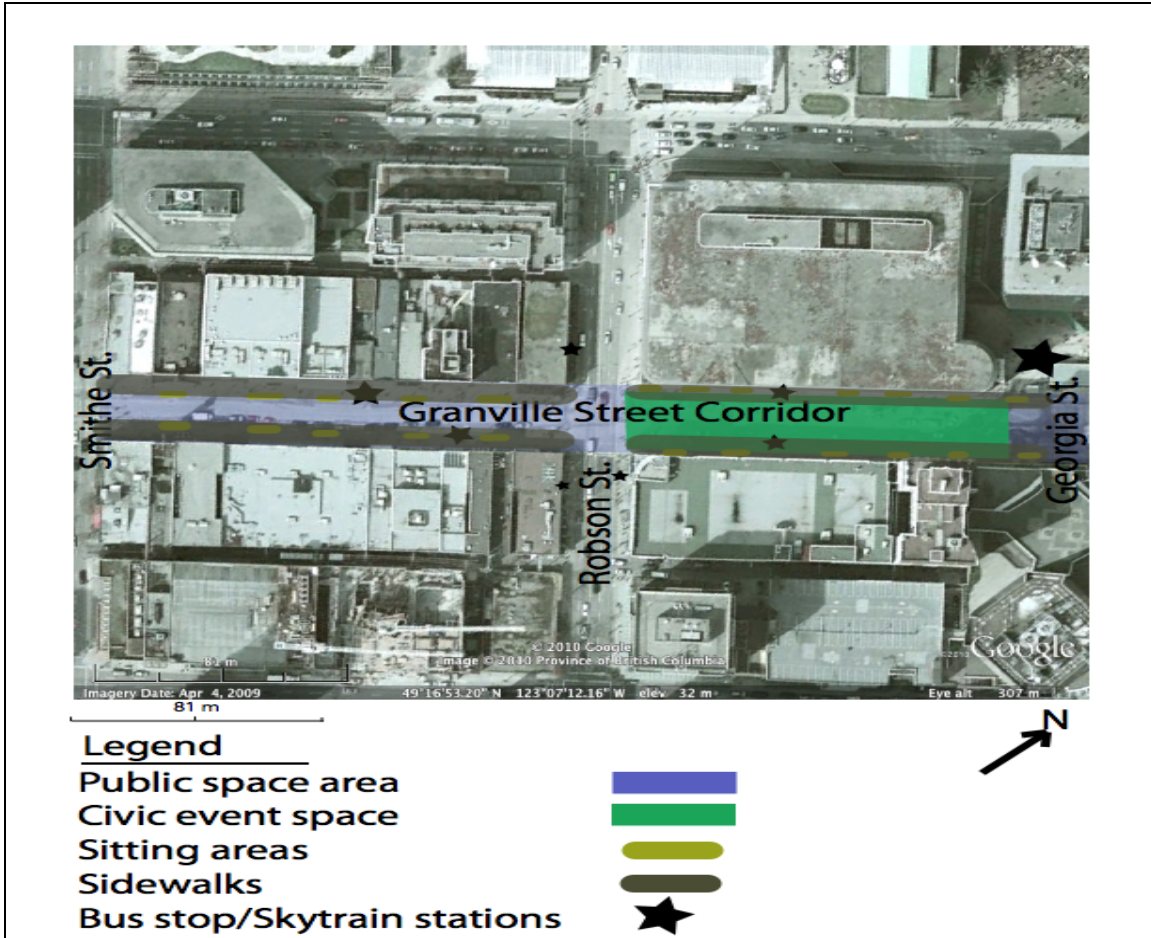


Figure 10: Granville Street corridor, showing location of benches, sidewalks, and programmable space after redevelopment for the 2010 Winter Olympic Games. Source: Behnia, 2010.

4.1.2 Emery Barnes Park

Located in the Downtown South, Emery Barnes Park is a neighborhood park in the middle of a residential enclave. The site is located in the Yaletown neighborhood of the downtown core, bordered by streets on three sides and commercial/residential buildings on its northern edge. The park, at its current state, is bounded by Seymour Street to the West, Davie Street to the South, and Richards Street to the East. The site has been developed through three phases since 2003. Phase I saw the initial development in 2003, and the site’s area increased through the initiation of Phase II in summer of 2010. By the

end of Phase II, the park's area had grown to 5334.63 m², encompassing an entire city block except a building on the corner of Seymour and Helmcken Street, shown in figure 12. Phase III of development, approved by council in 2001, will see the site's total area increase to 8971.67 m² by the end of 2011 (Vancouver Board of Parks and Recreation, 2008). The park was designed and developed by the city for the purpose of creating “a green refuge largely for passive recreation”, and for residents living nearby (Vancouver Board of Parks and Recreation, 2008).

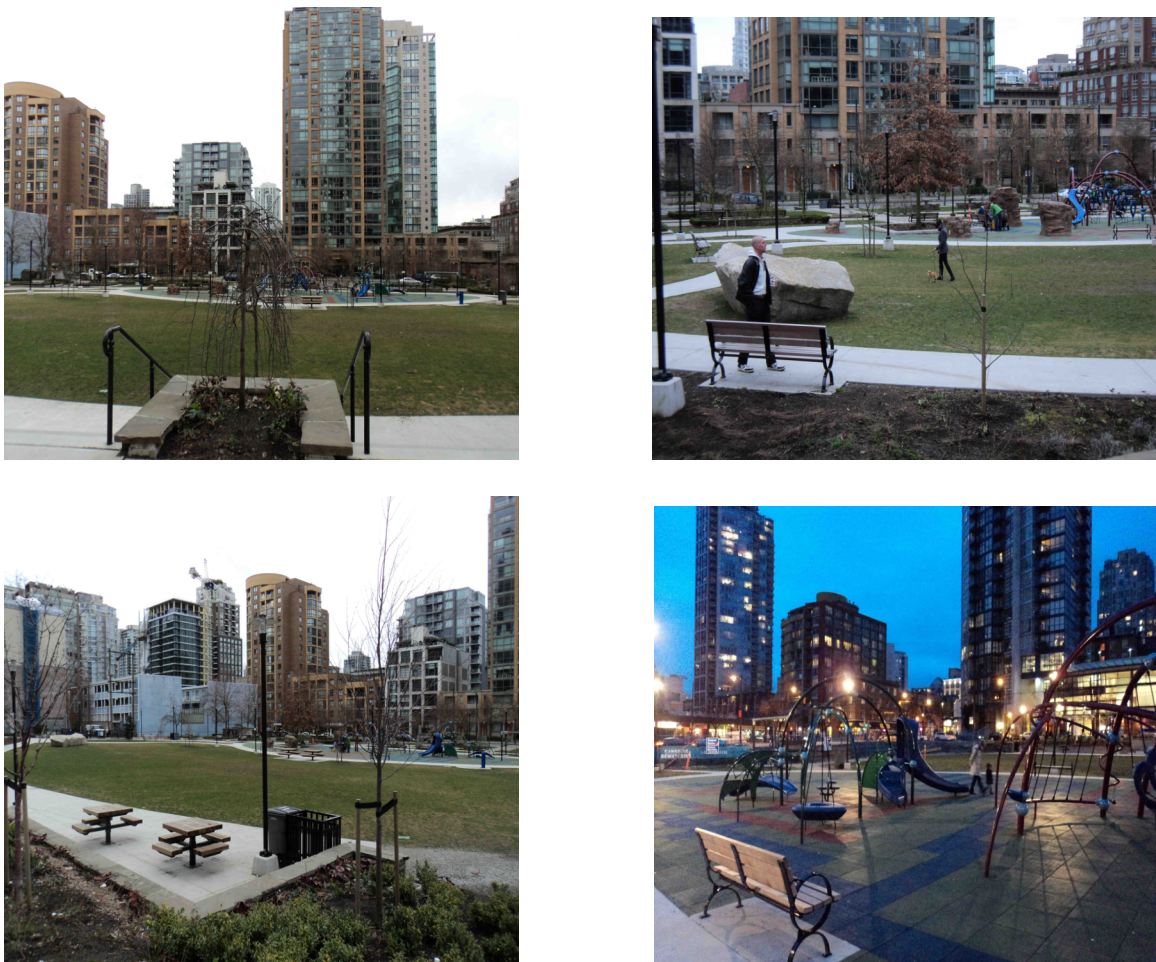


Figure 11: Emery Barnes Park site. Source: Behnia, 2011.

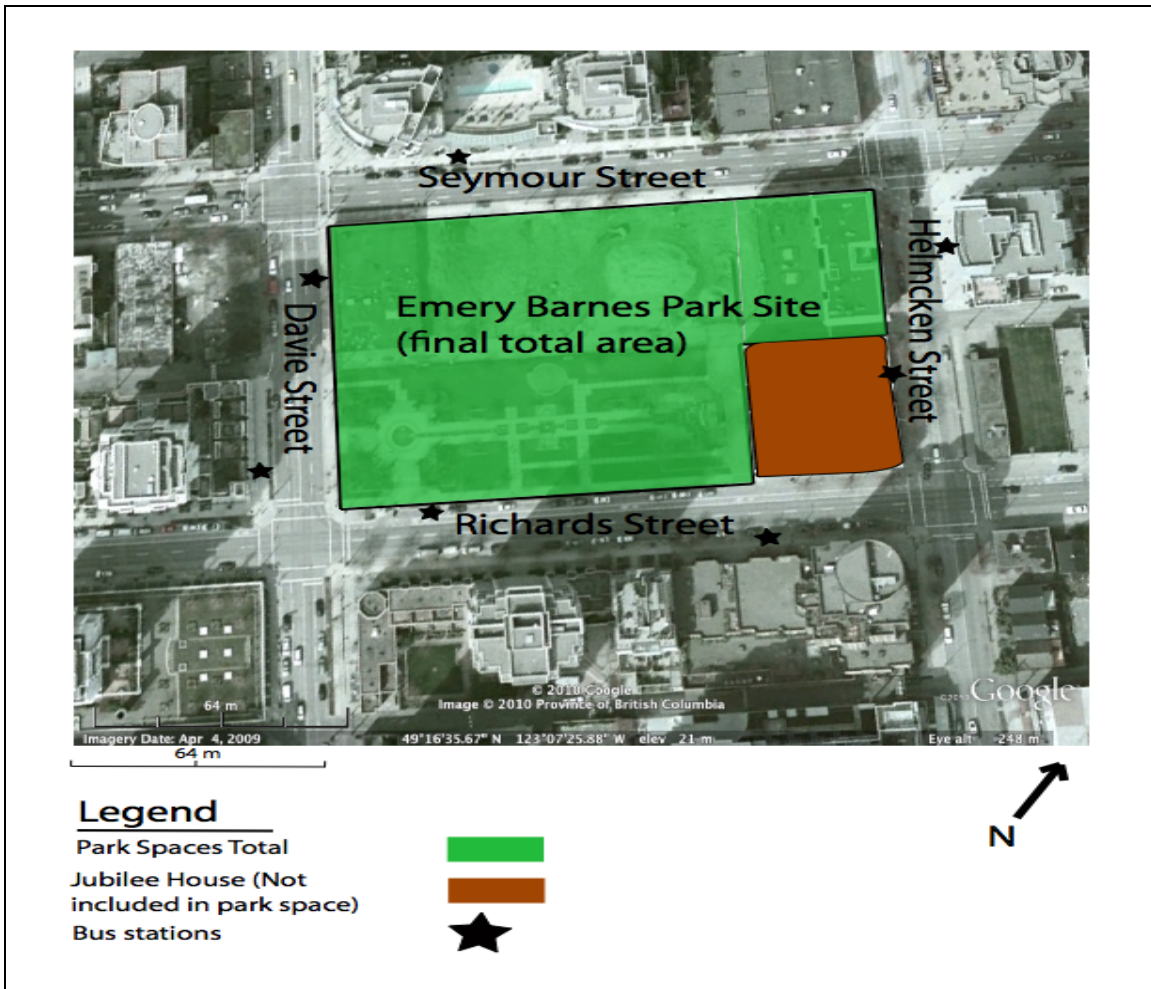


Figure 12: Emery Barnes Park site map. Source: Behnia, 2011.

4.1.3 Creekside Park

This waterfront park sits on the southeastern edge of Downtown Vancouver, encompassing the eastern portion of the seawall along False Creek, providing a connection between the downtown and the Olympic Village to the south. The park is ideally located next to Expo '86's Science World building and residential towers in the North False Creek and Chinatown neighborhoods. Following the Exposition of 1986 in Vancouver, the private developing firm Concord developed the first segments of the park. Concord will develop the lands immediately to the north of the present site, adding to the

existing parklands in the near future (Vancouver Board of Parks and Recreation, 2010). As of October 2010, the total open public space in Creekside stands at 3,570 m² (City of Vancouver, 2010). The original function of the park was to provide a space for programmed events and festivals, also providing an area for relaxation, outdoor activities, and enjoying the scenic beauty of the city and the North Shore Mountains. Being connected to the bike lane along Vancouver's seawall, however, has helped integrate Creekside Park as an important part of the city's bicycle routes network in the last decade. The site's current area is illustrated in figure 14, providing a brief overview of its outline. The future expansion area is also pointed out in figure 14.



Figure 13: Creekside Park site. Source: Behnia, 2011.

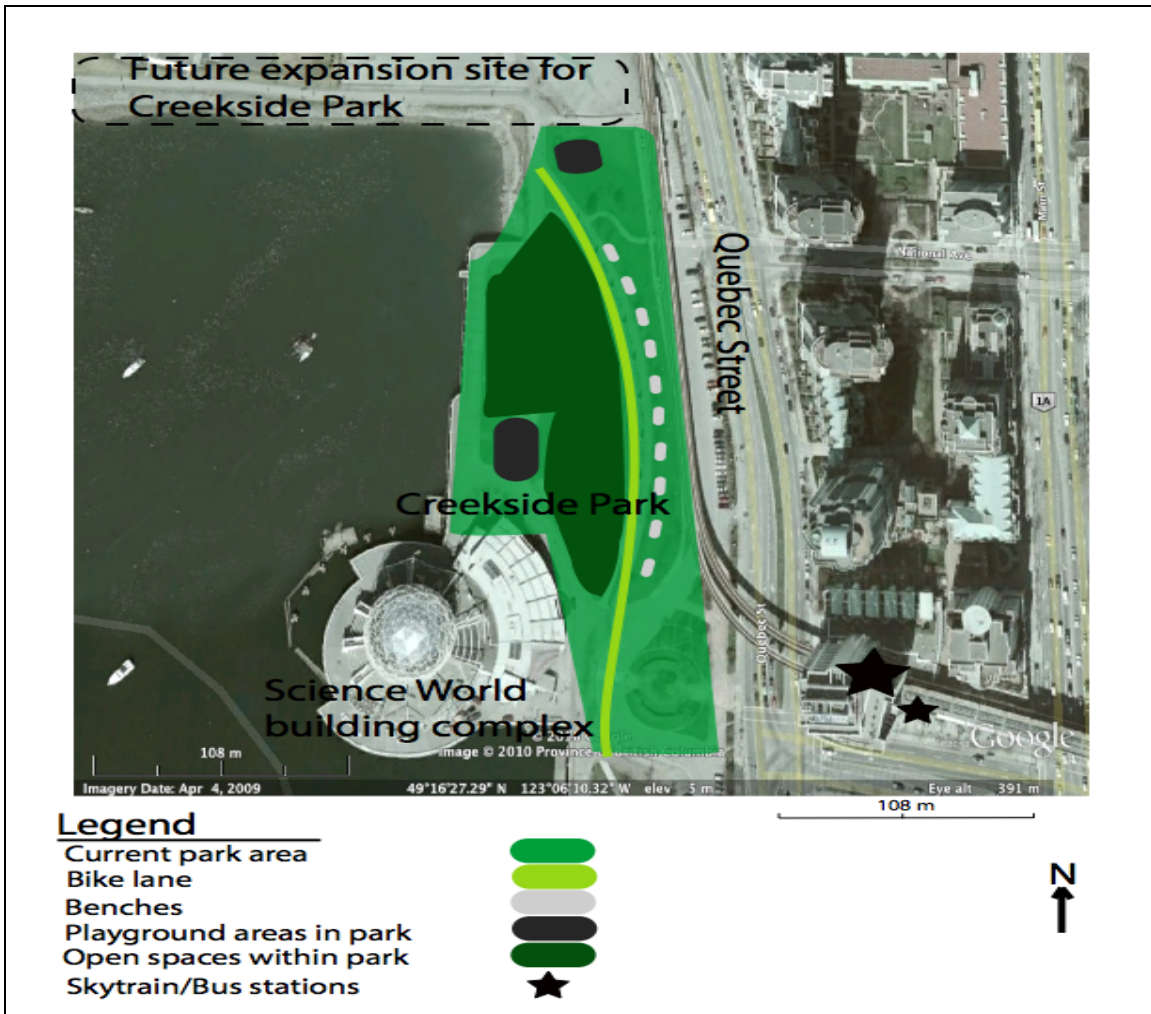


Figure 14: Creekside Park site, highlighting different subsections and overall functions. Source: Behnia, 2011.

4.1.4 North False Creek waterfront walkway (the portion intersected by Cooper’s Park and David Lam Park)

The waterfront walkways of Downtown Vancouver were first developed in early days of the City’s conception. The walkway in the North False Creek area of the downtown is, however, a recent development, having been completed in its current form at the end of the 1990’s. This walkway was developed by Concord Pacific Corporation under the guidance of the City of Vancouver, starting before the coming of Expo ’86, and following the area’s massive de-industrialization of the early 1980’s. The portion selected for this

research runs for approximately 700 meters, being entirely composed of paved sidewalks and shared pedestrian and cycling lanes. The site is bounded by water on one side and by residential towers of the North False Creek on the other. The entire space is paved and made of hard surface for pedestrians and cyclists alike. The space also boasts a number of benches and seating amenities, providing opportunities for photography and waterfront viewing (Vancouver Waterfront Inventory, 2009).



Figure 15: the North False Creek Waterfront walkway site. Source: Behnia, 2011.

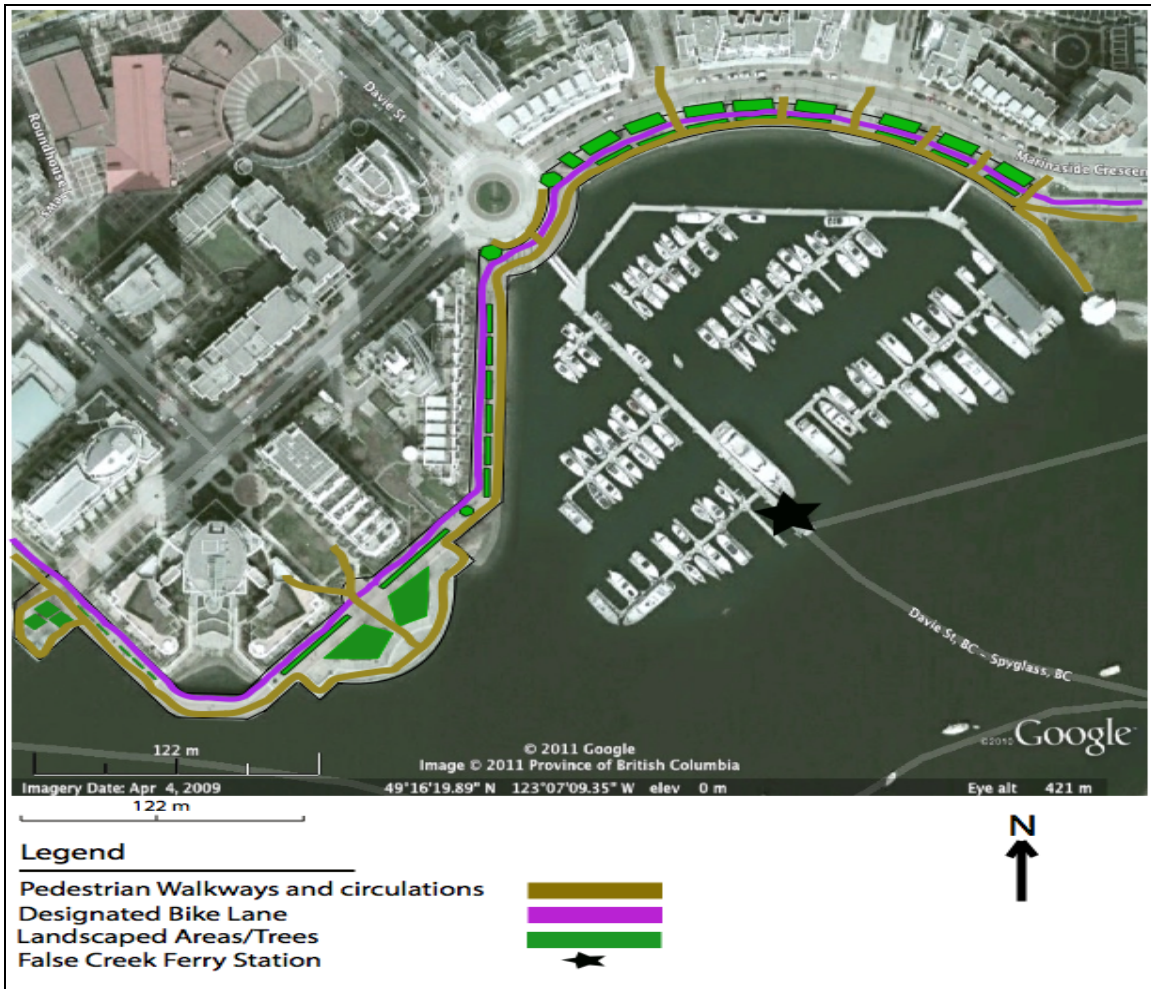


Figure 16: the North False Creek Waterfront walkway, showcasing pathways for pedestrians and cyclists along the waterfront corridor. Source: Behnia, 2011.

4.2 Summary

This chapter provided an overview of each of the selected public spaces in this research. Aside from brief histories of development, a number of maps were developed and used to illustrate the locations and contexts of each public space within Downtown Vancouver. The case studies' previews also touched on the shapes and forms of the sites, giving a brief view of the design and current look of these spaces. The look and feel of the study sites were also enhanced through the inclusion of some photographs taken by the

researcher. Findings from observation and mapping of activities, on-site surveys, and semi-structured interviews with regards to the selected study sites will be disclosed in chapter 5.

Chapter 5: Findings

This chapter provides findings from recorded and mapped activities, on-site surveys, and results of semi-structured interviews with bureaucratic-politico-economic and academic actors. Observed and recorded activities are presented for each site. Maps of each space's contexts as well as recorded activities are presented on a site-by-site basis. Survey results are presented for each of the four public spaces within summarized tables where the responses are pre-sorted into major themes and presented in a tabular format. Responses to survey queries are grouped together in a table format in order to show similarities and differences between answers provided by each of the users. Key information from semi-structured interviews is disclosed towards the end of the chapter. Utilizing an iterative process, each research methods will be cross-examined with each other and the reviewed literature from chapter two.

5.1 Observation of Activities

Types of activities and uses within each of the four public spaces were recorded for a total of 20 observation sessions (5 sessions per site) during the spring and summer of 2011. For better representation, each study site's recorded uses and activities were compiled on a pie diagram, indicating an average percentage of each of the major uses and activities during all observation sessions. The major types of activities/uses recorded are named in the upcoming sections for each of the four spaces.

5.1.1 Distribution of uses and activities in Granville Street corridor

Observation of activities within the Granville Street corridor revealed a public space that is heavily used by pedestrians. The major function seems to be transit-oriented: for pedestrians passing through or waiting for the bus at the bus stations. More than 80 percent of all activities recorded were comprised of pedestrians (both males and females) passing through the space in order to get to a destination outside of the study site. The recently upgraded seating amenities were not heavily used. Utilization of the space through sitting, eating outside, and exercising comprised no more than 3-4 percent of all recorded activities. The bus stations' sheltered areas and seats are the only amenities that are actively used by the waiting passengers. Cycling was also recorded during observations, but this activity, even though well suited to the space's layout and texture, did not make up more than 3 percent of the total. Figure 17 illustrates distribution of usage and activities for each of the observation sessions.

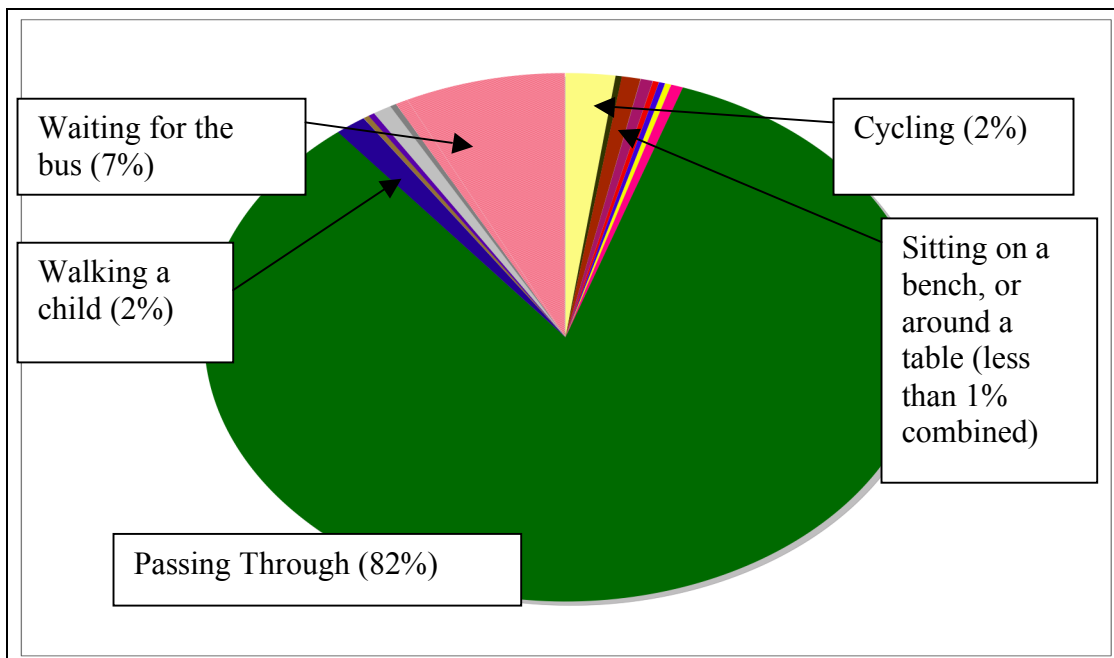


Figure 17: Distribution of observed activities in Granville Street corridor (averaged from 5 sessions). Source: Behnia, 2011.

Findings confirm earlier observations and surveys done on other similarly narrow public corridors in North America. Some previous studies have found that most users do not ‘linger’ within narrow public streets or narrow plazas, but just pass through it (Pushkarev & Zupan, 1975). At the same time, it is important to recall that the street has been redesigned through inclusion of many seating provisions, clearly defined pedestrian edges, and a number of art installations. A study of public plazas in Vancouver by Joardar and Neill (1978) had previously indicated that people tend to effectively utilize spaces with “dense furnishings” and focal elements, but observation of activities show a different picture of usage with regards to Granville Street corridor. Also, the space had undergone upgrades of its amenities in order to function more like a central gathering space and not a transit corridor.

5.1.2 Distribution of uses and activities in Creekside Park

Observation of uses and activities in Creekside Park revealed a park with a somewhat more diverse range of utilization when compared to Granville Street corridor. The first major recorded activity was pedestrians walking through and the second type was cycling. Walking through and cycling, together, comprised the main two types of activities within the park, but other uses such as jogging, walking the dog, sitting on the benches, playing in the playground and playing at the open grassed area were observed as well. Figure 18 illustrates distribution of uses and activities in Creekside during all observation sessions.

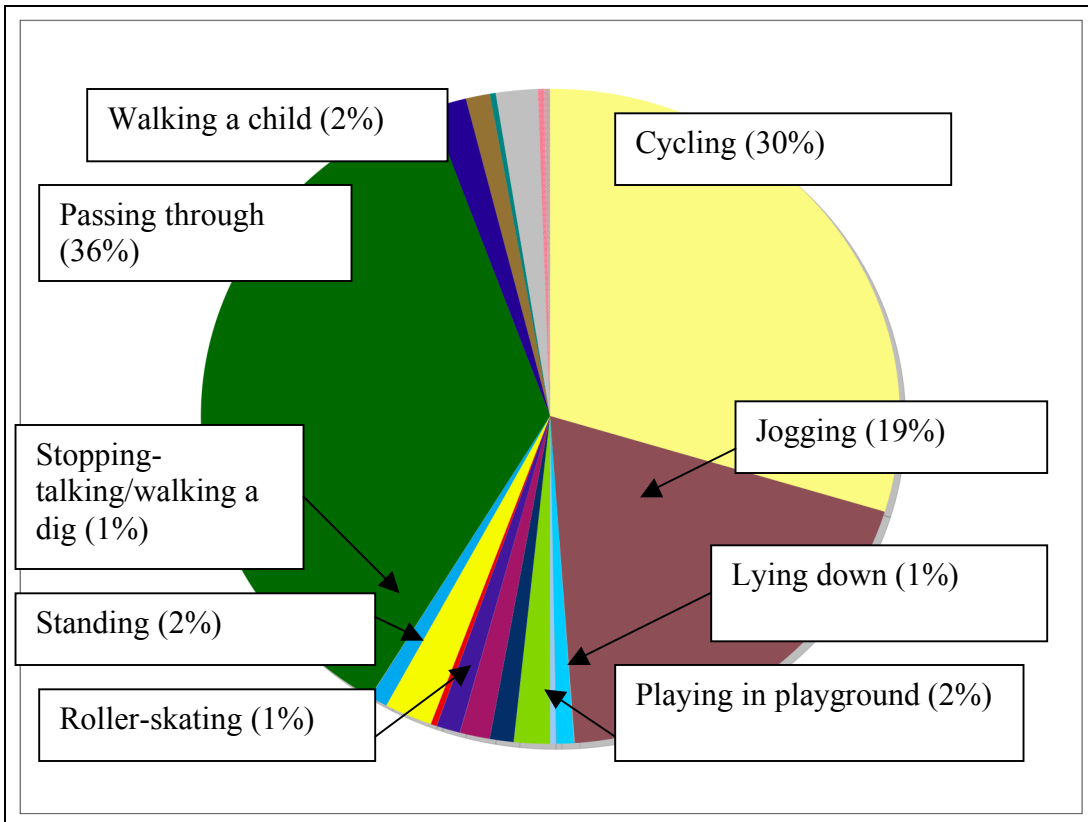


Figure 18: Distribution of observed activities in Creekside Park (averaged from 5 sessions). Source: Behnia, 2011.

In comparison with Granville Street corridor, Creekside Park attracted a larger number of people pursuing more varied types of activities. More long-staying uses were observed than in the previous space. Both individuals and groups of people were observed using the benches. It is important to note that Creekside Park does offer a great view of False Creek and the City's skyline, and this feature of the space's location seems to provide an additional incentive for long-staying activities.

5.1.3 Distribution of uses and activities in Emery Barnes Park

Observation of activities in Emery Barnes Park revealed a site with a wide range of uses and activities. Various activities observed at different sub-areas of the park.

Pedestrians passing through the space comprised the greatest number of all users, but they never comprised the majority of the total recorded activities. Playing with a ball, sitting on a bench or around a table, playing in the playground, walking a child, walking a dog, and sitting around a table, were the other notable activities taking place. There were a few instances of users tanning or lying down in the open grassed area in the middle of the park. Walking a dog was represented heavily, owing much to the dog park zone in the northwest corner of the space. Both adults and children used the centrally located playground. This study site was observed to be the space with the highest percentage of long-staying uses and activities. Most of the activities such as playing in the playground, sitting around the tables, and using the dog park to walk one's dog, are classified as 'active activities', taking place by individuals who stay in the public space for some time (Golicnik & Ward Thompson, 2010). Figure 19 illustrates the distribution of uses and activities in Emery Barnes Park.

Interestingly, a number of homeless persons were also using the space, but they were using the benches at the northeast sector of the park, some distance away from the children's playground, the picnic tables, and the open grassed area. There was a high degree of separation of activities in accordance with the partitioned sub-areas within the park. The central open grassed area contained a variety of uses in a more flexible manner, while users with specific expectations utilized the sub-areas that were designed and planned for specific usage type(s). Results of observation sessions confirmed earlier findings with regards to open spaces granting more personal space to users, thus promoting active engagements such as playing and exercising. At the same time, smaller sub-areas with defined edges were observed to be used for activities such as sitting,

chatting with friends, and reading, all requiring less personal space (Ostermann & Timpf, 2007).

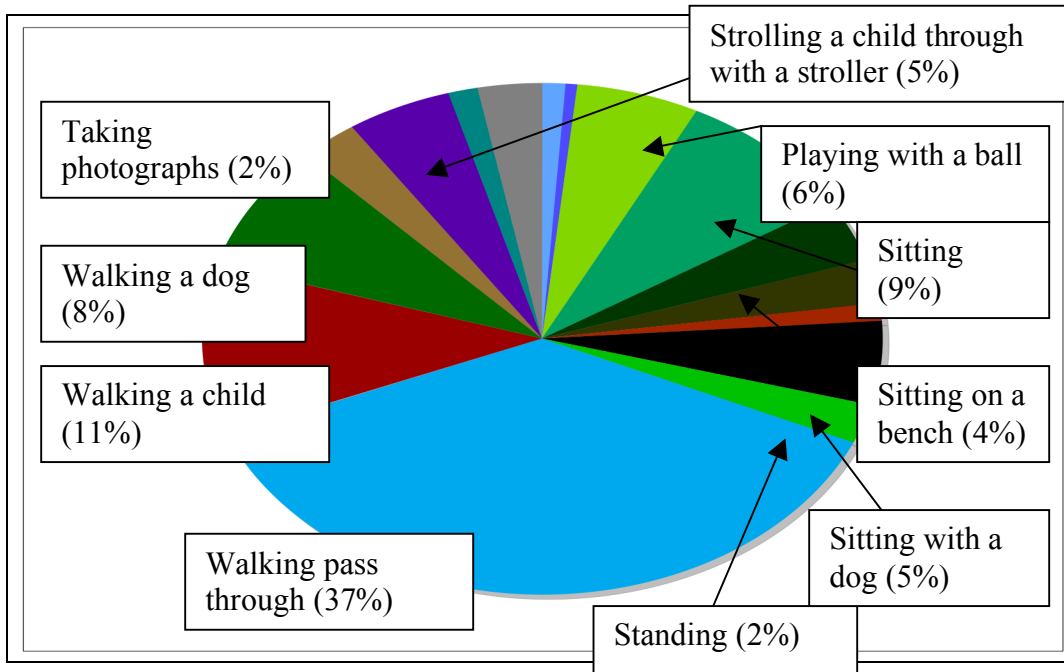


Figure 19: Distribution of observed activities in Emery Barnes Park (averaged from 5 sessions). Source: Behnia, 2011.

Compared to both Granville Street corridor and Creekside Park, a more diverse set of uses and activities were observed in Emery Barnes Park. It is important to note that this space is more heavily designed, incorporating more trees, boasting both formal (benches, table seats), informal seating amenities (hard edges and steps), and lighting features. Observation sessions also revealed a well-maintained and clean park, especially when compared to Granville Street corridor. The fact that the space is centrally located and carries more specific compartments suited to a host of different activities might be a factor in its higher diversity of uses and activities.

5.1.4 Distribution of uses and activities in the North False Creek Waterfront walkway

The waterfront along North False Creek was observed to be mostly functional for two purposes: cycling and pedestrians walking through. Other activities such as exercising jogging, dog walking and roller-blading were observed as well. The benches along the waterfront were used more intensively than their counterparts in Granville Street corridor. People used the grassed areas during sunny days, mainly through tanning, sitting, or lying down. Figure 20 illustrates the distribution of uses and activities in North False Creek Waterfront walkway below.

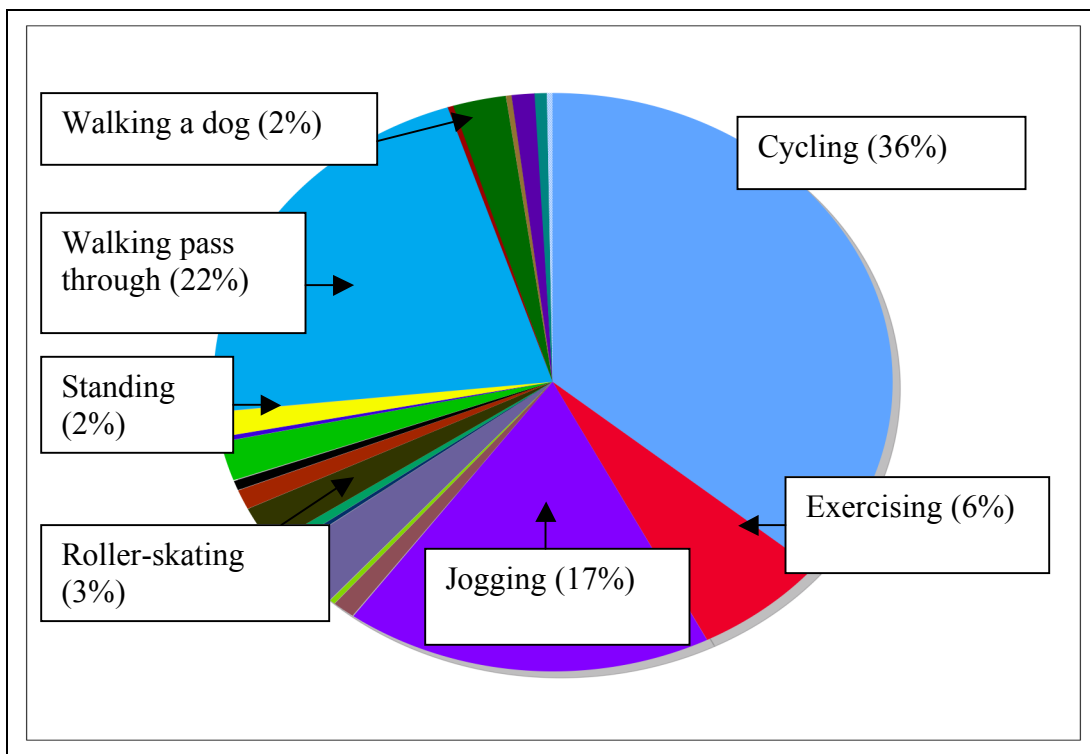


Figure 20: Distribution of observed activities in the North False Creek Waterfront walkway (averaged from 5 sessions). Source: Behnia, 2011.

The waterfront space was observed to be less diversely used than Creekside Park and Emery Barnes Park, but more so than Granville Street corridor. A major type of

activities observed in this space was exercise-oriented uses (cycling, jogging, roller-skating); rarely observed in Granville Street corridor. At the same time, providing a great view of False Creek plus boasting green areas and treed edges might be acting as high-quality aesthetic factors, making this space more diverse in terms of uses and activities. Interestingly, this space also contains a number of art pieces and focal sculptures. As confirmed by Cooper Marcus and Francis (1998), design elements such as art pieces and interesting sculptures have been cited as effective for ‘anchoring’ people into a public space.

5.2 Contextual Maps and Maps of Activities Within the Selected Public Spaces

The contexts of each of the public spaces, indicating all the different urban areas and types of zones, are presented below in subsections 5.2.1-5.2.4. Specific locations of observed activities within each of the sites are illustrated and explained in sections 5.2.5-5.2.8.

For the purposes of the contextual maps, the zones around each public space are noted, with each zone’s designated and planned functions explained in detail. Proximity to buildings, facilities, and other sites is illustrated through applying Lotfi and Kooshari’s ‘appropriate distance’ measurements, stating a range of 800-1200 meters as the appropriate distance between public spaces and other urban areas and services (Lotfi & Kooshari, 2009). Two concentric circles, one representing 800 meters and the other 1200 meters, are drawn from the center of each public space in figures 37-40, illustrating distance and proximity to other nearby urban areas.

With regard to maps of activities within sub-areas of each public space, the researcher recorded the place of occurrence of as many activities as possible. A site plan for each study space shows the total numbers (total from all five sessions for each study site), types, and place(s) of occurrence. Figures 41-44 illustrate mapped activities within each of the 4 public spaces in this study.

5.2.1 Contextual map of Granville Street corridor

Granville Street corridor is within 800 meters of the major retail facilities within the downtown core. The major zoning type within the 800-meter range of this site is the DD (Comprehensive Development District for Downtown), which allows for highest standards of development so that all necessary needs of the residential population is achieved within close walking distances. Within the 800-meter range, the major types of enclaves are commercial areas plus mixed-use retail and residential developments. Residential dwellings, lower-density retail areas, and higher density commercial districts along Coal Harbor Waterfront (north of the corridor) are located within the 1200-meter radius. Being the major transit hub within the downtown core, Granville Street corridor serves as the transit confluence that includes major bus stations as well as the Granville skytrain station.

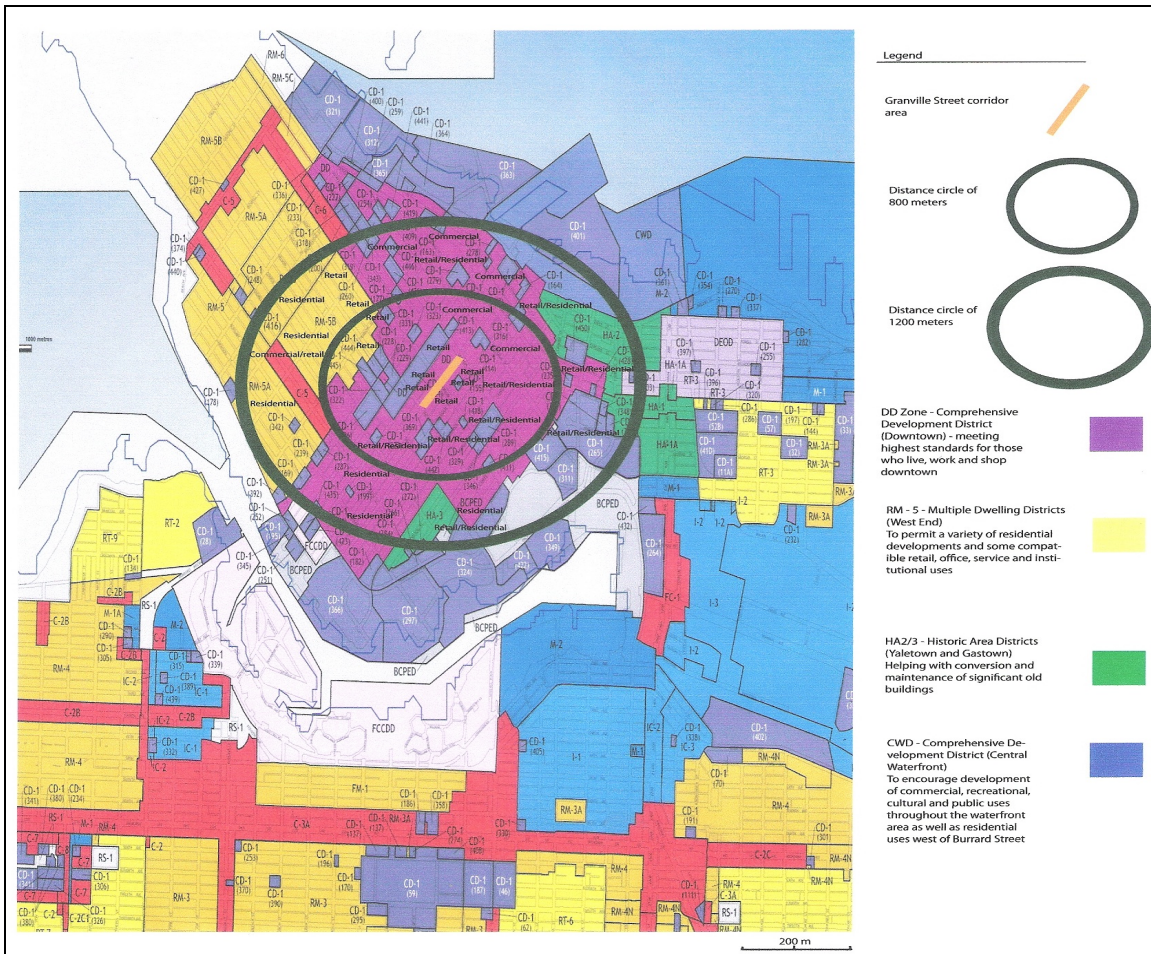


Figure 21: The urban context of Granville Street corridor within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.

5.2.2 Contextual map of Creekside Park

This park is located within an area that is a confluence of a number of different communities and neighborhoods. Being located at this crossroads puts Creekside Park at an advantage in terms of close proximity to dense residential, commercial, and light industrial areas. The 800-meter distance radius includes commercial areas of East False Creek as well as residential dwellings of the Village (formerly the Olympic Village), Strathcona, and the North False Creek. The 1200-meter radius for Creekside Park puts this public space within appropriate walking distance of major heritage areas of the Downtown, as well as mixed residential and retail centers of both Fairview and Mount

Pleasant neighborhoods (south of the park space in figure 38). The park is within the 800-meter walking distance of bus stops and the Main Street skytrain station.

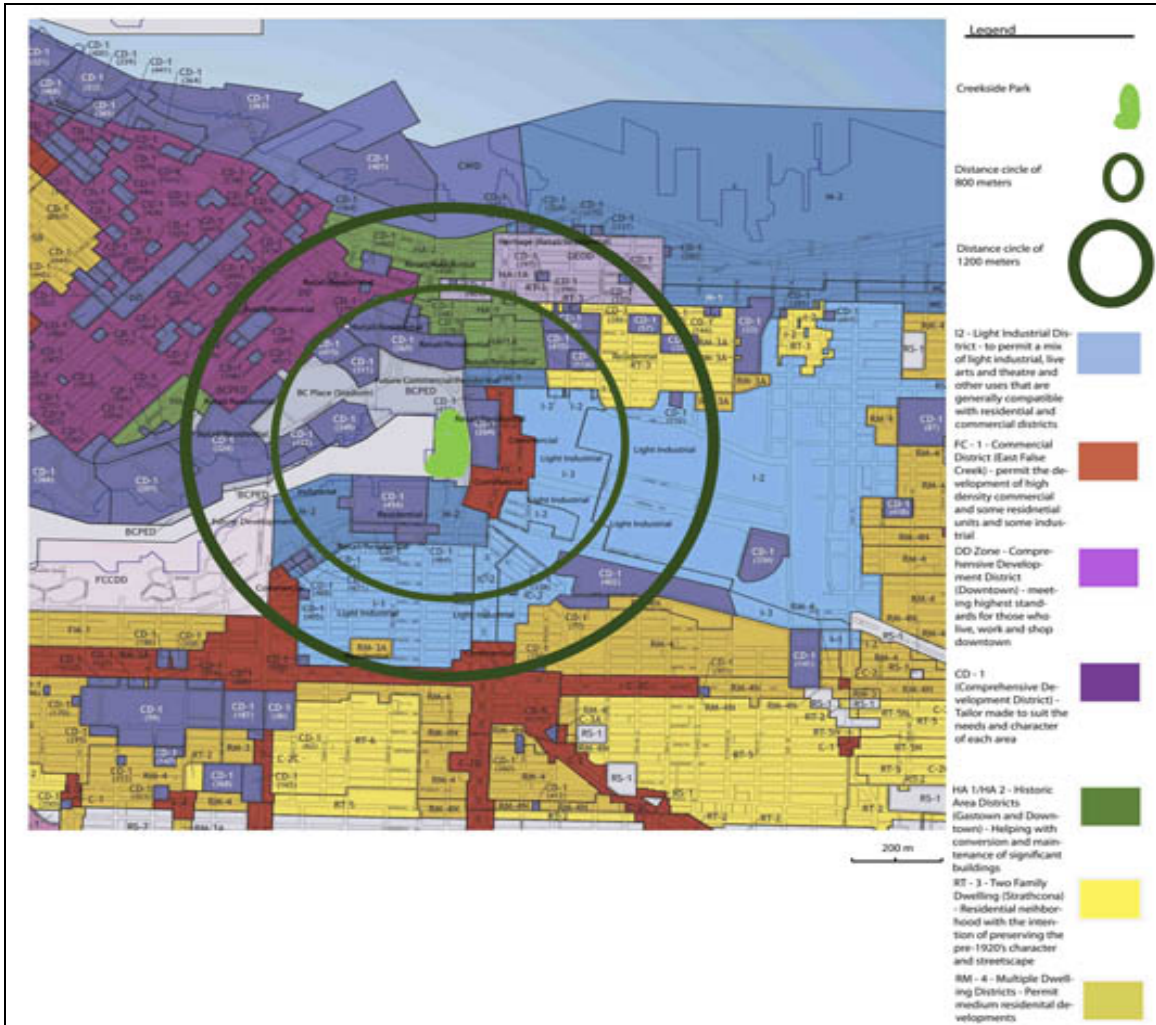


Figure 22: The urban context of Creekside Park within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.

5.2.3 Contextual map of Emery Barnes Park

Centrally located in the Downtown South, Emery Barnes Park is situated within good proximity to the major residential, commercial, and retail areas of the downtown core. The park is within 800 meters of the entire residential districts of the North False Creek, servicing the more than 45,000 residents in the area. The commercial areas of the

downtown core to the north of the park, are located within the 1200-meter radius. The retail corridor along Davie Street (in the West End community of the downtown) is also within both the 800-meter and the 1200-meter distance. Similar to the other public spaces in this study, the park is well within walking distance of bus stops and the skytrain stations of the downtown core.

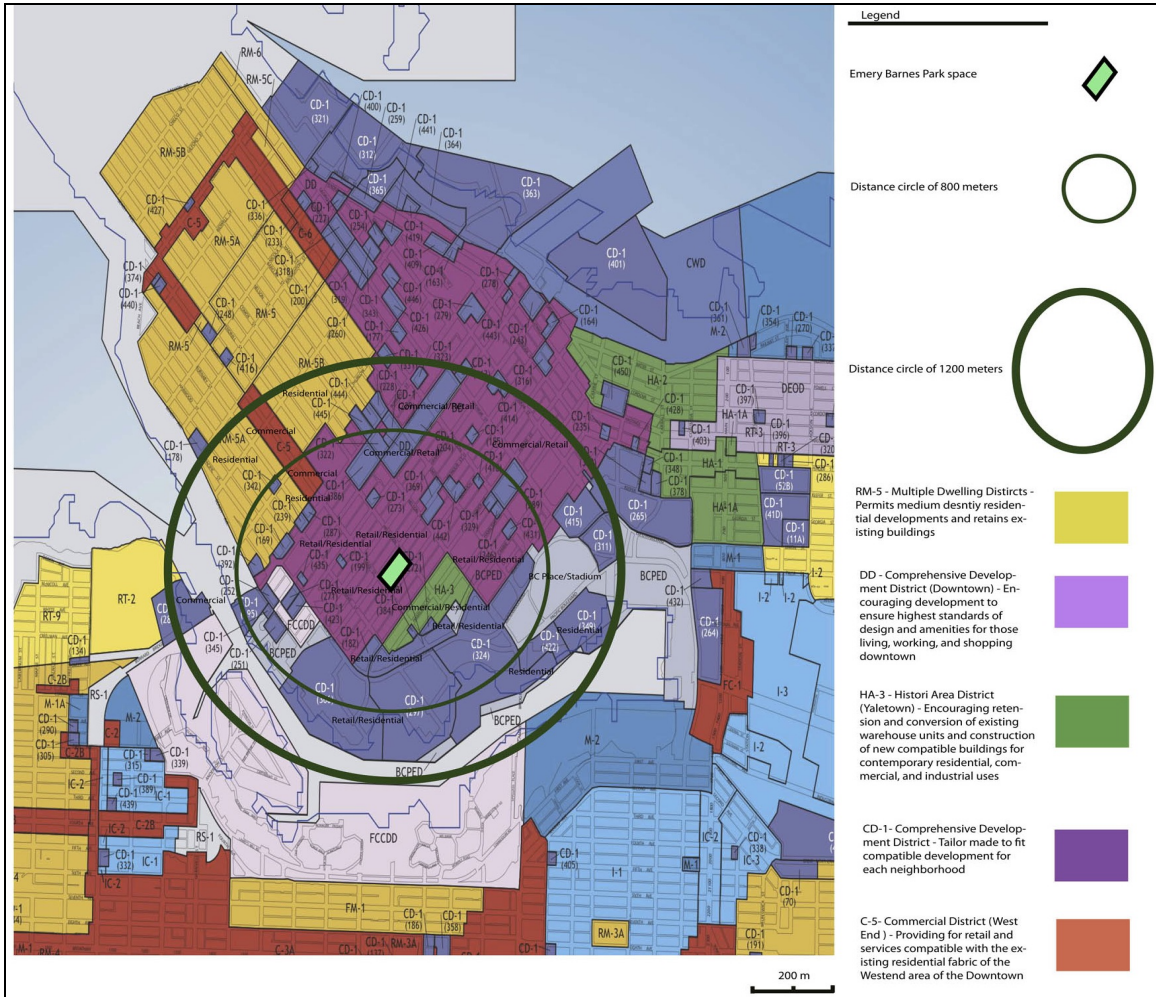


Figure 23: The urban context of Emery Barnes Park within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.

5.2.4 Contextual map of North False Creek Waterfront walkway

The waterfront along North False Creek is adjacent to the major residential towers and retail areas of the North False Creek. The Residential and retail areas of the Downtown

South are also located within an 800-meter radius of the waterfront, making this public space accessible to the residents of the area. This space is also accessed by residents on the south side of the creek through both water taxis and Granville and Cambie bridges. The residential dwellings of South False Creek are located within an appropriate walking distance of 800-1200 meters. The converted heritage warehouses of Yaletown (North False Creek), which are mixed residential/retail/commercial developments, are located within close proximity to the waterfront, enhancing the level of nearby services and amenities for this corridor. The Yaletown skytrain station is only 100 meters from the center of the waterfront, increasing accessibility to the waterfront for residents living outside of the downtown core.

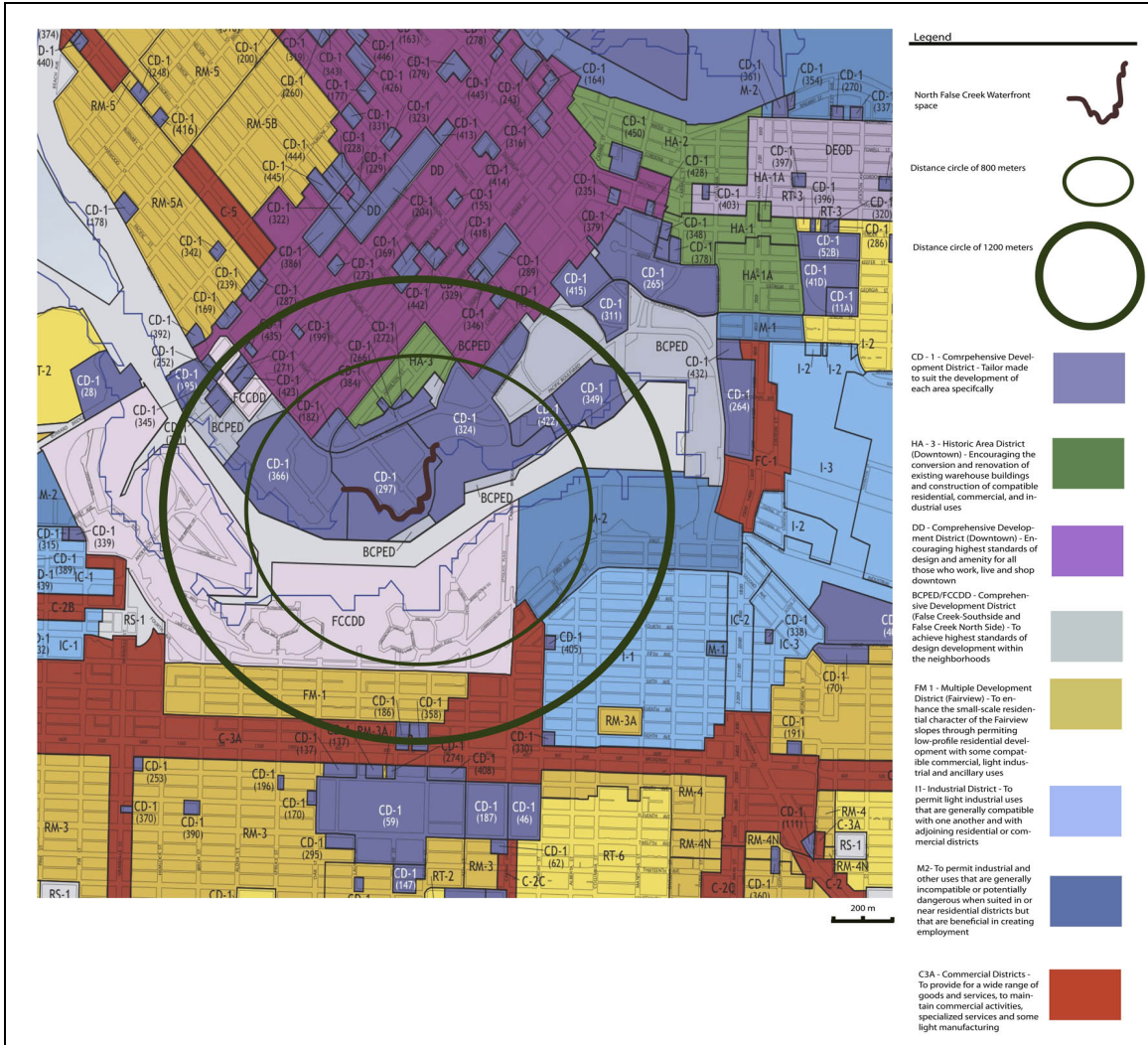


Figure 24: The urban context of the North False Creek Waterfront walkway within the 800-meter and 1200-meter distance radius. Source: Behnia, 2011.

5.2.5 Map of locations of activities within Granville Street corridor

The major activities observed in Granville Street corridor are shown in figure 41 below. The map corresponds to a combination of activities mapped during all observation sessions, noting specific place(s) of occurrence within the public spaces' sub-areas. The main usage, being pedestrians passing through the street, few people cycling, sitting on a bench/individual chairs, waiting for the bus, or walking a child, are mapped. Passing

through this space as a pedestrian was restricted to the 8-meter wide sidewalks on either sides of the street, while people waiting for the bus did so through standing or sitting on the benches at the bus stations. It is important to note that the curb height dividing pedestrian and transit zones is shorter and less obvious than many other streets in the downtown core. Perhaps consequently, most pedestrians walking through the corridor walked on the inner portions of the pedestrian zones and closer to store fronts and cafes. Sitting in this space was exclusively devoted to utilizing the benches and a few temporary chairs on the sidewalks. This finding was interesting because very few people used the hard edges near the skytrain station on the northern end of the space. Lack of using the hard edges are interesting since the edges are built near storefronts and are neither too long nor too short. Much like other pedestrians, people with children tended to walk closer to the storefront, still showing a tendency to be as far away from the non-pedestrian zone in the middle of the street as possible.

Another interesting finding about users walking closer to store fronts was the fact that sometimes the pedestrian zone seemed ‘too busy’ and bustling, especially during the afternoon rush hour and lunch time. Even though the pedestrian sidewalk is 8 meters wide, the majority of users effectively walk within a few meters in front of storefronts, perhaps creating a sense that the pedestrian corridor is ‘narrower’ than in reality, resulting in inducing a feeling of a ‘rush space’ where people have to walk through rather than sit and relax. Few cyclists were observed cycling through the pedestrian sidewalks, but most utilized the automobile/bus-designated street to cycle through the space. Some people in the space were observed sitting on the ground next to the stores in the street, and these were mostly panhandlers. For better illustration, the map of activities in this space has

been divided into two subsections, shown below in figures 42 and 43.

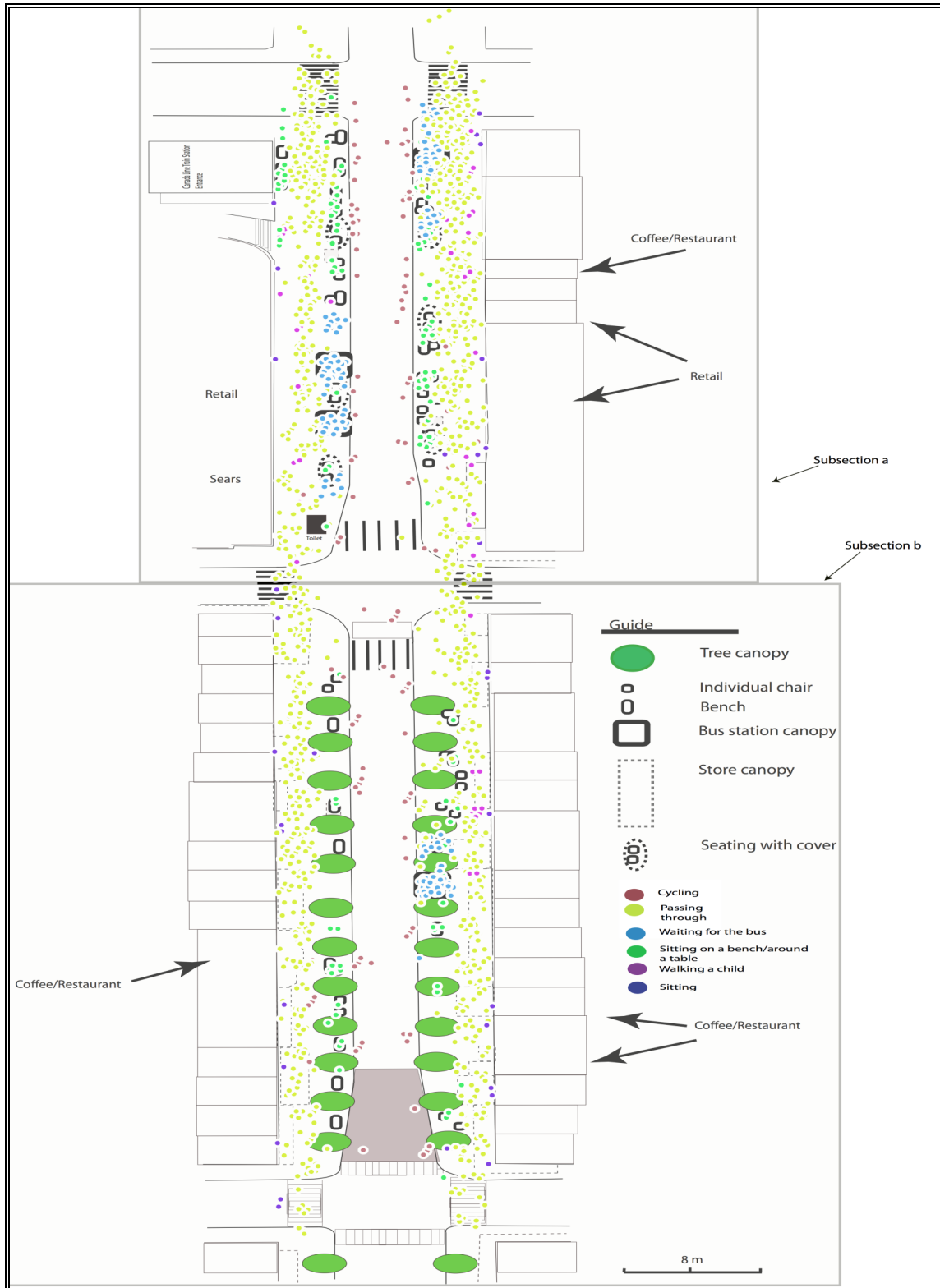


Figure 25: Map of location of activities and uses in Granville Street corridor. Source: Behnia, 2011.

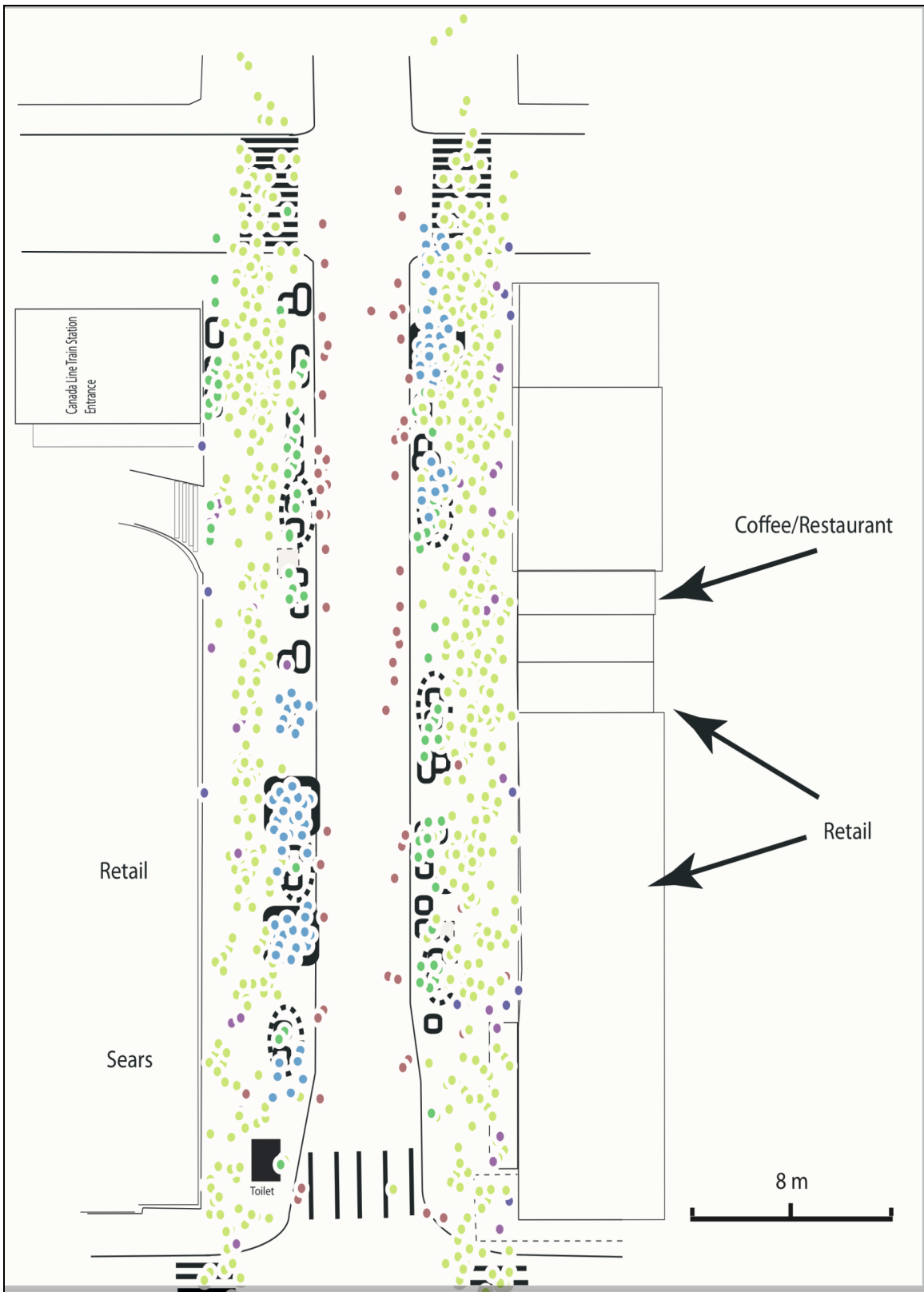


Figure 26: Zoomed subsection (a) of locations of activities and uses in Granville Street corridor. Source: Behnia, 2011.

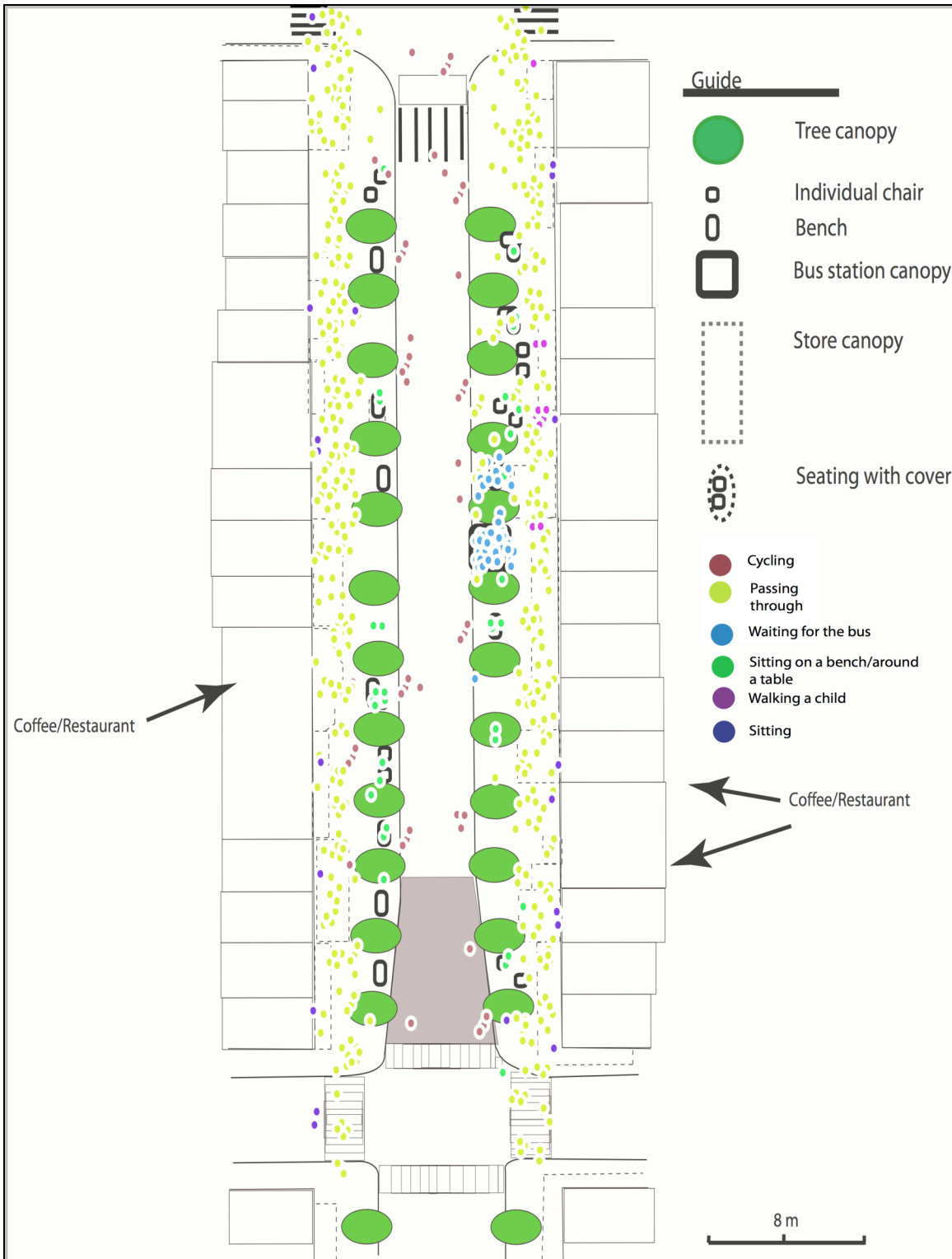


Figure 27: Zoomed subsection (b) of locations of activities and uses in Granville Street corridor. Source: Behnia, 2011.

5.2.6 Map of locations of activities within Creekside Park

This public space served two major functions: cycling and pedestrians passing through. Both cyclists and pedestrian passers-by used the designated pathways that arched through the eastern edge of the park. Cyclists cycle through the park by using the designated biking path, which is located right next to the row of trees shown below in figure 42. A small number of those passing through the space did use the outer waterfront pathway as well as the open green space in the middle of the park. Joggers, the other main users of the space, utilized both pedestrian pathways as well as the waterfront walkway, showing a tendency to jog on paved areas as opposed to the grassed area in the middle of the park. Being located on the False Creek waterfront, the scenic opportunities were utilized by photographers as well as many other users. All the photographers were seen taking pictures while standing closer to the water's edge. The fact that the park is located in a strategically scenic area of the downtown seems to entice many users to come in and conduct a variety of activities while being oriented towards False Creek. This finding is further confirmed when looking at the orientation of the benches towards the water. The walkways also provide opportunities to view not only False Creek but also the downtown skyline in the background as well. Most adults and their children were observed playing within the playground zone on the southwest corner of the grassed area. Those lying down or sun-tanning during warmer and sunny days, were spotted within the grassed area in the middle of the park. Furthermore, those people lying down on the grass were observed not just in the middle or near the edges but throughout the central grassed area. Team-oriented exercises and activities, expected to require large green patches such as the one in this park, were rarely observed. Activities within this park space seem to be

categorized according to the opportunities provided within each of the defined sub-areas. Being clearly defined with hard edges, the sub-areas of the park seem to encourage users ‘occupying’ their personal spaces according to what those sub-areas are designed to provide.

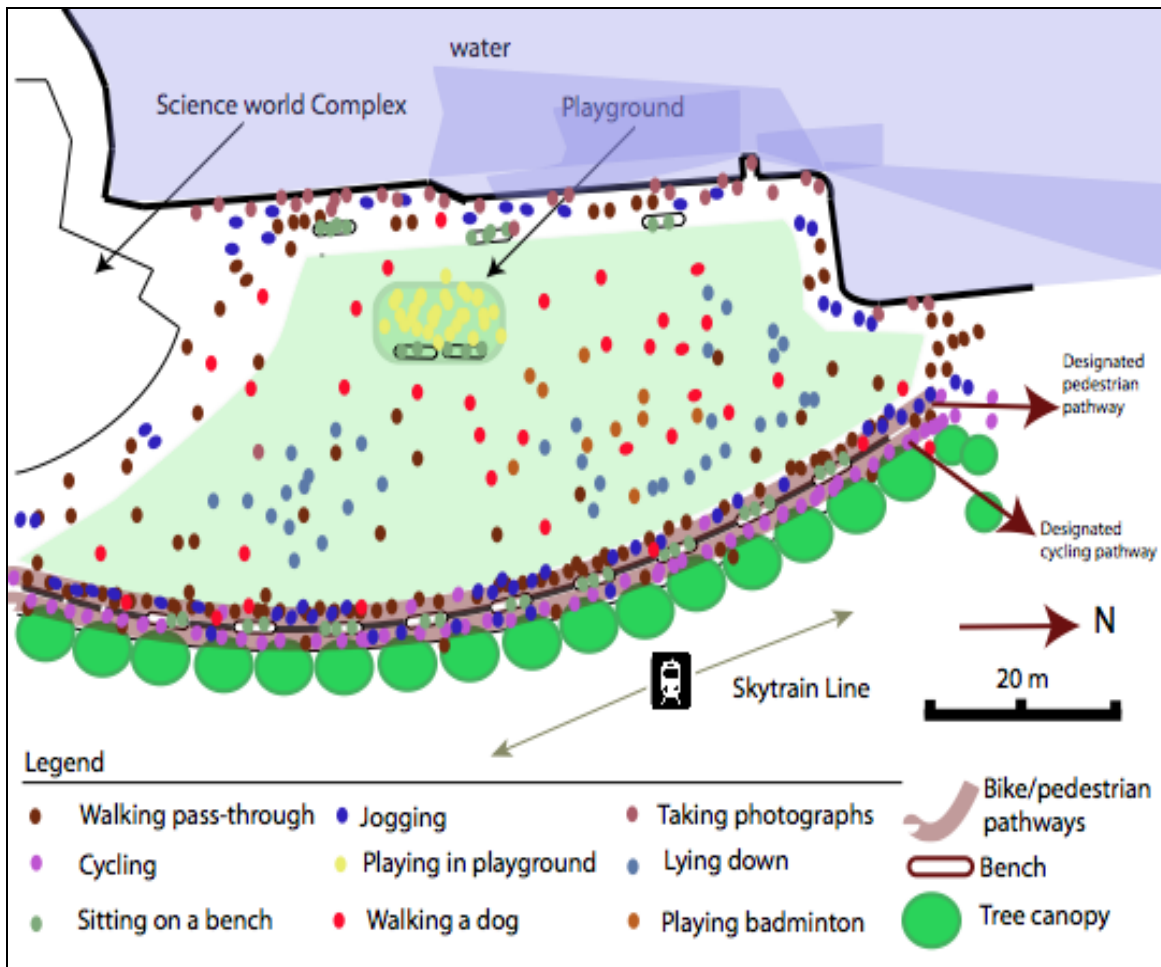


Figure 28: Map of locations of activities and uses in Creekside Park. Source: Behnia, 2011.

5.2.7 Map of locations of activities within Emery Barnes Park

A strong relationship between the types of usage and their associated locations within different areas of the space was observed in this pocket park. For example, pedestrians and those moving to specific sections of the park did so by using the pathways and

walkways rather than just jumping over the edge or walking through the central green open space. Much like Creekside Park, different sub-areas within the park, such as the dog park, are clearly defined with hard edges or fenced off, and people use each sub-area according to the uses for which it is designed.

After completion of observation sessions, it became apparent that individuals, families, or groups of people, effectively used the existing benches and tables at one time or another. This space attracted a great deal of long-staying activities unlike Granville Street corridor. Many people coming to the park actually spent some time using the amenities. There was not a strong presence of joggers or people exercising, but some group activities were recorded in the central open space. A small number of users were observed tanning or lying down within the central open space. Tanners and those lying down in the open grassed area were mostly observed near the edge rather than the middle of the sub-area.

Although not shown in figure 43, it is crucial to note that this park attracted a wide variety of people from different socio-economic backgrounds. Many low-income persons were observed using the northeast corner of the park the same time when other people of different socio-economic backgrounds were using the other parts.

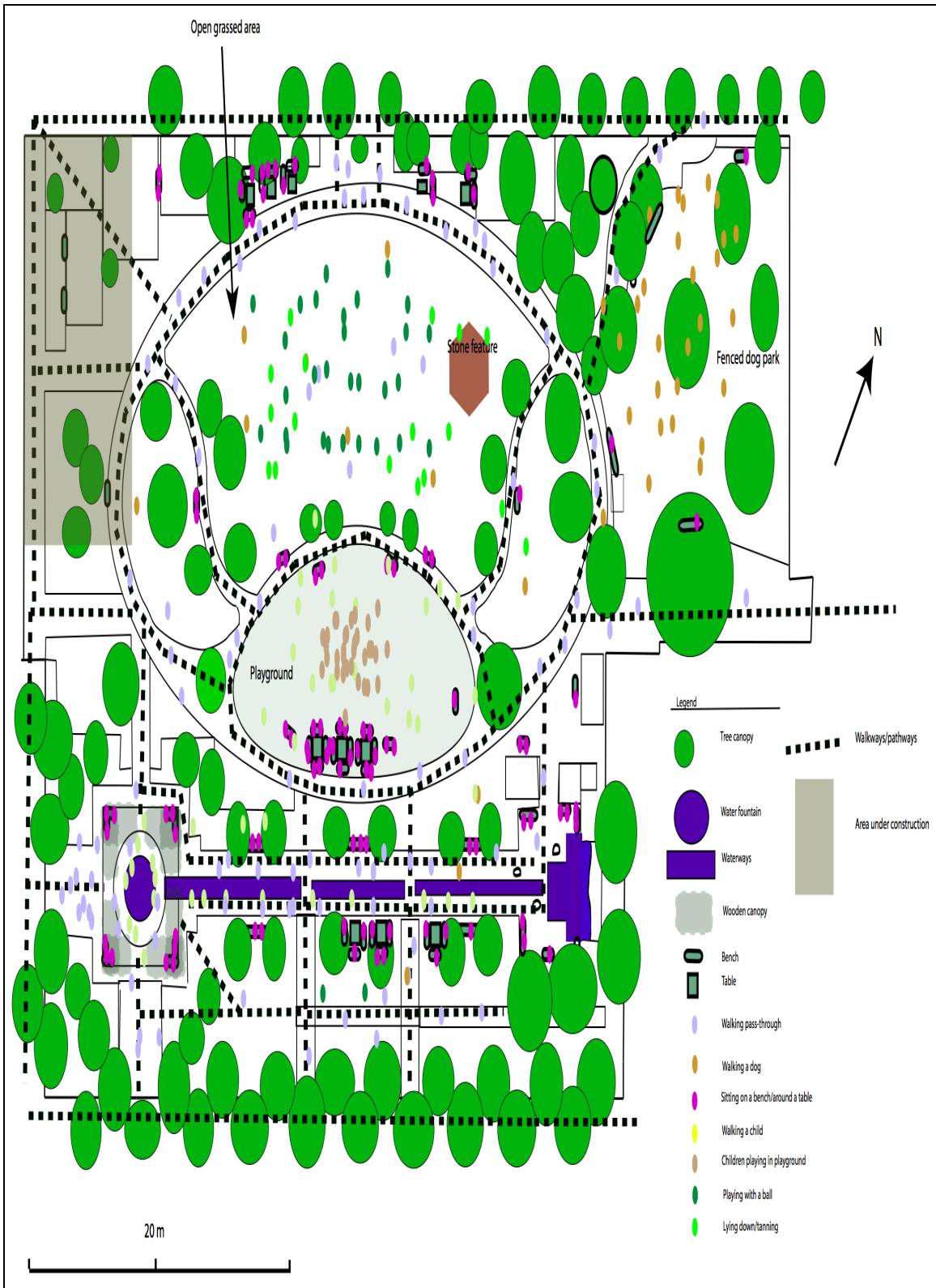


Figure 29: Map of location of activities and uses in Emery Barnes Park. Source: Behnia, 2011.

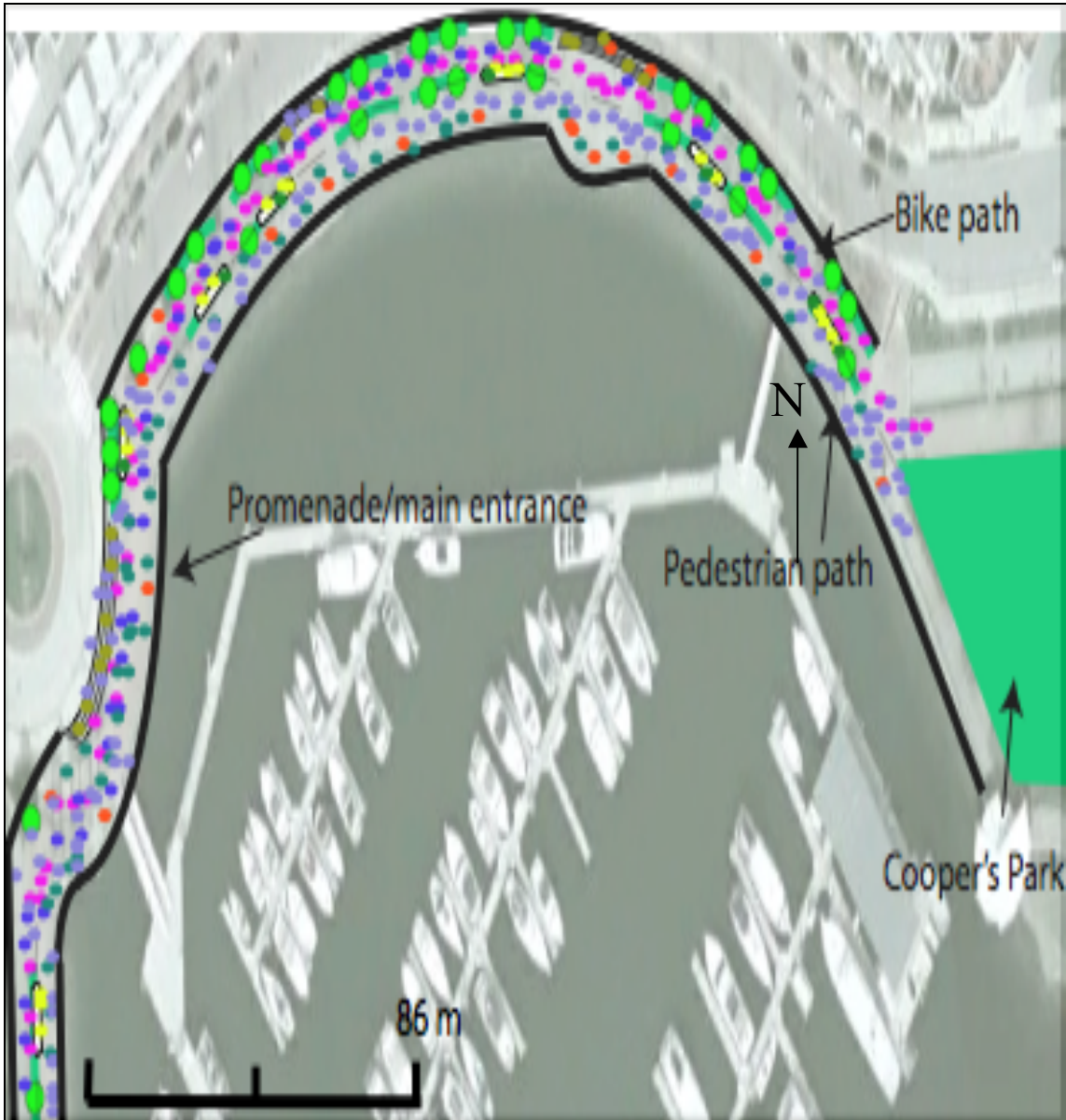
5.2.8 Map of locations of activities within the North False Creek Waterfront walkway

Cyclists use this space more heavily than other users. Other activities such as jogging, exercising, and rollerblading were observed as well. As is shown below in figure 44, the space is divided into two sections: the inner lane is designated for biking/rollerblading, while the outer lane is for pedestrians. The partition between the two zones is not strong in a physical sense. Signs and a subtle change of pathway material are two major ways to distinguish which side is for pedestrians and which for cycling or rollerblading. Unlike Emery Barnes Park and Creekside Park, and much like Granville Street corridor, this space is not well partitioned, being comprised of an edge transit route with trees and plants along one side and False Creek on the other. Observation of activities revealed that the vast majority of cyclists adhere to cycling within their designated zone (inner lane), while pedestrians, joggers, and those exercising, utilized both theirs and the cycling/rollerblading zones. The fact that each zone is subtly distinguishable from the other might be the reason why many pedestrians were observed throughout the corridor. Most of the people exercising in the area seemed to be training closer to the water's edge and near the grassed areas of the eastern wing. The eastern wing of the space has a greater width than the rest of the waterfront, and more people exercising or passing through were observed in that section. Most of the benches were used, especially during warm and sunny days. There was a collision of uses in the promenade/main entrance, which had no designated pedestrian and non-pedestrian demarcation(s). Figure 44 below clearly demonstrates how a wider variety of activities were recorded near the main entrance/promenade. Unlike the hard edges in Granville Street corridor, the steps of the main entrance and other minor entry/exit points were used for sitting, functioning as both

gateways and seats. All the benches and hard edges are oriented towards False Creek, and this seems to attract some long-staying activities, enticing users to relax and enjoy the view of the water and the city in the background. The main entrance to the waterfront contained the highest and most diverse range of activities, being the area from where most users start their journeys into the waterfront walkway. This is also confirmed when looking at the new vendors operating on or near the main entrance area, providing another incentive to visit the site and/or stay for a while. For better illustration, the site is divided into two subsections, presented respectively in figures 44a and 44b.



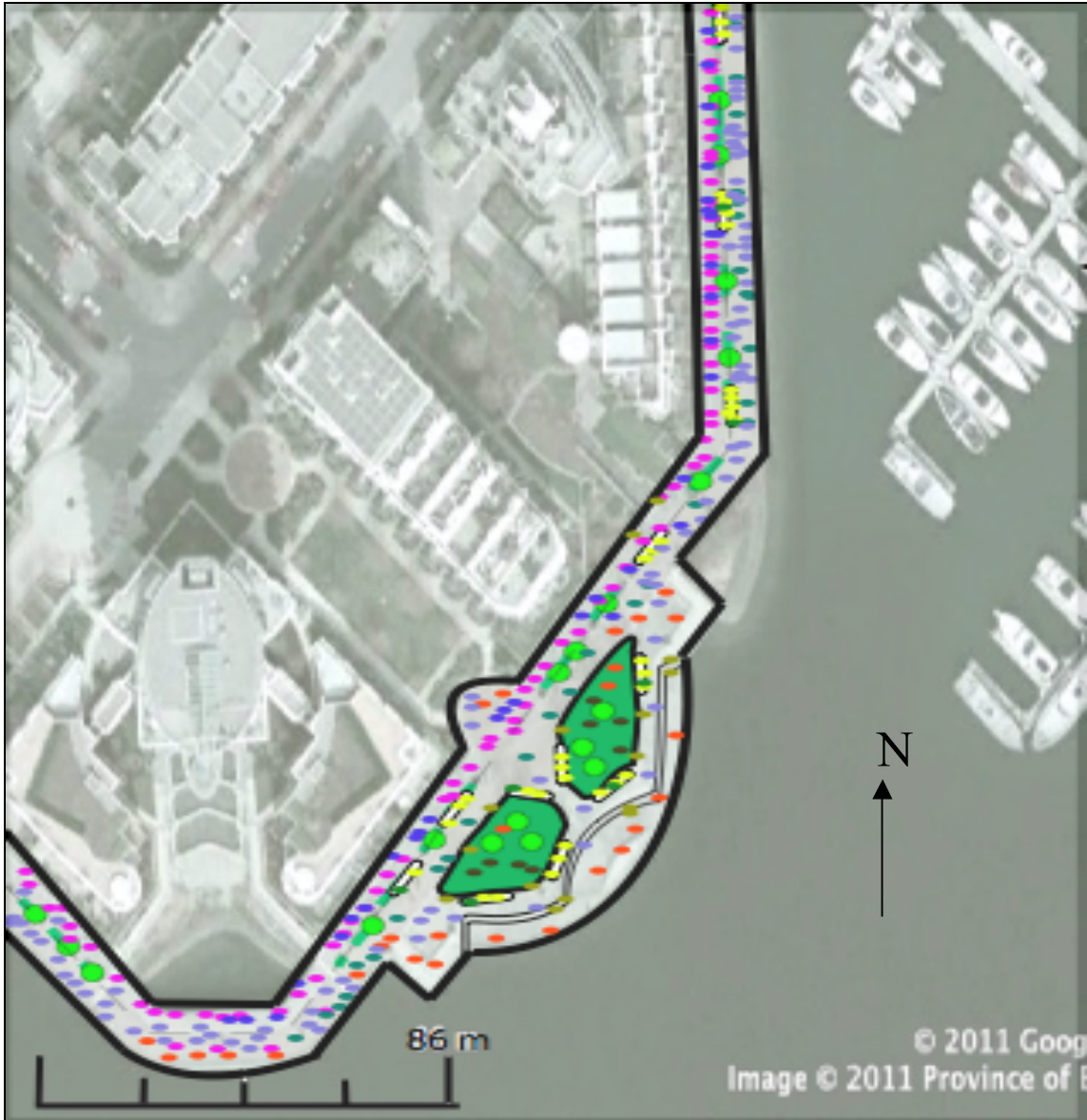
Figure 30: Map of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011.



Legend

- | | | |
|--|--|--|
| ● Tree canopy | ● Cycling | ● Sitting on hard edges |
| Bench | ● Roller blading | ● Lying down |
| Division line between bike lanes and walkers | ● Jogging | |
| Steps | ● Sitting on a bench | |
| | ● Exercising | |
| | ● Sitting on a bench with a dog | |
| | ● Walking pass-through | |

Figure 31: Zoomed subsection (a) of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011.



Legend

- | | | |
|--|--|--|
| ● Tree canopy | ● Cycling | ● Sitting on hard edges |
| Bench | ● Roller blading | ● Lying down |
| Division line between bike lanes and walkers | ● Jogging | |
| Steps | ● Sitting on a bench | |
| | ● Exercising | |
| | ● Sitting on a bench with a dog | |
| | ● Walking pass-through | |

Figure 32: Zoomed subsection (b) of locations of activities and uses in the North False Creek Waterfront walkway. Source: Behnia, 2011.

5.3 Survey Results

Results from surveys taken from user participants within each of the public spaces in this study are illustrated in table format. Results from all 100 surveys are summarized in tables 7, 8, 9, and 10.

5.3.1 Granville Street corridor

A total of 25 surveys were handed out, filled, and collected from on-site users during pre-set time periods. Respondents were comprised of 16 males and 9 females. Table 7 summarizes the results from Granville Street corridor.

Frequency of visiting	less than once a year (3), once a year (0), once every few months (2), more than once a month (3), once a week (4), a few times every week (13)
Age group	18-25 (4), 26-36 (7), 37-50 (8), 51-65 (3), 65+ (3)
Time of visit and type of activities pursued	Visiting: weekends. Summer times. After work. When I have time Activities: shopping for food and drinks. Watching other people in the street. Waiting for transit. Walking through.
Living less than 5 minutes away by walking	4 participants
Living between 5 and 15 minutes away by walking	8 participants
Living more than 15 minutes away by walking	6 participants
Use bus/skytrain/seabus to get around the most	9 participants
Drive own vehicle to get around	9 participants
Mostly use bus/skytrain/seabus to arrive here	7 participants
Usually drive to arrive here	3 participants
Thoughts about quality of design and facilities in the public space	Positive: better than before. It's beautiful. The quality of design is very beautiful. I love everything about this place. I love the light posts and the fact that traffic is closed. I like the new vendors on the street. Cleaner and more modern look than in the past. Negative: Lacks enough bike lock racks. Not a feeling of 'community' in this place. It needs to be cleaned up. The building facades on the street are mediocre to look at. Not enough greenery or plants. Benches are not comfortable and clean. The space is sort of tacky and not very creative. I am not a fan of this place. Not too much to do unless sitting at a café. It is very crowded and too many shops and cars.
Feelings of safety/reasons	Yes. Vancouver is very safe. I am familiar with the area and I know everywhere. There is nothing to feel unsafe about the area of the people. It is busy and vibrant. I feel safe in downtown. Police and security personnel are always present on the street. Not too safe sometimes at nighttime because of the clubs nearby. Not entirely safe because I don't see many police around. Not too safe at night because of drunk people (usually men).
General satisfaction	Yes. It's ok, but I'd like to see live music. No, it could have a more creative design. I don't really use the new seats but they look nice for only a short stop. No because there are a lot of homeless people approaching for money. Not satisfied because the space doesn't cover seats against seats. Yes I love the new stores on the street.
What to change in the future	Nothing really. I'd like to be able to drive my car through the corridor. More parking spaces. More original design to diversify the area. More covers and more opportunities to sit in sheltered areas and watch people. Need to be more clean and more family friendly. More public washrooms. More garbage bins. Needs to be completely closed off to traffic and a walking street. More comfortable and cleaner benches. Some water fountains to refill water jugs. Better street foods. More greenery. More events. Knock it down and restart and make it pedestrianized and European-style.

Table 7: Summarized results of user surveys for Granville Street corridor. Source: Behnia, 2011.

All age groups were represented, and people between the ages of 26-36 and 37-50 comprised the greatest number of participants. No relationships between age groups and comments on quality of design, safety issues, and ideas for improvements were noticed.

Most of the participants indicated that they come to the corridor at least once a week or more. A greater number also cited living in close proximity and within 5 and 15 minutes of walking distance. This finding seems to validate the theory by Salazar and

Menendez (2007), which stated that people living in close proximity to a public space are more likely to use that space frequently. The results show that the vast majority of the users actually walk to Granville Street corridor. This finding corresponds well with the majority of participants living in close proximity and within appropriate walking distances.

The primary reasons for coming to Granville Street corridor were for shopping purposes, waiting for transit at bus stations, and most frequently for walking through. These reasons seem to support recorded activities and uses during observation sessions. It is important to note that shopping, as an activity, was not recorded during observation sessions. This finding suggests that Granville Street corridor does function as a retail destination as well as a corridor for people to walk through. As noticed through observation and mapping of recorded activities, the other existing amenities such as individual chairs, new benches and shaded areas do not attract a wider range of uses and activities that one might have imagined.

A number of participants praised the new design of the corridor and its “modern look”. One survey participant stated that she likes this space’s design and quality of facilities due to the fact that the “area is closed to traffic” most of the time. Having a number of food vendors was also seen as a positive aspect of the space. However, there were specific negative comments recorded as well. The lack of interesting facades on the surrounding buildings were stated as making this place “mediocre to look at” in terms of aesthetic qualities, while a few participants mentioned lack of adequate bike racks, green features and trees. Comments with regards to aesthetic features are in conjunction with previous literature stating that users who develop negative perceptions towards aesthetic

qualities and design features of a public space might also feel a lesser sense of belonging (Pugalis, 2009). One participant even mentioned that this space lacks a “feeling of community” due to the way it looks and feels. Presence of garbage was stated as another negative feature of the corridor, making some feel uncomfortable. The new seating amenities were also mentioned by one survey participant as not comfortable and built “for only a short stop” rather than long-staying usage.

A number of specific safety issues were recorded during survey sessions. The most prevalent safety issues were with regard to nighttime usage. Those participants with safety concerns wrote about the presence of younger club-going crowds at night due and the activities of entertainment establishments on Granville Street. This is an interesting finding in the sense that the great deal of nearby retail venues are of the form of restaurants and pubs, and it seems that proximity to these types of urban amenities is actually working against creating a positive sense of safety and opportunities for usage for some users. While this safety issue was recorded by a number of participants in the older age groups, a few younger users also cited the same problems with nighttime entertainment-using crowds.

Participants with specific negative comments with regards to design issues and state of amenities also mentioned a lower level of general satisfaction. Another issue observed by a few participants was the presence of a number of homeless persons onsite. A few participants did mention the act of panhandling as a negative characteristic of the street. Survey results indicate that lack of diversity of uses and activities in this space might stem from social issues as a minor factor, being mostly derived from the physical factors of design, aesthetic characteristics, and type of amenities present. Indeed, all the

comments for future changes and improvements in Granville Street corridor are comprised of having to put a more diverse set of amenities and higher aesthetic quality through incorporating more trees and plantings along the sidewalk. Cleaning up the street more frequently was also mentioned as helpful in “improving the image” of the space, although no respondents called for the removal of the panhandlers or the homeless from the space, somewhat confirming previous literature that middle class sensibilities may not always result in lack of comfort towards the presence of the homeless (Sheehan, 2010). A last important physical issue recorded by a number of survey participant was the need to close the corridor to traffic permanently. Granville Street corridor is still accessible to taxis and buses, thus not completely pedestrianized.

5.3.2 Creekside Park

A total of 25 surveys were handed out, filled in, and collected from on-site users during pre-set time periods. 10 respondents were male, while 15 were female. The summarized results of the participants are presented in table 6.

Frequency of visiting	less than once a year (3), once a year (3), once every few months (3) , more than once a month (4) , once a week (3), a few times every week (9)
Age group	18-25 (5), 26-36 (17), 37-50 (1), 51-65 (2), 65+ (0)
Time of visit and type of activities pursued	Visiting: summer times. On the weekends, during the day. During the afternoons. In the evening. Anytime. Mornings. Activities: sit on the blanket on the grass. Come with friends and relax. Walking through. Looking at the view. To read. Play ball on the weekend. Rest stop during the biking trip. Sun tanning. Bike to work. Sitting. Rollerblading.
Living less than 5 minutes away by walking	12 participants
Living between 5 and 15 minutes away by walking	5 participants
Living more than 15 minutes away by walking	8 participants
Use bus/skytrain/seabus to get around the most	13 participants
Drive own vehicle to get around	8 participants
Mostly use bus/skytrain/seabus to arrive here	6 participants
Usually drive to arrive here	1 participants
Thoughts about quality of design and facilities in the public space	Positive: it's nice. It's simple but works. Very good. Good seating and location near the cycling and transit routes. Great view of the water and nice green area to chill out. Well designed and well maintained and the entire area has improved in recent years. I like the big open space and well connected. Pleasant. It's ok because it's close to my home. Negative: could use a hot dog vendor. It needs more benches along the waterfront and has good greenery and good for kids. I don't like the lack of views because of construction on the Science World Complex upgrade, but like the access path around the green area. Would be nice with some tables and chairs for picnic and bbq purposes. It's ok but could be better. While it's a good way to go to False Creek or the Olympic Village, this part of the network is the least pleasant. It could use more shade and needs washrooms.
Feelings of safety/reasons	Yes. I feel safe in Vancouver generally. Lots of people around. Feel safe during the day when biking but not at night because it's very empty and dark with cars going fast along the edge. No suspicious looking people around. Feels like home. There is virtually no place in this city I feel unsafe. It is well lit at night. Not so many homeless people around. Family and community-oriented. No. Maybe not the safest since it's close to East Vancouver. I don't feel too safe close to the parking lot. Depends on the time of day but not so safe at night because of homeless and drunks.
General satisfaction	Yes. Could have a washroom. Tennis parks are lacking in the downtown as a whole. It would be nice if there were water fountains. Could have more kid stuff and work out stuffs. No. Not very welcoming as a destination for relaxing or sitting.
What to change in the future	Good the way it is. More washrooms. More shades. Addition of more formal park space with more colours and interesting features/art. More recreational opportunities. More retail opportunities. More trees. More garbage cans. Water fountains; improve signage to keep pedestrians and cyclists apart. Addition of tennis courts and more amenities. Beach access. Addition of water park. Less construction. Less bumpy pavement. Vendors. More benches along the waterfront.

Table 8: Summarized results of user surveys for Creekside Park. Source: Behnia, 2011.

The majority of participants in this survey were comprised from the age group of 26-36, although other age groups were represented as well. Most of the positive comments with regards to design, quality of amenities, and perception of safety also came from this age group.

Like Granville Street corridor, most of the users live within appropriate walking distance of no more than 15 minutes. While most of the users were regular visitors to the park, a few did state that they come no more than once a year, and three participants stated a less than once a year visiting frequency.

Compared to Granville Street corridor, participants had a wider range of reasons for coming to the park. Sitting on the central grassed area, sitting and relaxing, sun tanning, playing with ball in the central grassed area, enjoying the view, biking through, roller-blading, and walking through were the major types of uses and activities recorded. An important matter not noticed during observation sessions but picked up through the surveys was that many users come to Creekside Park “to relax and enjoy the view”. The view of the water and the downtown skyline seem to be crucial incentives for many of the people who were observed to be sitting on the benches and the central grassed area during observation sessions. As Gehl (2010) points out, having good aesthetic qualities through providing fine views can improve sensory experience of users.

Most of the participants had positive comments with regards to the design and quality of amenities in Creekside Park. Presence of trees, adequate plants, and grassed areas were cited as some of the positive design features of the park. The view of False Creek and connection to other urban areas through bicycle and pedestrian lanes were stated as very positive as well. According to a number of participants, another point of strength is the presence of the large central open space. Interestingly, a wider range of uses and activities were reported within the central open space during observation sessions. Unlike Granville Street corridor, no participant complained about presence of garbage and lack of maintenance. There were a few negative comments with regards to the quality of

existing amenities. Lack of food vendors, public washrooms, and shaded sitting areas were mentioned as negative features of the park. Other negative complaints that were recorded were with regard to ongoing construction on the nearby Science World Complex, which is scheduled to finish by 2012.

The participants, for the most part, agreed that the park is a safe space, and the vast majority of them cited feeling secure. A number of participants also stated that they feel safe in Creekside Park because it is “family and community oriented”. This sense of being in a community-oriented environment was specifically mentioned as lacking in Granville Street corridor. Creekside Park also contains more high quality aesthetic features in terms of treed areas, plantings, and an open view to False Creek, all of which are lacking in Granville Street corridor. A few safety concerns were noted about the presence of the nearby surface parking lot. Some users had reservations for coming to the park at night due to lack of adequately lit areas. Only one participant complained about a possible presence of homeless persons at night. The presence of homeless persons seems to not be a barrier against effective usage and occupation in this park.

The vast majority of survey participants were generally satisfied with what the park offers. At the same time, the same persons complaining about lack of adequate amenities did reaffirm their desire to see more features such as washrooms, water fountains and shaded sitting areas. Only one participant was not generally satisfied with what Creekside Park offers currently.

A number of survey participants stated the desire to see the park remain the way it is in the future. This was an interesting finding in the sense that the vast majority of participants in Granville Street corridor stated some form of modifications in that space.

As mentioned already, recommendation for future improvements centered on improving the diversity of amenities and providing more shaded sitting areas during bad weather conditions. The issue of weather protection and inclusion of shaded areas in open public spaces was also mentioned by Zakrias et al. (2004) as an important factor towards making public spaces more successful. A few participants wanted to see more retail opportunities nearby, and this affirms previous findings on the importance of retail opportunities near public spaces (Karrholm, 2007). Although not a prevalent issue, a few participants stated that they would like to see clearer signage separating cyclists and pedestrians for safety reasons.

5.3.3 Emery Barnes Park

A total of 25 surveys were handed out, filled in, and collected during pre-set times in Emery Barnes Park. There were 17 male and 8 female participants. The summarized results are presented in table 7 next page.

Frequency of visiting	less than once a year (2), once a year (0), once every few months (3), more than once a month (3) , once a week (4), a few times every week (13)
Age group	18-25 (7), 26-36 (10), 37-50 (4), 51-65 (3), 65+ (1)
Time of visit and type of activities pursued	Visiting: During lunchtime. Everyday. After school. When I want to smell flowers. If I'm in the neighborhood walking by it. On the weekend. Weekdays. When I have a bad day. In the afternoons. 3 times per day. Several times a day. After supper. Activities: Enjoy the sun. Read and relax with my dog. Using on the way to visit friends. Just chilling with friends. To meditate and collect my thoughts. Sometimes to walk through it, other times to sit around or stroll along and watch people. Enjoy meeting new people and dogs. Walking my dog. Watch my kids play in the park. Walk around the area. Sit and smoke. Sit and relax. Pass time.
Living less than 5 minutes away by walking	8 participants
Living between 5 and 15 minutes away by walking	5 participants
Living more than 15 minutes away by walking	12 participants
Use bus/skytrain/seabus to get around the most	18 participants
Drive own vehicle to get around	6 participants
Mostly use bus/skytrain/seabus to arrive here	5 participants
Usually drive to arrive here	2 participants
Thoughts about quality of design and facilities in the public space	Positive: I like everything about this place. It's well designed. Very pleasant, tranquil, family-oriented, nice with water features and good seating. It's good, easy to get to, good place to sit and nice view of the park itself. It's nice ever since they added the second section it's better. Very good fun and good vibrations. Lovely, the water features phase out the noise. It's very vibrant and active with many features such as water features, children's play area, dog park etc. It is great pocket park. This space has been much improved, great flowers and parks maintenance. Great spot, great layout and lots of benches. The facility is great, well located and a positive impact on the neighborhood. The city needs more places like this one. It looks nice and fits well in the surrounding area. Negative: Could use more paved areas. I wish it was more simplified and more grass/green areas and could have been more commercial. Needs more open grass area for dogs to play. Just needs to finish the last bit. The area near the alley is shaded that it attracts people drinking and doing drugs. It needs more sitting spots and wifi.
Feelings of safety/reasons	Yes. Pretty safe because it's a nice area. The homeless are harmless. Never had a negative experience or seen negative things happening. I live close by, family-oriented. Because Yaletown is generally safe. No reason per se, just feel safe. It's a family park. Not that many gangster presence here. It's in a busy area. I rarely feel unsafe anywhere. Good neighborhood and adequate lighting. It is surrounded by residential and commercial buildings and always safe and vibrant even when homeless are using some sections of it. Because it's Vancouver and my home. No one bother you. No. most of the time, but I have seen some shady people around here. Some drugs are around here sometimes. Not sure at night. Except at night on Fridays and Saturdays when clubs are busy.
General satisfaction	Yes. There are many different features in this park. A lot of people and friendly. Downtown South could use another one of these parks for other uses. Usually yes, but today the water fountains are not working and the park is prettier with water. No. Needs more sitting spots. I wish the dog park had grass and had small and large dog areas. Construction at the South end of the park needs completing ASAP and it's an eye sore.
What to change in the future	Nothing. More simplified open space to maximize it and also would have been safer and like to see the last bit built. A little more playground, sport facilities and more garbage bins. A bigger public washroom that I can go in with my dog. I like it the way it is. Add places that have covers for rainy days. More space like these and community gardens. More cleaning for enclosed dog park. I would like more spinning things in playground. I would like to see more environmental friendly equipment and products to be used for maintenance at the park (solar panels). Dogs being in their own separate place. More greenery. Maybe more seats or benches. Have people not smoking in the park and better lighting at night. Be able to smoke in the park. Would be nice if they finally finished the park. Since a lot of children hang out here it would be nice to have security of police officers around. I'll put more trees and benches and wifi could probably have more flowers with nice smells and colors.

Table 9: Summarized results of user surveys for Emery Barnes Park. Source: Behnia, 2011.

Unlike the previous sites, the participants in Emery Barnes Park were more evenly distributed across all age groups.

Although almost half of those surveyed stated living more than 15 minutes away in terms of walking distance, most still walked to get to the park. This finding seems to contradict earlier literature by Lotfi and Kooshari (2009) who had stated a less likelihood for people to go to a public space that is located beyond an appropriate walking distance. This criterion of accessibility through close proximity does not necessarily hold true in Emery Barnes Park since almost half of the survey participants lived beyond a 15-minute walking distance.

There was a wide range of reasons for using Emery Barnes Park. The range of uses and activities recorded by survey participants is the greatest when compared with previous sites of Granville Street corridor and Creekside Park. Sitting and relaxing on either the benches or the hard edges, walking one's dog, meeting with friends, bringing one's kids to play in the playground, and passing the time were the major categories of activities recorded. The activity of passing the time and relaxing was not recorded during observation sessions, and it seems that passing the time while with friends or alone does constitute a major reason for people visiting the park. Similar to results from observation sessions, there was a high diversity of uses and activities recorded through on-site surveys.

Most of the users stated very positive comments with regards to quality of design, aesthetic features, and available opportunities for usage. Specific positive comments focused on the design and aesthetic details such as the water fountains, trees and plantings, the central open space, and the dog park. Another frequent comment by users

was that they did not feel they were “being bothered by others” and that “everybody had their own personal spaces”. This finding does point to the way the park’s design has resulted in segregated zones for specific activities while a central open space is also available for more flexible usage. Observation of uses and activities also showed a more varied range of uses within the central open space and a number of specific activities being devoted programmed sub-areas, thus occurring in those sub-areas for the most part. Although not a prevalent thought among the vast majority of participants, one participant did state a desire to have seen a more “simplified design”. Another participant mentioned a lack of wifi connectivity in the park, wishing the City had invested in placing a hot spot Internet zone for those wishing to use their portable computers. This finding does recall earlier concerns by Mitchell and Banerjee (1995; 2001) who had stated a possible decline in physical usage of public spaces due to rise of telecommunication technology. Installing wifi access might be a good strategy for making a public space more usable in an era when more people are communicating online rather than face-to-face.

The vast majority of users also felt very safe, stating the location of the park among residential, commercial, and street retail areas as the reason for feeling secure. This finding does correlate with previous literature about creating more positive perception of safety by placing residential dwellings and other urban services within close proximity of public spaces. Two participants, who also mentioned having witnessed some drug usage at night, did not feel as safe to come to the park after dark. It is important to note that the park is not open to nighttime usage between the hours of 10 pm and 6 am.

All the participants were generally satisfied with what the park offers currently, affirming their previous comments regarding design and aesthetic features and range of available opportunities for usage.

The majority of users also did not want to see any changes to the park in the future. At the same time, a few did mention a need for even more varied amenities in the future by having more washrooms, a bigger playground, and even more space devoted to dog walkers.

5.3.4 North False Creek Waterfront walkway

25 surveys were handed out, filled in, and collected from users in this public space. 20 out of the 25 participants were males and 5 were females. Summarized results of the surveys are presented next page in table 8.

Frequency of visiting	less than once a year (0), once a year (0), once every few months (1), more than once a month (4) , once a week (9), a few times every week (11)
Age group	18-25 (4), 26-36 (13), 37-50 (6), 51-65 (2), 65+ (0)
Time of visit and type of activities pursued	Visiting: Afternoons. Evenings. Anytime. When the weather is nice. Usually during daylight. On weekends. Any day of the week. Activities: Bike riding. Jogging. Relaxing. Walk, shop, groceries. Walk through to get to the casino. Just walk or cycle. Walk along the beach or read. Walking on the edge or sitting on the benches, or sun tanning in the summer. To go to the restaurants. Enjoy the view. Sit and stare at the boats. Running. Hanging out with friends., catch the sun. Walk after dinner, live nearby and take 'the long way' as I go shopping. Exercise.
Living less than 5 minutes away by walking	13 participants
Living between 5 and 15 minutes away by walking	4 participants
Living more than 15 minutes away by walking	6 participants
Use bus/skytrain/seabus to get around the most	10 participants
Drive own vehicle to get around	8 participants
Mostly use bus/skytrain/seabus to arrive here	4 participants
Usually drive to arrive here	2 participants
Thoughts about quality of design and facilities in the public space	Positive: Very good. It's beautiful although so close to the water may be why that is true. Nice view of the city and the beach at the same time. Well-designed, efficient use of land, well thought out urban planning. It's nice. Very good probably for walking, jogging, cycling. Ideal. Well maintained. It's accommodating to runners, bikers. Close to home. Nice and quiet. One of Vancouver's few public space 'successes' in my opinion. Negative: It's very simple and they can bring more stuff to this place. It could be more entertaining for walkers. More social areas like a Piazza would encourage people to come to the area. Too much concrete, artificial and superficial. The interlocking stone on bike path not good for rollerbladers. It could use more green space.
Feelings of safety/ reasons	Yes. Not a shopping district or nightclub. The look of everybody else, no one looks scary, neighborhood looks expensive. There's always people around, apartments are close. Other people around, housing nearby, I also feel calmer when I'm here because of the water and the open spaces. Well used. Very central and modern. There are always lit areas, you don't see crime or problem around here and busy with people. Clean. Not East Hastings. Good part of town. The trees and plantations and the new buildings. Mostly used by Yaletown residents and they are well behaved and classy. Residential area with many buildings around. Gentrified. Well lit. The community is great. No. At night when retail areas close down the place gets empty. Safe most of the time but sometimes early mornings when the weather is warm, you see some drug users or street people camping around.
General satisfaction	Yes. Lots of varied things to do. Restaurants nearby and the water taxi to Granville Island is useful. The blend of commercial and public areas is well designed and also a proper mix of residential and commercial real estate. No. Improvements can still be made. This place has much more potential. There is no public transport via water to reach the other side of the waterfront.
What to change in the future	Less brickwork for skateboarding & cyclists because they can get hurt, more palm trees, could have more vendors. The weather. Get beach access., or an indoor/outdoor pool in the area. Perhaps more seating and others can't sit comfortably on the edges. More trees, shaded areas. It's great the way it is. Stone materials for bikers and rollerbladers, water fountains. More human touch: artists, food stalls, musicians, social activities. More public bathrooms. More covered areas. Designing areas where people can congregate. I think the metal pipe art piece at the roundabout/center of the marinaside is hideous and should be removed or replaced, maybe some music (ambient). Not much. I would love to see cafes and restaurants spilling over on the sides of the park and near the water. More entertainment and events. More affordable bars/stores, more access by public transit. Cleaner and more accessible garbage cans are necessary, the public washroom is not the best it can be.

Table 10: Summarized results of user surveys for North False Creek Waterfront walkway. Source: Behnia, 2011.

Most of the participants were composed of the 26-36 age group. Very few in the upper age groups agreed to complete the survey in this space. The majority of the participants were frequent users and only one person stated a visiting frequency of less than once a month. Most of the participants also live in the nearby neighborhood of South False Creek and within a 15-minute walking distance. Much like Creekside Park, this waterfront space seems to attract more local and frequent visitors. This finding does correlate with earlier suggestions by Thorosson et al. (2007) and Passaogullari and Doratli (2004) stating peoples' willingness to occupy and use public spaces that are close to their places of residence.

The major reason for using the waterfront walkway, according to survey participants, is exercise oriented. Jogging, biking, and roller blading were recorded more than any other activities as primary reasons for visiting. Even a number of people who were surveyed while sitting and relaxing indicated that they were just resting after having jogged or biked through the space. Enjoying the view of False Creek was the other major activity recorded by both the seated participants and those on the move through the corridor. Like Creekside Park, the view of the water is a strong incentive to come to the site. Unlike Creekside Park, which offers the same great view to False Creek as this waterfront walkway, the survey participants recorded less diverse range of uses and activities.

The state of maintenance and the views of the creek and the city were praised by many participants, while the design layout as well as the amount of greenery were mentioned as positive as well. At the same time, a number of users did have some specific negative comments. A few users wished to have "more things to do" in this corridor, while another

user explicitly stated a lack of a “piazza and other social areas” as hindering interaction with other people. Indeed, most activities observed and recorded during observation sessions showed a tendency for people to conduct more solitary activities rather than group activities. Similar to recorded activities in Granville Street corridor, not many people were observed socializing and interacting in this space. One participant observed that the space looks “artificial” and that “too much concrete” have been used in its design. The same participant would have liked this site better had it been designed to look more natural and less artificial. Other participants, however, did not share this lack of naturalness of space.

Like the other spaces in this study, most users felt very safe and secure. The reasons for feeling safe in North False Creek Waterfront walkway were both similar and dissimilar when compared to the previous sites. While many stated the proximity of residential units and other urban services for feeling safe, some stated the location in a higher-income area made them feel safer. One user stated feeling safe “because of the look of everybody else”. This finding is interesting in that Emery Barnes Park is also located in the same neighborhood of mostly higher-income residential towers and retail services, and yet no one in that space mentioned anything regarding the social and economic status of the neighborhood or other users as important for feeling safe. It is also imperative to note that Emery Barnes Park did attract a wider range of activities than North False Creek Waterfront walkway. Unlike the waterfront corridor, observation of activities in Emery Barnes Park had also revealed the existence of lower income in the same park as nearby residents and without any obvious sense of tensions. Two participants stated nighttime usage as less safe because of nearby shops and retail areas

closing. This finding does confirm Cooper Marcus and Francis' findings regarding people not using public spaces that are empty (1998).

Although a few users mentioned the potential to still improve the corridor in the future, the majority was generally satisfied with what the space is currently being offered. Redesigning some parts of the waterfront by removing some brickworks to make it safer for cyclists and skateboarders, adding more seating amenities and washrooms, creating direct access to the creek, putting water features, providing shaded areas and even more trees were stated as the major ways to improve the space in the future. Like the other sites in this study, some users, even when generally satisfied with the space, still desired to see more specific amenities and aesthetic features. An important design change recommended by two participants, was to have more restaurants and cafes “spilling over” to the waterfront rather than being located across the street. Onsite entertainment was also mentioned as positive for future improvement, although a number of entertainers were already observed near the central promenade sub-area during observation sessions.

5.4 Semi-structured Interviews

Seven individuals were interviewed for this research. The participants were selected from among planners and officials in the City, members of the academia at the University of British Columbia's School of Community and Regional Planning, and individuals involved with the Downtown Business Improvement Association (DVBIA). Important themes derived through the interviews are stated in sections 5.4.1-5.4.4.

5.4.1 Strength of the selected public spaces

Responses from interview participants with regards to the strength of the selected sites were varied as well as similar.

Most of the participants agreed that Granville Street corridor is, and has been historically, an important central corridor in the downtown core. The fact that the street has been ‘re-imagined’ is noted as a point of strength for this public space (Interview Participant 1, 2011). The street, being located within a commercial and retail context, is cited as not only important for its linearity and transit-oriented nature, but for offering consumption activities in the shops, bars, restaurants and entertainment centers. This finding was congruent with some of the survey respondents stating shopping in the area as the main reason for walking through the corridor. Granville street corridor is also being used as the stage for a social event called VIVA Vancouver, and such events have had positive influence on the urban fabric of the downtown, drawing in many people from the neighborhood as well as other areas of the GVRD (Interview Participant 3, 2011). This space is also one of few busy spots in the Downtown not located near the waterfront, enabling the creation of an urban public landscape which is more central than edge oriented (Interview Participant 7, 2011).

Creekside Park was noted as a space ‘in progress’ by four of the interview participants. The space’s close proximity to a skytrain station is a positive factor, enhancing its accessibility to more residents in the city and the GVRD. The fact that the park is undergoing expansion plans makes it less viable as a successful public space (Interview Participant 1, 2011). Interestingly, none of the survey respondents mentioned any problems with construction and upgrading schemes in terms of hindering utilization.

There seemed to be a difference of opinions and perceptions between the users of the park and the interview respondents. The survey respondents seemed to find this park more pleasant and usable than some of the interview participants. While a few interviewees were concerned with how viable and safe this space was for users, most users had positive perceptions of safety, quality of amenities, and opportunities for usage.

Emery Barnes Park, being busy and bustling with crowds at most times of the day, drew a lot of acclaim from 6 of the participants. The council member who participated in this study labeled the park ‘the most successful public space’ in this study (Interview Participant 5, 2011). Having an off-leash dog area, a kids’ playground zone, and water features were stated as great for users and for providing for the needs of nearby residents. By having a number of well-partitioned sub-areas for a variety of planned and unplanned activities, Emery Barnes Park can attract a wider range of users (Interview Participant 3, 2011). Being a pocket park within a high-density urban fabric was another strength of this public space since Downtown Vancouver does not have many central public spaces to begin with (Interview Participant 7, 2011). The vast majority of survey participants seemed to concur with the opinions of the interviewees. The park, as a whole, was cited as meeting the most of the diverse range of users’ expectations and requirements. The fact that observation of uses and activities revealed a more diverse range of usage in Emery Barnes Park also supports findings from both the interviews and the surveys.

One of the interview participants noted that the North False Creek Waterfront walkway was named ‘Canada’s number one public space’ in Spacing Magazine (Interview Participant 1, 2011). This area serves the needs of cyclists and pedestrians, providing a view of False Creek. The waterfront walkway has also helped improve retail

activities in the nearby neighborhood. The space is linear in design, serving a variety of needs such as walking, moving to other parts of the downtown, jogging, and strolling, thus being successful as an urban public space (Interview Participant 1, 2011). One of the interview participants stated that the walkway is clearly demarcated and partitioned between cyclists and pedestrians, a very positive feature that reduces chances of accidents and tension between different users (Interview Participant 1, 2011; Interview Participant 5, 2011). Observation of activities, however, seem to indicate that the lanes might not be perceived as clearly demarcated since many pedestrians were observed strolling through the cycling/rollerblading zone. None of the interviewees mentioned the aesthetic qualities of the space as a strength, while many survey respondents cited the fact that the space is located next to a body of water, offering views to both natural as well as urban features as major positive attributes.

5.4.2 Importance of design and placement of amenities in relation to types of usage

All research participants agreed that types of amenities and overall design of these spaces would encourage or hinder different types of uses and activities.

Seating facilities took the most amount of attention. The design of ‘street furniture’ was cited as critical in current and future utilization of such public spaces as Granville Street corridor and Emery Barnes Park (Interview Participant 2, 2011). Through placing seats, benches, and other amenities in specific locations within small and larger public spaces, different types and variety of activities can be ‘programmed’ or laid out, at least conceptually (Interview Participant 3, 2011). If the public space is partitioned into a number of smaller sub-areas for a variety of programmed and flexible activities, then the

possibilities of meeting more diverse range of user expectations and requirements increase. Understanding how a space functions, and designing benches according to that function(s) has a huge role in the public space's utilization. The individual chairs designed for Granville Street corridor indicate a good understanding by the landscape architects for that project with regards to how people like to use street furniture in the urban space (Interview Participant 2, 2011). Observation sessions revealed little utilization of Granville Street corridor's seating amenities, however. The "authoritarian street furniture" in Granville Street corridor, North False Creek Waterfront walkway, and other similar public spaces in the Downtown is designed to make sure the homeless cannot stay for long, inhibiting their ability to use these spaces (Interview Participant 5, 2011). This design seemed to hinder usage for long-term activities especially in Granville Street corridor where the seats and hard edges are hardly used. Lack of tables and amenities such as drinking water fountains, garbage bins, and diverse seating orientation in the North False Creek Waterfront walkway might also be the reason why that space is less diversely used than Emery Barnes Park. Emery Barnes Park does have varied seating types and other important amenities such as garbage bins, and drinking water fountains throughout, offering a more diverse incentive for usage.

Existence of other amenities such as lighting, drinking fountains, water features, washrooms, and garbage bins help with not only improving and encouraging usage, but with the overall image and design of the public space (Interview Participant 1, 2011). This was a point that was mentioned by many survey participants from all the case studies in this research. A high number of complaints with regards to lack of drinking fountains, washrooms, adequate lighting, water features, garbage bins, and bike racks

were noted by survey participants. Bike racks, washrooms, and garbage bins are few in many public spaces in Downtown Vancouver, and people have to resort to utilizing surrounding shops' amenities instead. Cyclists and pedestrians, therefore, can run into difficulties when wishing to lock their bikes, drink water from a fountain, or go to the toilet (Interview Participant 7, 2011).

Sometimes, amenities within a public space are not used as much due to other factors. Children do not use the water features in Emery Barnes Park as much as the playground installations, possibly due to the fact that some homeless persons are sitting nearby (Interview Participant 4, 2011). However, observation of uses and activities, as well as surveys from Emery Barnes Park revealed that most users do not feel threatened or intimidated by the presence of people of different economic backgrounds. Also, some children were observed using the water features in Emery Barnes Park, albeit with adult supervision.

The design of the public space should be focused towards making it more pedestrianized. The more pedestrian a public space is designed to become, the more successful it will be in the long term (Interview Participant 5, 2011). Pedestrianization seems to be most pressing need in Granville Street corridor, which is still transit and taxi accessible. Observation and mapping of activities revealed that the majority of people walk towards the inner sections of sidewalks away from taxis and buses, creating higher levels of foot traffic within a smaller zone, and perhaps increasing the perception of the area as not a space for long-term activities. This perception in Granville Street corridor might be helping with the street meeting a less diverse range of users' expectations and requirements, thus rousing more negative comments as were picked up through on-site

surveys.

A public space, however, does not necessarily become more diversely because of good design. The placement of some of the existing by-laws and regulations in the City discourage usage of public spaces after certain hours of the night, and this hampers some nighttime activities in the public realm (Interview Participant 7, 2011).

5.4.3 Issues of user safety in the selected public spaces

All interview participants agreed that these public spaces, along with many others in the downtown, are generally very safe. The City's Planning Department has even had police officers and security experts involved with design of public spaces in the past. Designing public spaces by paying attention to the effects of 'natural surveillance' and 'eyes on the street' has had a positive impact on public space safety levels and perceptions (Interview Participant 3, 2011). The fact that high-density residential buildings surround spaces such as Emery Barnes Park help to enhance perceptions of safety (Interview Participant 7, 2011). There were some concerns noted with regards to Granville Street corridor, Creekside Park, and Emery Barnes Park, however.

Being the entertainment district of the City, Granville Street corridor was noted as potentially unsafe by older crowds and some younger persons as well. Some people, not wishing to use the corridor's restaurants, pubs, and entertainment facilities, might not feel very welcome during the weekends and at night. It is not surprising to witness brawls and arguments between people on Granville Street corridor at nights and during the weekends (Interview Participant 1, 2011; Interview Participant 5, 2011). Ideas put forth by survey participants centered on design modifications in order to make the space 'more attractive' and 'clean'. A number of those complaining about safety in the space also mentioned the

need to “clean up the space” or to “redesign the entire space all over again”. It seems that a more aggressive management of the state of cleanliness of the street might go some way in improving negative perception of safety among some of the users.

A few of the survey participants noted Creekside Park as possibly unwelcoming at night since it lacks proper lighting. People would not use Creekside Park at night because it is empty and “feels deserted”. This finding supports previous studies by Cooper Marcus and Francis (1998) stating that people might not venture into empty public spaces. Some people have been observed to squat in Creekside Park at night, and that has had some negative perceptions of safety in this space (Interview Participant 1, 2011). Aside from not being well-lit at night, no other specific complaint was stated by either the users or the interview participants in Creekside Park. This, of course, might make sense in light of the fact that usage levels drop dramatically at night and people prefer to use the park during the day. Creekside Park, however, did not generate the same amount of negative safety perception among its users than Granville Street corridor. The vast majority of users stated that they feel quite safe in Creekside Park, while the interview participants, for the most part, did not have a clear input on safety levels.

Emery Barnes Park was noted as being used by some drug users during the day. Used needles and other drug-related residues have been found in parts of the park in the past, and this can affect perceptions of safety, potentially ruining the family-oriented image of the park (Interview Participant 4, 2011). Aside from the interview participant’s somewhat negative perception regarding drug usage, almost the entire sample of survey participants had a very positive perception regarding safety levels. No user mentioned any concerns with regards to drug usage in Emery Barnes Park during on-site surveys. No illicit drug-

related activities were observed during observation sessions either.

North False Creek Waterfront walkway was stated as a very safe public space due to the presence of both retail and residential units ‘right on its doorsteps’ (Interview Participant 3, 2011). The City’s strategy of locating private areas at very close range to the walkway ensured local usage while pertaining public access to the waterfront walkway. Interestingly, a few users did mention a lack of desire to use the walkway at night due to cafes and restaurants closing down and some squatters and drug users visiting to the space at certain times.

Perception of safety can be improved through both design, inclusion of appropriate amount of amenities, and through programming usage for all age groups. By having incorporated programs such as VIVA Vancouver and bringing more vendors to the street, a corridor such as Granville Street has managed to improve its previous image as only an entertainment center that is only usable by the younger pub-going crowds (Interview Participant 6, 2011). Making public spaces ‘age-friendly’ can go a long way in ensuring a positive image created for all the various age groups and people of different social backgrounds (Interview Participant 1, 2011).

An important matter to recall is the issue of safety as it pertains to ‘preferred users’ of the public space. As noted in previous literature, not everyone is welcome to use a public space; therefore managers and ‘caretakers’ of the space have to tackle the issue of who is welcome and who is not. Clearly, most of the safety issues derived from surveys and interviews points to concerns regarding those who might use the spaces for activities such as drug usage, squatting, or panhandling. How the selected public spaces are managed in the future will clearly have consequences in terms of the variety of uses and activities that

will occur. Restricting specific uses might make some feel safer, but whether that will meet more of the diverse range of users' expectations and requirements will remain to be seen in the future.

5.4.4 Future physical modification of the selected public spaces in order to accommodate higher variety of activities and functions for users

There was general consensus by interview participants in that the selected public spaces in Downtown Vancouver, and others like them, will have to be somewhat modified in the future. Public spaces are modified through ongoing design and planning processes. Planners and designers should never feel that their jobs on creating successful public spaces are necessarily complete once a space is designed and built (Interview Participant 3, 2011). Part of the reason for the ongoing need to change and modify public spaces derives from changing ownership of these spaces. Needs of future users of public spaces can be different than current needs, and public spaces should be redesigned and modified to reflect these changing needs. Downtown Vancouver's population make-up is changing due to immigration from other Asia-Pacific countries. The public spaces of the city center will have to be redesigned in the upcoming decades in order to reflect and accommodate the many varied ways people of different cultural backgrounds use public spaces (Interview Participant 1, 2011). These spaces, and others like them, will also need to become more 'age-friendly' in the future as our population ages. The selected spaces need to be reflective of all age groups through design and placement of amenities and range of available opportunities (Interview Participant 1, 2011). By partitioning public spaces into smaller sub-areas, whenever possible, it will be easier for users to pursue a

wider variety of activities in the future. Also, the city's public spaces will need to house more amenities such as public washrooms, bike racks. These public spaces need to provide wider sidewalks and better street tenements to accommodate an overall higher number of users (Interview Participant 5, 2011). The studied spaces, and others like them, will probably undergo some physical modifications in the future as the population's needs become more diverse due to both immigration and aging (Interview Participant 1, 2011). Increased multiculturalism in the City will mean that the selected public spaces in this study, and perhaps others like them, will need to be modified in ways that correspond to how different people of different cultural and ethnic backgrounds might prefer to use them. Studies have shown that there are some preferences with regards to public space uses and activities based on cultural backgrounds. Leisure researchers have found that various cultural groups tend to exhibit distinct preferences for using a public space such as an urban park (Byrne & Wolch, 2009). Based on this finding, a possible direction for future research could be to assess specific socio-cultural preferences of using public spaces in Downtown Vancouver.

There were a number of specific points about the public spaces in this study. Granville Street corridor has already begun a rapid physical modification process during the last 5 years. The corridor's street furniture were changed and improved in time for the 2010 Winter Olympics Games. A lot of events are being programmed specifically within the two-block portion of Granville Street corridor (Interview Participant 6, 2011). Making the street completely pedestrian in the future will probably happen through new pedestrian-oriented schemes by the City and the Downtown Business Improvement Association (DVBIA) (Interview Participant 5, 2011; Interview Participant 6, 2011).

Downtown Vancouver does not have many central plazas or squares for civic activities and community gatherings, and since Granville Street corridor is the closest entity to a civic space, it will need to become completely pedestrianized in order to serve the citizens' civic space needs (Interview Participant 7, 2011). Emery Barnes Park has already gone through a 10-year process of being designed and built, so it is too early to tell whether it needs to undergo any redesigning in the near future (Interview Participant 2, 2011). This park, given the general levels of satisfactions drawn from surveys and interviews, is currently meeting a great degree of current needs and expectations of the downtown community. The North False Creek Waterfront walkway is also meeting the needs of both pedestrians and cyclists in the area, and it may not need to undergo any further physical modifications in the near future (Interview Participant 4, 2011). The waterfront walkway, however, could have possibly attracted more variety of uses had it been designed to include some central 'hubs' for activities. A similar shaped linear park called Ohlone Park in California, houses a segregated dog park, central basketball court as well some central open spaces, thus attracting both planned and unprogrammed activities (Cooper Marcus & Francis, 1998). All the users surveyed in the waterfront stated their primary reasons for usage based on solitary or individual-based activities. This finding suggests that long staying engagements, and group activities that one would normally observe in central spaces is not very prevalent in North False Creek Waterfront walkway. The North False Creek Waterfront walkway, along with the other public spaces in Downtown Vancouver, could also house more art pieces in the future. These spaces currently do not have any interactive art pieces one would see in numerous prominent public spaces of other cities. Interactive art installations can invite more users, making

public spaces more imaginative and more attractive. This waterfront corridor could follow suit from Chicago's Millennium Park where interactive art installations attract many visitors and users on a daily basis (Interview Participant 7, 2011). Creekside Park is still undergoing expansion schemes, and the future design outcomes and potential uses are not well known currently (Interview Participant 3, 2011). As was mentioned by a few on-site survey participants, the park could benefit from a few design features such as better lighting along its edges.

This chapter presented the findings and results from observation and mapping of activities, on-site user surveys, and semi-structured interviews. The following chapter analyzes the presented data, providing insights and answers to the research questions.

Chapter 6: Analysis

This chapter analyzes the results obtained from utilized research methods and in conjunction with findings from previous literature. Discussions will focus on answering the four research questions and addressing the advantages and benefits of assessing the degree to which each study site meets the diverse requirements and expectations of its users.

The primary objective of this study is to assess current functions of public spaces in Downtown Vancouver and to analyze whether each of the selected spaces are accommodating a diverse range of uses and activities in accordance to the range of expectations and requirements of their users. This research was approached to answer the following four questions:

1. How are the selected public spaces in Downtown Vancouver being primarily used?
2. To what extent does diversity of uses and activities in each of the selected public spaces help to meet the diverse expectations and requirements of their users?
3. And further more, to what extent does perception of safety, quality of amenities, and opportunities for usage satisfy the expectations and requirements of users?

The results indicate that some of the public spaces in this study offer more diversity of uses and activities than others. Two of the public spaces, Emery Barnes Park and Creekside Park, accommodate a more diverse range of activities for their users. Meanwhile, Granville Street corridor and the North False Creek Waterfront walkway are clearly used mostly through a fewer set of activities such as walking and cycling. The degree to which uses and activities meet the diverse range of expectations and requirements of users had connections with design features, quality of amenities,

proximity to residential and retail areas as well as being an edge or central space with. Perception of safety, quality of amenities, and opportunities for usage were shown to influence users' diverse expectations and requirements as well. The answer to the research questions will be explored in more detail in the upcoming sections.

6.1 How Are the Selected Public Spaces in Downtown Vancouver Being Primarily Used?

Observation of activities revealed that public spaces that are corridor-oriented and linear, when compared with neighborhood pocket parks and central spaces, tend to be used more through short-staying and transitory types of activities, as stated previously by Cooper Marcus and Francis (1998).

Granville Street corridor is primarily used through short-staying and transitory uses. Pedestrians passing through or waiting for public transit at bus stations comprise the vast majority of users. People do use the benches and the hard edges on the north end of the corridor, although neither continuously nor in high levels. Findings from observation sessions were in correlation with survey respondents' stating their primary use as just walking through the space. While this finding is hardly surprising given the fact that corridor spaces tend to be used for short-term activities, it must not be forgotten that the study site had been redesigned and upgraded with new amenities in the past few years in order to function more as a central gathering space rather than a linear street corridor. In short, Granville Street corridor had been redesigned in order to encourage longer staying activities (City of Vancouver, 2010; Interview Participant 1, 2011; Interview Participant 3, 2011). Previous literature suggests that people tend to stay for longer periods within a public space if they have incentives (Cooper Marcus & Francis, 1998). Most users do not

linger on long even though the corridor contains a number of retail stores, numerous seating amenities, and even a few art pieces. Survey results indicate that some users would like to see improved aesthetic qualities of the space such as “store facades, trees and plants”, and with better management to keep the street clean. Such modifications and improved management might go some way in making users stay within the space longer, but it would not necessarily guarantee wider range of uses. An uncertain possibility of ensuring higher diversity of uses and activities in Granville Street might be due to the fact that the corridor is not completely pedestrian-oriented. The street cannot become a vibrant public space unless it first becomes completely pedestrianized (Interview Participant 5, 2011). A number of interview participants indicated that the VIVA Vancouver program has managed to bring in people to Granville Street during special events, encouraging more active engagements with the space through entertainment, long-stay sitting, exercising, group activities, and playing sports when the street is closed off to traffic. Events-programming has been hailed as successful by two of the interview participants in this research, but these programs are temporary in nature, and the space still functions mainly as a transit hub rather than a central public plaza designed for active engagements.

Cyclists and pedestrians both use Creekside Park in similar numbers. Benches and the middle grassed area of the park are used through passive activities such as sitting and lying down. In Creekside Park, these activities were observed to occur at a lower rate than Emery Barnes Park, which also has a central grassed area. Survey respondents corroborated the results of observation of activities, mostly indicating a passive engagement with the park through sitting on the benches, walking through the space, or

lying down on the grass during warm and sunny days. The children's playground was used heavily as well. Creekside Park is an example of clear and simple design that is well utilized, especially when compared to corridor spaces such as Granville Street and the North False Creek Waterfront walkway. Interestingly, two of the interviewed planners at the City of Vancouver revealed that Creekside Park is 'a work in progress' (Interview Participant 1, 2011; Interview Participant 3, 2011).

Emery Barnes Park is the public space that boasts both active and short term/transitory uses. Sitting on the bench, sitting on edges, and lying on the grass were observed in specific areas of the park. At the same time, active engagement through playing, children using the playground area, and people walking their dogs within the dog park were observed as well.

North False Creek Waterfront walkway is used mostly for short-term activities, with some long-term engagements recorded and observed as well. Activities such as exercising and jogging were recorded during observation sessions, on-site surveys, and through semi-structured interviews. Usage through sitting on the site's benches and lying down on the grassed areas of the space were also recorded. A number of survey participants mentioned long term engagements such as sitting and reading, enjoying the view, and doing exercises as primary reasons for coming to the waterfront.

Both males and females were surveyed in this study, and no significant relationships between types of usage and gender of the survey respondents were noticed. Observation of activities also indicated that males and females utilize public spaces equally, with no real gender gap in terms of usage types or levels. No significant gender gaps or issues with regards to perception of safety, quality of amenities and opportunities for usage were

observed either.

Whether each of these study sites is being used through accommodating the diverse range of expectations and requirements of its users will be explored in the next section.

6.2 To What Extent Does Diversity of Uses and Activities in Each of the Selected Public Spaces Help to Meet the Diverse Expectations and Requirements of Their Users?

Some of the public spaces are certainly being used through a wider variety of activities than the others. Observation and mapping of activities, on-site user surveys, and semi-structured interviews show that Emery Barnes Park is the one space offering the most diverse range of uses and activities. Creekside Park, even though cited as a work in progress and not well known in terms of usage types by the interview participants, offers a more diverse set of uses than both Granville Street corridor and the North False Creek Waterfront walkway. For better illustration, it was appropriate to rank the study sites according to their range of uses and activities.

6.2.1 Study sites ranked according to diversity of uses observed and recorded in surveys and semi-structured interviews

By analyzing results from observation of activities in the study sites, as well as assessing the answers provided by both survey and interview participants, the four spaces were ranked. Table 11 below demonstrates which sites offer more diverse range of uses and activities.

Rank	Name of Public space
1	Emery Barnes Park
2	Creekside Park
3	North False Creek Waterfront walkway
4	Granville Street corridor

Table 11: Ranked study sites according to diversity of activities within site boundaries. Source: Behnia, 2011.

6.2.2 Why is Emery Barnes Park used in more diverse ways than Granville Street corridor and the other study sites?

Mapping of observed activities in Emery Barnes Park suggest that this space is used more diversely due to its well partitioned sub-areas designed for both programmed as well as un-programmed uses and activities. The pathways circulating throughout the park divide the site into many smaller areas, and map of activities show that people conduct different activities within certain sub-areas according to what opportunities those sub-areas provide. At the same time, the open grass area in the center of the park is shown to be more flexible and a number of different activities occur in this central sub-area throughout a typical day. In a sense, the open grassed area is a flexible space where people can pursue a variety of activities, while a range of specific activities are devoted their own spaces in other partitioned sub-areas. This finding seems to corroborate earlier research by Kaplan and Kaplan (1989) stating humans' tendency to generate more positive response to open and yet defined urban environments. Survey of users revealed some insights that corroborated findings from observation sessions. The vast majority of survey respondents were satisfied with what Emery Barnes Park offered them, mostly citing the fact that the park contained many features and areas. As mentioned previously, a number of survey respondents were explicit about their high comfort levels in the park

due to a feeling that “everybody has their own personal spaces” for desired activities. As was noticed during observation and survey sessions, the presence of the homeless and those some might label “the other” was not a negative according to survey participants. England (2008) had also suggested the need to ensure full participation of more citizens of different socio-economic backgrounds in public spaces, and Emery Barnes Park seems to be an example of success in this regard.

The finding points to more than just a well designed and well partitioned park space; it also confirms earlier research regarding amount of spaces devoted to various activities, and how these amounts can influence tension levels and conflict for space utilization (Ostermann & Timpf, 2007). The edges of different sub-areas in Emery Barnes Park and Creekside Park are well demarcated while Granville Street corridor does not have such edge demarcations. Clear defined edges were stated by Forsyth and Musacchio (2009) as crucial in providing more space for more activities and reducing tension over space appropriation. With the exception of Creekside Park, the other study sites do not necessarily offer a large open space that has the flexibility for a variety of uses. A flexible space could be more successful in the long term as it lets its users ‘take control’ and appropriate the space for their specific activities (Interview Participant 3, 2011; Jacob & Hellstrom, 2010). Granville Street corridor and the North False Creek Waterfront walkway are designed to act as pedestrian corridors rather than wholesome public spaces. The fact that these corridors are connected to other public spaces makes it unnecessary for them to have to incorporate more uses and activities, and not all public spaces need to provide wide ranges of activities (Interview Participant 1 2011; Interview Participant 7, 2011). The upgrading scheme of Granville Street corridor, however, was pursued with

the goal of making the space function more like a central plaza, but it seems that it is still functioning more like a street corridor with few types of uses and activities taking place.

A street or any other public space that functions within a strict set of activities and uses is not necessarily less successful than a public space that incorporates more uses and activities. Diversity of uses and activities has to be studied in conjunction with how they accommodate the existing and future range of diverse expectations and requirements of their users. Compared to Creekside Park, North False Creek Waterfront walkway, and certainly Emery Barnes Park, Granville Street corridor is not only functioning through a fewer set of uses and activities, it is also accommodating fewer of its users expectations and requirements. Lack of greenery, a street façade that is “mediocre to look at”, uncomfortable and not well-covered seats, and presence of cars were cited as reasons for not staying in the space too long. The fact that seating amenities in Granville Street corridor are not actively used confirm earlier finding by Whyte (1988) regarding the quality of any urban environment be measured by the existence of comfortable places for pedestrians to sit. There are of course social reasons that are not the fault of the space’s location, proximity to other urban areas, or even the way it is designed. The presence of the homeless and drunk young people at night were certainly noticed by a number of survey respondents, being cited as negative attributes of the space, although these attributes were shown to be minor in influence when compared to design and aesthetic factors. Many users did agree that more design features and amenities such as water fountains, garbage bins, better lighting, and more comfortable sitting areas could still be added to not only Granville Street corridor, but to both the North False Creek Waterfront walkway and Creekside Park as well. Survey of users in Emery Barnes revealed that

people come to the park for a wide range of reasons, while respondents in the other sites cited fewer specific reasons for frequenting those spaces. It may seem logical to conclude that respondents in the other spaces have a less diverse range of expectations and requirements due to their stated reasons for visiting the sites, but as has been discussed, this is simply not the case.

Almost half of the survey participants cited the close proximity of Emery Barnes Park to their homes as important for visiting, similar to answers provided in other sites. This finding does correlate with Pugalis' research results from Northeast England's public spaces where survey respondents stated close proximity of the study sites to their residences as very important (2009). Other public spaces, however, are in close proximity to residential, retail and other urban services as well; and therefore proximity is not necessarily a determining factor in the park's higher variety of uses and activities.

Interestingly, a number of respondents in Emery Barnes Park indicated that they use the park because there are no other spaces like it in the nearby area. This finding confirms Berelowitz's research (2005) on Vancouver public spaces being mostly edge-oriented and not central. Being one of the few centrally located public spaces in Downtown Vancouver was confirmed as strength of Emery Barnes Park by a number of interview participants as well.

Emery Barnes Park incited a sense of being family-oriented and 'friendly' according to survey respondents, something that is lacking from respondents from Granville Street corridor and mentioned by only a few users in other study sites. Numerous users also pointed to presence of others in Emery Barnes Park as the primary factor in their positive perceptions of safety, while some survey respondents in Granville Street corridor wrote

statements such as the street being “just cold and unwelcoming”. Most of the survey participants in Emery Barnes Park did not feel unsafe. Also, these users did not have negative perceptions of safety, while numbers of safety concerns in Granville Street corridor were higher.

Semi-structured interviews revealed that professional actors perceive Emery Barnes Park as more diverse in terms of uses and activities because it is very busy most of the time, is well-designed, and provides for some specific needs of the community by having a dog-park and a good-sized children’s playground. Indeed, findings from surveys and observation and mapping of activities seem to corroborate the interview participants’ inputs. Cooper Marcus and Francis (1998) also support the theory that busy public spaces attract more people than empty spaces. The design of the park allows for both planned and unplanned activities due to its partition into a number of sub-areas. It is important to recall that Granville Street corridor is a very busy space, as observation of activities showed. Therefore, being a crowded and busy space does not always result in attracting more people or meeting more of the diverse expectations and requirements of users.

There are a number of connections between user inputs, gathered data from observation sessions and previously stated criteria for making great streets by Jacobs (1993). Lack of physical comfort due to the orientation and design of chairs, lack of the ability to feel connected and being able to socialize with others, a less than interesting façade, and a lack of proper maintenance efforts to keep the place clean seem to suggest that Granville Street corridor is already missing four major criteria as addressed by Jacobs: physical comfort, being able to walk with leisure, qualities that engage the eyes, and maintenance.

Corraliza, reviewed by Ward Thompson (2002), had stated that the street is a more true type of public space due to how it can accommodate non-spatial and emotional needs of their users, while parks were being used by a few special categories of people. This earlier suggestion in the literature does not correspond with findings in this research, especially since Granville Street corridor seems to be lacking in providing for emotional needs such as social engagement with other people and other types of long-staying activities; all of which were stated as occurring in both Emery Barnes Park and Creekside Park.

6.2.3 Do contextual factors of location within the urban landscape, as well as proximity to residential, retail, and other urban services explain levels of diversity of usage within the study sites?

It is interesting to note that all the public spaces in this study are within appropriate distances of 1200 meters with regards to major residential, retail, and commercial areas. The fact that Emery Barnes Park and Creekside Park are used more diversely and provide for more of the diverse expectations and requirements of their users than Granville Street corridor and the North False Creek Waterfront walkway demonstrate that proximity to residential, retail and other urban amenities do not necessarily explain how and why one public space is used through a wider range of activities than another. This is especially a valid line of reasoning given the previous research by Kaczynski et al. (2009) who stated that people with greater sense of attachment to a public space are willing to travel longer distances to visit that space. The fact that twelve out of the twenty five survey participants in Emery Barnes Park live beyond a 15-minute walking distance also showcases that proximity to residential and retail areas, while crucial in many spaces, does not alone explain nor result in accommodating more of the diverse expectations and

requirements of users.

Analysis of survey results indicated that the majority of the users in study sites other than Emery Barnes Park live within 15 minutes of walking distance. Accessibility through proximity of residential areas is not a strong factor influencing lack of diversity in Granville Street corridor or the North False Creek Waterfront walkway. This finding does not refute the theory that proximity of all public spaces to other urban areas as a crucial factor in usage levels. Research findings suggest that the studied spaces are already within appropriate proximity to residential, retail, and other urban amenities, and a lack in accommodating the diverse expectations and requirements of users might stem from a combination of factors other than proximity to residential and retail areas.

Being an edge public space or a central public space in Downtown Vancouver might not necessarily explain perceptions of safety and opportunities, and thus the accommodation of diverse expectations and requirements. While Emery Barnes Park, a central neighborhood space, is used through a diverse range of activities and meeting a wider range of its users' expectations and requirements, Granville Street, also a central space, does not. Also, Creekside Park, a public space on the edge (waterfront), offers more opportunities for activities than Granville Street corridor and the North False Creek Waterfront walkway. A possible explanation for why Granville Street corridor is less diversely utilized, aside from not being a well-partitioned space, is the fact that it cannot function as a central gathering space because it is not completely pedestrian-oriented. As was mentioned by a few users and one interview participant, Granville Street corridor could have functioned better had it been made completely pedestrianized. The corridor currently functions more diversely when it is completely closed off to traffic and fully

pedestrian-friendly during the VIVA Vancouver events (Interview Participant 3, 2011).

Judging by the state of uses and activities during the VIVA Vancouver events, it is safe to assume that a more permanent pedestrian Granville Street corridor could arguably function more like a central plaza, offering a more diverse range of uses and activities as a result.

6.2.4 Do existing physical factors of design and aesthetic characteristics (including the amount and placement of amenities) within public spaces explain state of diversity of usage?

Previous literature had indicated that people do not pay attention to good quality of design and aesthetic matters in the public space when they like the space, and only notice low quality design and unpleasant aesthetics (Pugalis, 2009). Findings from this research, however, show that users do acknowledge high-quality design and great aesthetics just as much.

Current design features and amenities within these public spaces can partially explain the state of diversity of uses and activities. Emery Barnes Park is an example of a public space that is heavily designed, incorporating numerous types of amenities such as a playground, a dog park, tables, benches, as well as an open grassed sub-area. Granville Street corridor and the North False Creek Waterfront walkway are also well designed with a large amount of street furniture, covered/shaded areas, and even a number of street vendors. Emery Barnes Park is used through more diverse types of activities than both Granville Street corridor and the North False Creek Waterfront walkway. Survey participants did respond to the design characteristics of the study sites, citing positive/negative perceptions toward design features, aesthetics and amenities' qualities. Granville Street corridor, even though having a number of aesthetically interesting art

pieces, does not act as a meeting place, functioning mainly as a space for short-term activities. This finding confirms earlier research by Zebracki (2011), which suggested that public spaces that are designed as passageways, even if containing visually interesting art installations, would not necessarily act as spaces for long-staying activities. At the same time, survey participants' negative comments regarding building facades suggest a lack of visual complexity that would engage their eyes, which was mentioned as a requirement for great streets by Jacobs as well (1993). The North False Creek Waterfront walkway does benefit from having high quality aesthetic elements in the form of trees, a few art installations, diverse vegetation, as well as providing great views of False Creek and the city's skyline. Providing a great view is also mentioned as having a positive influence on people's preference within the Preference Matrix developed by Kaplan and Kaplan (1989). The waterfront corridor still functions less diversely when compared to both Creekside and Emery Barnes Parks. It is imperative to recall that the waterfront walkway was built for only a few specific purposes, namely for cyclists, pedestrians enjoying the view, and roller-bladers and other types of exercises (Interview Participant 1, 2011). On this note, it may be prudent to suggest that the North False Creek Waterfront walkway is meeting the original functions it was designed to accommodate, and the inputs of many survey participants support this finding as well. Demands for more amenities such as benches, garbage bins, and even water features and food vendors suggest that even a corridor space designed for few specific functions can still improve the way it accommodates its users diverse expectations and requirements.

Boasting natural views of False Creek and with less 'manicured' lawns and vegetation seems to suggest that Creekside Park might be acting as a more natural looking public

space, drawing a lot of users because of its natural aesthetic qualities. The aesthetic qualities of Creekside Park are of course missing in the more heavily designed Granville Street corridor. The fact that Granville Street corridor does not have an adequate supply of trees and vegetation is not only pointed out as a negative quality by numerous on-site users, but also confirms previous literature stating people's appreciation for the presence of trees and vegetation in both natural looking and heavily designed spaces (Ozguner & Kendle, 2006).

Creekside Park, a simpler design with less path circulations and less seating than other study sites, is used more diversely than all other sites except Emery Barnes Park. Survey results indicated that more users had positive perceptions of opportunities for activities as well as safety in Emery Barnes Park and Creekside Park, especially when compared to Granville Street corridor.

Previous literature suggests that people tend to stay for longer periods within a public space if they have incentives (Cooper Marcus & Francis, 1998). Even though Granville Street corridor is ripe with retail facilities and numerous seating amenities, most users do not linger on long. Survey results indicate that some users would like to see improved aesthetic qualities of the space in the form of store facades, trees and plants coupled with better management to keep the street clean. Such modifications and improved management might go some way in prolonging users' time staying in Granville Street corridor. Jacobs (1993) also confirmed the importance of maintenance and comfort as essential in making streets great. Lack of proper management is an issue that can make a public space less attractive for usage (Interview Participant 2, 2011). Additional design features such as lightings, varied types of seating facilities, trees, and landscaped areas

should be maintained more often and the space kept more clean in order to provide additional incentives for users to come and stay for more reasons.

With regards to design characteristics, a space could actually become less diversely used after going through a new redesigning phase. Granville Street corridor used to have more plantings and trees before it was redesigned for the Winter Olympics Games of 2010. A number of survey respondents mentioned that they liked the street better when it was more treed. Research findings indicated that perception of safety and opportunities for usage in Granville Street corridor had actually not improved since the redesigning phase, mostly due to the way the space was 're-imagined'. This finding is also confirmed by a current City Council member, interviewed for this research, also mentioned that the new design of Granville Street is lacking in adequate green and treed areas (Interview Participant 5, 2011).

6.2.5 Is it necessary for all public spaces in Downtown Vancouver to be used through more diverse types of uses and activities? Differences and Similarities between users and professional/academic/political actors

The issue that whether all public spaces in Downtown Vancouver should offer more diverse ranges of activities was discussed with interview participants and through analyzing survey results from on-site users. Most of the users, when asked what they would like to see changed within the study sites, revealed that they would like to see some degrees of improvements. Survey results from all the study sites contained comments/requests for additional amenities and more opportunities for activities through design modifications. Two of the interview participants were explicit in their support for the these sites and others like them containing more opportunities for activities, while

another participant mentioned the need for public spaces to be ‘age friendly’ as well as reflective to social and cultural changes already occurring in Downtown Vancouver due to immigration. One interview participant did mention that each public space needs to look different than another one, and that we cannot have “public spaces all looking like each other” (Interview Participant 2, 2011).

Cooper Marcus and Francis also mention that different public spaces such as neighborhood parks and plazas are designed to accommodate somewhat different uses and activities (1998). An interview participant noted that we cannot have the same range of activities within all of our public spaces, but we can aim for each public space to house and encourage more opportunities in the future in order to draw in as many potential users as possible (Interview Participant 7, 2011). Another interview participant regarded pedestrianization of all public spaces as the best strategy to ensuring more successful usage in the future. The argument goes that “the more we pedestrianize our public spaces, the more successful our public spaces will become” (Interview Participant 5, 2011).

Not all spaces are designed for a multitude of uses and activities. Indeed, many spaces’ physical dimensions could actually limit the amount and range of uses that designers could incorporate within them. Given its original inception to act as a corridor space, the North False Creek Waterfront walkway is meeting the expectations and requirements of many of its users. At the same time, Emery Barnes Park and Creekside Park were originally designed to serve a multitude of user requirements, and this is a contributing factor in their higher diversity of existing uses and activities. The interesting deviation from original purposeful designs is the case of Granville Street corridor, which was ‘re-imagined’ to function more like a plaza and a central gathering space, attracting

wider uses and activities. As mentioned previously, Granville Street corridor seems to still be functioning as a through-fare corridor for both automobiles and pedestrians.

Many urban public spaces are also catered towards a few types of desirable users such as shoppers, families, and those with the right 'image' and 'criteria' (Banerjee, 2001). Accessibility to the public space is therefore an ongoing issue. Not everyone would like to use a space and not everyone can feel welcome in every single urban public space. Also, not everyone is welcoming of other 'social groups' or users within the same public space. Survey results from study sites in this research indicated that people could be weary of those they deem 'unwanted' and 'suspicious'. While most of this negative reaction was focused toward potential drug users and the homeless, it should be noted that perception of the other is subjective rather than objective, and one person's perception of who is an appropriate user might differ from the next person's. A clear example of this subjectivity and difference was with regards to Interview Participant 4 (2011) having concerns about drug usage in Emery Barnes Park. None of the users surveyed in Emery Barnes Park had any concerns with regards to drug users, the homeless, and persons of different socio-cultural backgrounds, however. The better approach, for planners and public space designers, is perhaps to aim toward as many types of uses and activities as possible, knowing that no one public space can meet an entire population's diverse expectations and requirements.

This study revealed that both users and the politico-bureaucratic-economic and academic actors have somewhat similar ideas about the importance of diversity of uses and activities. Both users and the politico-bureaucratic-economic and academic actors involved with designing and planning public spaces, share the philosophy of aiming for

and meeting more of the diverse expectations and requirements of users. A major finding is users' desire for having more opportunities and more amenities in virtually all the public spaces studied. This finding confirms the original premise that people's expectations and requirements from a public space can be diverse. When asked what they would like to see changed or improved, the vast majority of users cited additional amenities and strategies for creating more opportunities. Some users also had comments for site improvement in Emery Barnes Park, which affords the most diverse range of uses and activities in this study.

6.2.6 Are the goals and objectives of the CityPlan 1995 being met in the studied public spaces?

The CityPlan report of 1995 identified a few specific goals and objectives with regards to developing downtown public spaces.

A number of users and participants cited the existence of Emery Barnes Park in the Downtown South as crucial for providing for the needs of the immediate community. Indeed one of the most important roles of the park is its location and precedence in the neighborhood (Interview Participant 3, 2011; Interview Participant 5, 2011). The fact that no other central pocket parks exist in the area is an indication that the CityPlan objective of acquiring public parks in areas previously devoid of such spaces is being applied, at least in the case of the Downtown South neighborhood.

One can strongly argue that CityPlan's goal of creating a variety of park sizes, shapes and uses are being met in the case of the studied spaces in Downtown Vancouver. As a whole, the study sites are comprised of different sizes and shapes, and together they do

provide for a diverse range of user expectations and requirements. As individual spaces, however, some are clearly meeting more of their users' expectations and requirements.

While functioning as a corridor space, much as in previous decades, Granville Street corridor was redesigned to function more like a central civic space before the 2010 Winter Olympic Games. According to a number of users and interview participants, this corridor is suffering from a lack of adequate tree and vegetation coverage. A specific goal of the CityPlan for creating vibrant public spaces is to increase the number and variety of trees in a public space such as a street (CityPlan Overview, 1995). Given the findings from Granville Street corridor, it would seem that not all public streets are meeting this specific objective of adequate tree coverage.

The report also called for creating attractive downtown plazas and parks as well as increasing access to the waterfront. Previous literature suggests that Downtown Vancouver has been rather successful in terms of the number of edge public spaces developed on its waterfronts and not so much in terms of central gathering spaces (Berelowitz, 2005; Czypyha, 2010). Findings from Granville Street corridor, which was redesigned with the goal of functioning more as a central plaza, seems to suggest that the core has not managed to create an adequate supply of central plazas.

A last major goal of the CityPlan was to preserve natural views to the mountains and the water in order to enhance the role and quality of public spaces. Given the sheer number of open public spaces on the waterfront as well as findings from both Creekside Park and the North False Creek Waterfront walkway, public access to the mountains and the water have not only been preserved but also enhanced. A major reason for many users visiting the edge spaces in this study was to access the natural views of the sea, the city

skyline, and the mountains. It is prudent to state that the goal of the CityPlan with regards to preserving access to natural views of the mountains and the water have been met by the politico-bureaucratic-economic actors in the City.

6.3 To What Extent Does Perception of Safety, Quality of Amenities, and Opportunities for Usage Satisfy the Expectations And Requirements of Users?

On a general level, all interview participants and the majority of survey respondents, had positive perceptions of safety of the selected public spaces in this study. There were, however, a number of safety issues raised by some of the survey and interview participants.

6.3.1 Specific safety issues in the public spaces under study

Granville Street corridor boasted the most negative safety perceptions. The results with regards to safety issues ran contrary to previous literature by Ozguner and Kendle (2006), which had suggested that more heavily designed public spaces tend to be regarded as more secure and safe than public spaces that are less ‘manicured’ and more natural looking. Since the more natural looking Creekside Park was perceived as more safe than Granville Street corridor suggest that inclusion of more design elements and amenities do not necessarily make users feel more safe.

With regards to safety issues in Granville Street corridor, there seems to be some agreements between findings obtained from politico-bureaucratic-economic and academic actors and on-site users. Two interview participants cited the existence of the pub crowd at night as possibly uninviting to other potential users. Three survey participants also noted that they would not venture into the space at night due to the

presence of “some drunken people coming out of the pubs”. Granville Street corridor also has the highest number of panhandlers. There is also the correlation of the least variety of activities and uses in Granville Street corridor and number of safety issues raised through both interviews and surveys. Results from the interviews, however, indicated that the space used to be unsafe before the redesign phase, and that the City had approached the redesigning of this space with “the idea of cleaning up the place” (Interview Participant 3, 2011). At the same time, the fact that the corridor is part of the ‘entertainment area’ of the city does bring in a number of problems concerning the pub going crowds (Interview Participant 1, 2011).

Two survey respondents noted that Creekside Park is used by a number of homeless persons as well as drug users at night. Another survey participant agreed that Creekside Park might not feel the safest at night because of “being close to the low-income areas of East Vancouver”. At the same time, Creekside Park is more diversely used than other study sites except for Emery Barnes Park. There were no issues with regard to lack of proper management and hygiene issues. Being a clean and well maintained space could be contributing to this space’s more varied types of uses and activities. The fact that the park is not well used at night is an issue that should be addressed. None of the users and interview participants cited any specific strategies for making this place used at night, but perhaps by improving lighting or programming night-time events, the space could lose its perception as a daytime-only park.

Some sections of the North False Creek Waterfront walkway were mentioned as being used by squatters and homeless people at night. One survey participant noted that he had seen a number of “drug users during early hours of the morning”. Like Creekside Park,

the vast majority of people cited a clean and well-maintained area within this corridor. At the same time, a few users mentioned lack of interest for nighttime visiting. The fact that the nearby cafes and restaurants close early was cited as a primary reason why some users did not visit the area at night. Lack of nighttime activities in many parts of Downtown Vancouver is also due to existing by-laws and regulations discouraging nighttime usage. One of the interview participants confirms this finding by stating that some of the City's existing by-laws make it hard for people to use public spaces and occupy the public realm after certain times at night (Interview Participant 7, 2011).

One interview participant and one on-site user mentioned some drug use in Emery Barnes Park at night. Emery Barnes Park, however, carried the lowest number of complaint with regard to safety issues. Nearly all the survey participants mentioned good maintenance and close proximity to high-density residential and retail areas as making them feel safe. A number of survey respondents cited the partition of the space as a great quality, since it allowed for different users to inhabit the space without 'occupying' other people's areas. As observation of activities showed, a number of homeless persons use Emery Barnes Park, but they did not seem to arouse complaints from any of the survey participants. Unlike Emery Barnes Park, some users did mention discomfort with regards to squatters and the homeless within the other study sites, so there must be a reason as to why Emery Barnes Park is more successful in attracting a higher variety of uses with the lowest levels of safety issues. The fact that the homeless were using the benches in the northeast sector of the park away from users of other sub-areas, indicates that partitioning this space into a number of zones designed for both programmed and flexible uses is working. This finding is congruent with previous literature stating that an important step

towards encouraging public space usage by people of varied socio-economic backgrounds could be pursued through providing public spaces with diverse range of amenities so as to increase the likelihood of meeting diverse needs (Cattell et al., 2008). A number of survey respondents also agreed that the “homeless use their own areas” and do not bother them, further pointing to partitioning as a successful design feature in the park.

Another interesting finding seems to be the lack of any hints towards ethnic/cultural and gender issues regarding safety levels. Survey results, observation of uses and activities, and the semi-structured interviews did not reveal any problem areas with regards to lack of comfort and security due to one’s ethnic/cultural backgrounds and/or one’s gender. This of course does not suggest that such issues are not worth further examination in future research but rather imply that they are not as relevant within the contexts of this research framework.

6.3.2 Relationships between general perceptions of safety and opportunities for usage as determined by physical and contextual factors of design, aesthetics qualities and proximity to other urban amenities

Survey results indicated that most users feel safe within these public spaces due to both physical and contextual factors. Some lower perception of safety are related to design characteristics or proximity to other urban areas, social reasons such as drug usage, rowdy and unruly behavior of other users at nighttime, and possible presence of the homeless.

A number of research participants complained about Granville Street corridor’s design, citing lack of trees and vegetation features “that would make the place look nice”.

Interestingly, Granville Street corridor corresponded with the highest rate of complaints with regards to safety issues. Creekside Park and North False Creek Waterfront walkway both enjoy being near False Creek, providing a visual connection to both the urban and the natural environment around the City, while Granville Street corridor is devoid of such qualities due to its central location. Emery Barnes Park, while also a centrally located space, boasts visual complexity in the form of many trees and green areas, clearly defined edges, as well as waterways and fountains. These aesthetic features were clearly pointed by both users and interviewees as important factors in making Emery Barnes Park pleasant.

Judging by findings from Emery Barnes Park, it is necessary to analyze the design of the other public spaces in more detail. Creekside Park is not as heavily partitioned into separate sub-areas for different activities, and some users had some negative perceptions with regards to safety. Granville Street corridor had the highest negative perceptions of safety, with the design of the space criticized by a number of participants as well. More than a few research participants criticized the fact that Granville Street corridor has no trees and planting features, thus not completely pedestrianized. A number of survey respondents stated that “we should start all over again” or “this place needs trees”, while one of the interview participants stated a need to “make this space completely shut off to traffic”. A number of interview participants agreed with the users, mentioning the lack of trees, plants, and even interesting art features as making the space ‘cold’ (Interview Participant 5, 2011; Interview Participant 7, 2011). Interestingly, the same research participants mentioned safety issues with regards to the homeless and the rowdy crowds at night. Given the fact that Granville Street corridor does not suffer from being far from

residential, retail, and other urban areas, demonstrates the influential role of design and aesthetic qualities in establishing more positive perceptions of safety.

With regard to the proximity factor, many participants agreed that spaces such as Emery Barnes Park and the North False Creek Waterfront walkway are safe because of close proximity to residential and retail areas, aesthetically pleasant design, and good connection to other urban areas. Research findings show that Downtown Vancouver's residential and commercial densification in the past two decades has helped with creating a contextually safe environment due to ever-smaller distances between public spaces and other urban areas. By having used the principles of 'eyes on the street', the public spaces in this study have essentially been regarded as safe by the majority of residents (Interview Participant 1, 2011; Interview Participant 3, 2011). As mentioned in the previous chapter, the proximity factor might actually be working against Granville Street corridor in an interesting way. Proximity of the corridor to retail areas in the form of pubs and restaurants are possibly helping some users feel less secure. The fact that a number of survey respondents complained about the drunken crowds' presence at certain times suggests that proximity to retail areas does not always result in making many feel secure, especially when a good portion of the economic activities are based on evening and nighttime alcohol consumption. The type(s) of retail and associated economic activities near or on the public space have a role to play in terms of influencing perception of safety and opportunities for usage. Another interesting point to bear in mind is that CityPlan (1995) had designated the areas near Granville Street corridor as an entertainment strip in order to help the neighborhood economically. While, in the words of Boyd (2010), this goal of the CityPlan has certainly made the area near Granville Street corridor into the

entertainment district of the City, it has not actually resulted in accommodating a wide range of users' expectations and requirements.

Many users in Emery Barnes Park, Creekside Park, and the North False Creek Waterfront walkway cited feeling a sense of comfort and belonging. Attachment to place and a sense of belonging has been noted as very important within the New Urbanist Theory because of how it can foster a sense of community and result in resident interaction (Talen, 2000; Pugalys, 2009). This finding adds another level of importance to how the design, aesthetic qualities and location with relation to other urban areas cannot only work to influence perceptions of safety and opportunities for usage but perhaps create a sense of belonging, comfort and attachment as well.

The fact that many users in Granville Street corridor mentioned not feeling too comfortable, belonging or attached, while many of their counter parts in the other sites did, adds credibility to the connections made between place attachment and a sense of comfort, positive perceptions of safety and opportunities for usage.

6.3.3 Relationships between quality of amenities and opportunities for usage with expectations and requirements of users

When asked what they would like to see changed in the public space, survey participants cited a number of specific ideas. For all the public spaces in this study, users asked for an increase in the number of amenities, focusing on public washrooms, water features, garbage bins, more seating amenities, more covered/shaded areas, more street vendors, as well as more trees and grassed spaces. Ideas for future changes through amenity and design modifications were not only noted for Granville Street corridor or Creekside Park, but for other spaces in this study as well. Except perhaps Emery Barnes

Park, the other spaces in this study could benefit from more seating spaces, more covered/shaded areas, more public washrooms and other amenities desired by their users.

As mentioned by a number of research participants, making public spaces more pedestrian-oriented can be an effective method as well. Observation and mapping of activities indicated that users pursue a wider range of activities when the public space has clear demarcation lines and is partitioned into sub-areas. Emery Barnes Park and Creekside Park have been partitioned into a number of sub-areas, enhancing their perception of usability through a wider range of activities than the other study sites.

Many survey participants in Emery Barnes Park indicated that downtown Vancouver could use more of such public spaces. Consequently, three interview participants talked about Downtown Vancouver as an area that does not have many central public spaces like Emery Barnes Park. Lance Berelowitz also mentioned the lack of central gathering spaces as a shortcoming of the Vancouver's public realm (2005). Both research findings as well as the review of previous literature show that Downtown Vancouver needs to house more central public spaces in the future. Not having these types of public spaces means that a portion of traditional uses and activities meant for the public realm will be harder to pursue. This is a somewhat alarming finding, especially considering the rise of telecommunication technologies in the past few decades, having resulted in less public space utilization (Banerjee, 2001). Just deciding to put a new central plaza or square within the downtown core might not be enough to encourage more variety of uses and activities, however. Large plazas need to be designed with sub-areas that are well partitioned. Partition of the public space into specific areas planned for both programmed and unprogrammed sets of activities has been shown as effective in Emery Barnes Park

and Creekside Park. A newly redesigned central space needs to provide as many aesthetically pleasing features as is possible economically and physically. Previous research also shows that people tend to not want to use central open spaces “devoid of planting and street furniture” and usually only pass through such spaces quickly, as was shown to be the case in Granville Street corridor (Cooper Marcus & Francis, p. 36, 1998).

One interview participant pointed to the changing demographics of the City of Vancouver as an important indicator for modifying existing public spaces and designing new ones. The CityPlan community vision (1995) also indicated that the urban population is quickly changing, citing a need to meet this changing demographic trend. As the population of the City and its downtown core changes due to aging and immigration, so do the needs and expectations exerted on its public spaces. The trend of aging populations is not unique to Vancouver or even Canada, and has been shown to be the case in a number of other cities as well. Ward Thompson’s research on future public spaces support the need to design future public space with the knowledge that the requirements of the least mobile persons such as older users must be paid attention to (2002). New immigrants will bring new cultural practices with regards to public space usage, while the aging population will require appropriately designed public spaces to frequent (Interview Participant 1, 2011). The more the existing and future public spaces are designed to reflect the ever-increasing multiculturalism and aging nature of the City’s population, the more successful the range of uses and activities can be provided in the long term. Planning and designing public spaces with regards to an aging and more multicultural urban fabric will ensure that future users will be more likely to perceive a sense of attachment and connection with their urban spaces, thus helping make such

places more successful.

It is interesting to note that none of the interview participants mentioned a need or the necessity to provide more adequate Internet wireless access in the selected public spaces. Currently, none of the selected spaces offer free wireless Internet services. A few users in Emery Barnes Park wished to see Internet access in the park, but this issue was not a significant factor within the context of findings in this research.

Also important is the revelation that one cannot meet the entire set of diverse expectations and requirements of users. People will always expect and desire more amenities and opportunities, as was shown to be the case even in Emery Barnes Park. Designing more successful public spaces will have to be approached as an on-going process in tandem with changing demands. The on-going nature of public space design was also stated in numerous previous literatures such as Cooper Marcus and Francis (1998), Gehl (2010), and Banerjee (2001).

Findings from this research suggest that provisions and quality of amenities, safety levels, as well as opportunities for usage can influence diversity of uses and activities. Research findings and previous literature do indicate the importance of other factors such as socio-economics, who actually belongs to the public place, place attachment, and a sense of comfort, in making great public spaces.

Earlier assertions about the irrelevance of the public realm and public spaces in modern cities by Sennett (1990) does not seem to be the case in the studied spaces of Downtown Vancouver. Both the users and the politico-bureaucratic-economic and academic actors, as a whole, stressed their support and belief in the importance of public spaces in not only the downtown peninsula but the rest of the city as well.

A set of conclusions and recommendations to the City of Vancouver and other actors involved in planning and designing public spaces will be discussed in the next chapter.

Chapter 7: Recommendations and Conclusions

The final chapter uses findings from Downtown Vancouver's public space case studies in conjunction with information presented through the review of previous literature to provide a set of recommendations for the City of Vancouver and actors involved in planning and designing public spaces. Concluding remarks for future research for both public spaces in Downtown Vancouver and other cities with similar-sized downtown cores will be provided as well. Finally, a summary of the research thesis will be concluded.

7.1 Recommendations for the City of Vancouver, other municipalities in North America, and other actors involved with public space planning and design

A set of recommendations for planners, architects, and other actors involved in planning and designing Downtown Vancouver's public spaces is listed below.

7.1.1 Planning public spaces within close proximity to residential, retail, and other urban areas

A point of strength with regards to the case studies in Downtown Vancouver is the fact that these spaces are all located within appropriate distances of 1200 meters to residential enclaves, retail stores, and other urban services. The actors involved with planning and designing public spaces need to keep creating public spaces that are as close to residential dwellings and other urban amenities as possible. As this research has shown, however, special attention needs to be paid to the types of retail activities that will occur near a public space, and not all retail activities will help make a public space accommodating to diverse range of users' expectations and requirements. This principle

cannot only be practiced in the downtown core, but in other North American urban centers as well. Other similar-sized Canadian and American municipalities can revitalize their CBDs partially through planning diverse types of public spaces alongside other developments, helping retain economic, social and cultural importance within their cores.

7.1.2 Plan more central public spaces in the Downtown core

The City and other actors involved in planning and creating public spaces in the Downtown core need to focus more on re-imagining existing central spaces and make these spaces more pedestrian-oriented. As was stated by one of the interview participants, the more these central spaces become pedestrian, “the more users they can attract, and become more successful in the long term” (Interview Participant 5, 2011).

As confirmed by Berelowitz (2005), a current contextual weakness of the public realm in the downtown is the lack of central spaces. The core needs to house more of such spaces, as centrally located public spaces can potentially accommodate a higher diversity of activities that were not previously present in the public realm.

7.1.3 Provide as many amenities and aesthetically pleasing features within existing and future public spaces as is economically and physically possible

Amenities such as garbage bins, public washrooms, street vendors, benches and tables were not adequate, as noted by many survey participants. More opportunities for frequenting and using these spaces will be created by incorporating more of the mentioned amenities within existing and future public spaces of Downtown Vancouver. Designers should incorporate more covered areas and shades within public spaces in order to make them more usable during bad weather conditions. Indeed, by

‘weatherproofing’ the public space, more usage can be retained even when weather conditions are not appropriate for outside activities (Interview Participant 1, 2011).

While edge/waterfront spaces can boast aesthetic qualities through the natural views they provide, others such as Granville street corridor need to make up for lack of such visual opportunities through having interesting design features such as plantings, trees, water features and perhaps more art pieces in order to ‘anchor’ people for longer periods, possibly creating more varied uses and activities.

Paying attention to the design features of the public space is one factor that can positively influence the perception of potential users with regard to safety and opportunities offered. This positive influence helps make the public space more diversely utilized, potentially resulting in meeting more user expectations and requirements.

7.1.4 Plan public spaces that are designed for both current and future users

Public spaces of today need to be re-imagined and created so as to reflect not only the needs of today’s users, but of potential users in the future as well. Recent immigrants have brought with them “entertainment and leisure behavior, uses of informal economy, and a new dependency on the public realm” (Banerjee, 2001, p. 21). The City of Vancouver, as well as planning bodies and advocacy groups such as the Vancouver Public Space Network (VPSN), need to conduct studies and research to assess how public spaces in Downtown Vancouver can become more ‘age-friendly’ and multicultural-friendly. As the population of the city ages and as more immigrants move into the downtown core, public spaces need to change to reflect the many social, age, and ethnic groups’ preferences for public realm usage. As was mentioned by one interview

participant, how people use a public space can be ‘surprising’ in that the space designed for specific activities may not necessarily be used in the way originally envisioned by planners and designers (Interview Participant 3, 2011).

7.1.5 Partition the public space, when possible, into both flexible and programmed sub-areas

Studies of the selected downtown spaces indicate that public spaces that are partitioned into sub-areas for different activities fair better in terms of meeting more of the diverse range of users’ expectations and requirements. It is a good strategy to design and redesign through partitioning the whole space into distinct sub-areas, with some designed to be flexible, while others designed to perform pre-planned functions. As suggested in previous research, creating divergent and flexible characters have already been implemented in a number of other urban cores’ public spaces (Jacob & Hellstrom, 2010). At the same time, Forsyth and Musacchio (2005) state the need for the edges of partitioned sub-areas to be demarcated clearly so as not only suggest locations of certain activities, but to minimize tension and conflict over space appropriation as well. Not all public spaces in a downtown landscape can be partitioned equally, but aiming for more partitioning, whenever possible physically and economically, can go some way in meeting more of the diverse expectations and requirements of users.

7.2 Recommendations for future research and studies of public spaces

There are many factors that can influence how people use and occupy public spaces. This research looked at uses and activities through a specific set of criteria, but there are other factors that can be explored with regards to public spaces in Downtown Vancouver

and other North American centers.

Changes in the social fabric of Downtown Vancouver and other similar-sized North American downtown cores will need to be researched further in order to specify how and to what extent future residents will potentially prefer to utilize their urban spaces.

Through studying the specific types of social and ethnic groups' preferences for public space utilization in Downtown Vancouver and other similar-sized city centers, planners and academics could come up with public space planning frameworks that will ensure continued and increased engagement with the public realm.

This research did not take into account socio-economic factors that might influence current types of usage within urban public spaces. A conceptual approach that takes into account socio-economic factors in conjunction with physical and contextual factors could be developed. The line of investigation in these case studies also shed light on the importance of emotional needs of users. While not a major part of the framework, ideas of place attachment and feeling a sense of belonging were noticed as missing in Granville Street corridor, but more frequently observed in the other sites. Place Attachment and a sense of belonging are important in public space viability, mentioned by previous researchers such as Cooper Marcus and Francis (1998) and Talen (2000). More research could be undertaken with regards to these emotional needs and their connection with viability of Downtown Vancouver's public spaces.

Issues of safety and security based on one's gender and ethnic/cultural backgrounds, while not seeming to be of major caliber within the studied spaces here, are warranted further studies. Possible research in the direction of such issues might be beneficial

within the context of the City of Vancouver and its downtown given the increasing rates of immigration and multiculturalism already occurring.

The influence of seasonal changes on uses and activities were not heavily assessed in this research. Future research could also incorporate the effect of seasonal temperature variations when analyzing how Downtown Vancouver public spaces function.

7.3 Conclusions

This research highlights the importance of meeting the diverse range of user expectations and requirements through more diverse range of uses and activities in Downtown Vancouver's public spaces. Downtown Vancouver needs to retain and enhance its public spaces in the future in order to remain the most vibrant and active social/economic hub of the Greater Vancouver Regional District.

A selected number of Downtown Vancouver's public spaces were studied through analyzing the degree to which users' diverse expectations and requirements were being met. Research findings and analysis revealed that some of the studied spaces function through a wider range of uses and activities for their users. The neighborhood pocket park named Emery Barnes Park was assessed as meeting more of the diverse expectations and requirements of its users, especially when compared to Granville Street corridor and the North False Creek Waterfront walkway.

It is important to realize that the City of Vancouver has had great success with planning and designing a number of great public spaces since the World Exposition of 1986. The City has managed to improve the quality of life of many urban residents through having embraced the principles of 'eyes on the street' and planning downtown public spaces within appropriate walking distance of residential, retail and other urban

enclaves. All the study sites are also accessible through public transit stations, adding the potential of more users visiting from more distant parts of the region. Strategies mentioned above should not be abandoned but retained for designing new public spaces and ‘re-imagining’ older ones in the future.

The fact that downtown public spaces have been placed in close proximity to residential, retail and other urban enclaves have helped positively influence perceptions of safety and opportunities. Downtown Vancouver’s public spaces are mostly used by local residents due to accessibility through close proximity. Other municipalities in North America should take note that public space location within close proximity to other urban areas can go a long way in ensuring positive perceptions of safety and opportunities.

Some of these spaces are more successful in terms of diversity of activities because of being designed to house more functions and to provide for more of their users’ expectations and requirements. Other downtown spaces could, whenever possible, accommodate a higher range of activities for users by housing more amenities and through being partitioned into smaller sub-areas.

As research findings have shown, not all public spaces can or need to have the same level of diversity of uses and activities. Through specific strategies, however, a public space can embrace more uses and activities for a diverse and changing demographic that has dynamic and changing expectations and requirements from its public spaces.

Furthermore, this research illustrates a downtown public realm that is active and utilized by many people. Some of the reviewed literature had suggested that the role of the public realm and public spaces has become irrelevant in the 21st century (Sennett, 1990; Davis, 1992), and yet research findings make it evident that the public realm of

Downtown Vancouver is not actually an example of irrelevance. All the studied spaces are at the very least used for a few types of activities and even the ones with less diversity of uses and activities do become busy and crowded on a daily basis. Sennett's concern with regards to organizing and managing differences in the public realm still holds true, however. Indeed, findings from Granville Street corridor and the overall lack of central gathering spaces in the downtown suggest the need to put more efforts to support the public realm throughout the urban landscape and not just at its edge.

Public spaces form a critical segment of an urban landscape. This is particularly true within denser residential and commercial areas such as Downtown Vancouver. The study sites and others like them can be improved through the cooperation of planners and designers and in conjunction with active consideration of users' expectations and requirements. Resulting improvements could help encourage more diverse uses and activities, making each public space more successful in terms of satisfying more of the expectations and requirements of a dynamic urban populace.

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Appendices

Appendix 1 – On-site survey questionnaire for sites' everyday users

DOWNTOWN VANCOUVER PUBLIC SPACE FUNCTIONS **Master's Thesis Survey**

Select site:

- A) Granville Street (Between Georgia and Smithe Street intersections)
- B) Creekside Park
- C) Emery Barnes Park
- D) North False Creek waterfront walkway (between Cooper's Park and David Lam Park)

1. How often do you come to this place?

- a) less than once a year
- b) once a year
- c) once every few months
- d) more than once every month
- e) once a week
- f) a few times every week

2. In which age group do you belong?

- a) 18-25
- b) 26-36
- c) 37-50
- d) 51-65
- e) 65 +

3. I am: a) Male b) Female

4. When do you normally come to this place, and what do you do when you are here?

5. Check True/False to the statements below:

- i) I live less than 5 minutes away by walking
- ii) I live more than 5 minutes and less than 15 minutes away by walking
- iii) I live more than 15 minutes away by walking
- iv) I use the bus/skytrain/sea-bus the most in order to get around

- v) I drive my own vehicle the most to get around
 - vi) I mostly use the bus/skytrain/seabus to come to this place
 - vii) I usually drive to arrive at this place
6. What are your thoughts about the quality of design and facilities in this place?
7. When using this place, or being near it, do you feel safe? Why?
8. Are you generally satisfied with the facilities and opportunities that this space offers you?
9. What would you personally like to see changed in this place?

Thank you for your participation!

Appendix 2 – Semi-structured Interviews with Bureaucratic, Academic, and Professional Actors

Interview Questions:

1. What are the strengths of the four public spaces in this study?
2. How important do you think the design and placement of facilities in these spaces are to the way they are used by residents?
3. Do you believe that these spaces are safe throughout the day, and do you believe that users feel safe and secure while frequenting these places?
4. How could/should these spaces, in your opinion, be changed in the future in order to accommodate a higher variety of activities and functions for users? Or do they need to undergo any physical modifications at all?

Appendix 3 – Recruitment Email for Semi-Structured Interviews

Hello,

My name is Babak Behnia and I am a Graduate student working under the supervision of Dr. Zhu Qian in the School of Planning at the University of Waterloo. The reason that I am contacting you is that I am conducting a study that is assessing success of Downtown Vancouver's public spaces by analyzing the diversity of uses and activities within a selected number of such spaces.

Participation in this study involves a short semi-structured interview of no more than 30 minutes, during which I will ask four open ended questions regarding your opinions about the current state of public spaces in the downtown core, what achievements have been observed, and towards what directions public spaces in the downtown core need to move in the future to serve residents of the City better. The mentioned process will be audio-recorded (with your written permission of course). In appreciation of your time commitment, you will receive remuneration through your choice of obtaining a gift card from one of the local coffee shop stores in Downtown Vancouver.

I will most likely attempt to conduct this interview during the months of July and August (2011), and would appreciate you being able to meet me sometime during the aforementioned month.

If you are interested in participating, please contact me at bbehnia@uwaterloo.ca, or bbehnia11@gmail.com, and list your top three choices for when you would like to participate during the months of July and August. I will then send a confirmation email indicating that you have been signed up for your selected time, and provide you with further information concerning the location of the interview. If you have to cancel your appointment, please email me at *your earliest convenience*.

This project was reviewed and received ethics clearance through the Office of Research Ethics, University of Waterloo.

Sincerely,

Babak Behnia
MA Planning (Candidate)
School of Planning
University of Waterloo

Appendix 4 – Information Letter for Survey Participants

University of Waterloo

June/1/2011

Dear Vancouverite:

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the School of **Planning** at the University of Waterloo under the supervision of Professor **Zhu Qian**. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

The importance of public space planning, design, and development in our cities is being realized through new vigor nowadays, and the purpose of this study is to study and analyze the success of public spaces in Downtown Vancouver.

This study will focus on four selected public spaces in the downtown core of Vancouver, namely the Granville Street corridor between Georgia and Smithe Streets, Emery Barnes Park, Creekside Park, and the North False Creek Waterfront walkway between Cooper's Park and David Lam Park.

Participation in this study is voluntary and anonymous. It will involve completing 5-10 minute survey. You may decline to answer any of the questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. All information you provide is considered completely confidential. Data collected during this study will be retained indefinitely in a locked office in my supervisor's lab. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at **(604) 349-5385** or by email at bbehnia@uwaterloo.ca or bbehnia11@gamil.com. You can also contact my supervisor, Professor **Zhu Qian** at 519-888-4567 ext.38426 or email z3qian@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at 519-888-4567 Ext. 36005 or ssykes@uwaterloo.ca.

Thank you in advance for your assistance in this project.

Yours Sincerely,

Babak Behnia

Master's Candidate

School of Planning

University of Waterloo

Appendix 5 – Information Letter for Semi-structured Interviews

University of Waterloo

June/1/2011

Dear (*participant's name*):

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the School of **Planning** at the University of Waterloo under the supervision of Professor **Zhu Qian**. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

The importance of public space planning, design, and development in our cities is being realized through new vigor nowadays, and the purpose of this study is to study and analyze the success of public spaces in Downtown Vancouver, and to investigate how these space are being used, and how they could be improved through providing a wider range of activities to their users in the near future.

This study will focus on four selected public spaces in the downtown core of Vancouver, namely the Granville Street corridor between Georgia and Smithe Streets, Emery Barnes Park, Creekside Park, and the North False Creek Waterfront walkway between Cooper's Park and David Lam Park. Your feedback will help investigate how these spaces function currently, whether they meet the expectation of their users, and how they could be modified to work better through providing a wider range of uses and activities in the future. The results from this research can help direct the planning, design, and development of public spaces in the downtown core in a manner that makes them more successful.

Participation in this study is voluntary. It will involve an interview of approximately 30 minutes in length to take place in a mutually agreed upon location. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the summary to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained indefinitely in a locked office in my supervisor's lab. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at **(604) 349-5385** or by email at bbehnia@uwaterloo.ca or bbehnia11@gamil.com. You can also contact my supervisor, Professor **Zhu Qian** at 519-888-4567 ext.38426 or email z3qian@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at 519-888-4567 Ext. 36005 or ssykes@uwaterloo.ca.

I hope that the results from this research will be beneficial in future planning and development of public spaces in Downtown Vancouver, making these spaces more successfully used by the residents of the City. It is also hoped that the data obtained and recommendations and conclusions formulated in this research, will help further academic studies with regards to public spaces in North American downtowns and other urban centers around the world.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Babak Behnia

Master's Candidate

Appendix 6 – Consent Form for Semi-Structured Interviews

CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Babak Behnia of the School of Planning at the University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Director, Dr. Susan Sykes, Office of Research Ethics at 519-888-4567 ext. 36005, or at ssykes@uwaterloo.ca.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES NO

I agree to have my interview audio recorded.

YES NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

YES NO

Participant Name: _____ (Please print)

Participant Signature: _____

Witness Name: _____ (Please print)

Witness Signature: _____

Date: _____

Appendix 7 – Appreciation Letter for Semi-structured Interview Participants

Dear *participant*,

I am writing to thank you for a stimulating meeting last week. I had not been aware of your extensive involvement in the campaign before our conversation. It was indeed a pleasure meeting you.

My project, (***Aiming For Diversity of Activities in the Public Space: The Case of Public Spaces in Downtown Vancouver***), is proceeding according to design, and is nearing completion.

I hope you will get in touch with me if further thoughts occur to you about the subject of our conversation, particularly if you decide in retrospect that you would like to designate some of it for non-attribution. Should you have any comments or concerns you could also contact Dr. Susan Sykes of our Office of Research Ethics at 519-888-4567 Ext. 36005 or ssykes@uwaterloo.ca. This project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo.

Sincerely,

Babak Behnia
M.A Planning (Candidate)
School of Planning
University of Waterloo

Appendix 8 – Feedback Letter for Semi-structured Interview Participants

University of Waterloo

Date

Dear **Participant**,

I would like to thank you for your participation in this study. As a reminder, the purpose of this study is to investigate current functions and uses of public spaces in Downtown Vancouver, and to assess how successful these spaces are and how they could be modified to accommodate a wider range of uses in the future and become more successful as a result.

The data collected during interviews will contribute to a better understanding of how the selected public spaces in this study function at the moment, and how and in what manners they should be modified to become more successful for their users and residents of the City of Vancouver.

Please remember that any data pertaining to you, as an individual participant, will be kept confidential. Once all the data are collected and analyzed for this project, I plan on sharing this information with the research community through seminars, conferences, presentations, and journal articles. If you are interested in receiving more information regarding the results of this study, or if you have any questions or concerns, please contact me at either the phone number or email address listed at the bottom of the page. If you would like a summary of the results, please let me know now by providing me with your email address. When the study is completed, I will send it to you. The study is expected to be completed by September of 2011.

As with all University of Waterloo projects involving human participants, this project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. Should you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes in the Office of Research Ethics at 519-888-4567, Ext., 36005 or ssykes@uwaterloo.ca.

Babak Behnia

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