PROCESS OF PARKS PROJECT DESIGN WITHIN METRO VANCOUVER

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ABSTRACT

This project examines the learning environments and learning practices within

the parks planning departments of Metro Vancouver's municipalities. It begins

with a review of the literature on policy learning, organizational learning, networks

and best practices. The findings of the project are based on statistics, surveys,

website information and qualitative interviews with parks planners. The project

includes a case study of a parks design plan for each of the municipalities. The

analysis explores the relationships between learning environments and learning

practices and includes the identification of a dominant learning model currently

used within most of Metro Vancouver's municipal parks planning departments.

The implications for the design of parks and the field of urban studies are

discussed in the conclusion.

Keywords: Learning, Learning Practices, Metro Vancouver, Parks Design

Subject Terms: Learning Practices

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DEDICATION

To my family.

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I wish to thank my fellow students, the faculty in the Urban Studies Program, and my examining committee.

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1: INTRODUCTION

Research Question: What is the relationship between the learning environments and the learning practices of Metro Vancouver's municipal parks planning departments in the design of parks projects?

In order to provide a background for this project, this paper will begin with a discussion of learning practices within cities. This discussion will include the rationale for engaging in a study of learning environments and learning practices within Metro Vancouver's municipalities, as well as the project's relevance to the field of urban studies. The scope of the project will also be defined during this section. This will be followed by a review of literature relating to policy learning, organizational learning, and formal and informal networking. The literature review will be followed by a discussion of the project's methodology, which will include a description of the process of collecting and analyzing data. Next is a presentation of the findings in a case-wise format, followed by a variable-wise analysis of the relationships between learning environments and learning practices. The learning model and implications will be presented in the final section.

2: BACKGROUND: WHY LOOK AT HOW CITIES LEARN?

Learning is an important phenomenon in the design of urban spaces. A large "market for knowledge" has been discovered in cities around the world (Campbell, 2009, 195). Some suggest that this is in response to various pressures, such as the rapid urbanization of the world's population and the need to rise to the challenges of sustainability (Keiner and Kim, 2007). Despite this growing demand for knowledge, little research has been devoted to the phenomenon of how cities learn. One example is Campbell's (2009) study, which was focused on what he has termed "proactive cities" (196). These cities have demonstrated "a high degree of effort—institutionally, financially or organizationally—to gather knowledge... [and they have also]...organized a special unit to manage learning" (Campbell, 2009, 197). Campbell's (2009) work was based on research conducted on a large scale, with large cities that were at the forefront of gathering knowledge. Campbell's (2009) study also examined learning at the city leadership level. This project could be considered an extension of that study as it proposes to examine the learning process within a wider range of city sizes from small to large, many of which may not be considered "proactive" (Campbell, 2009, 197) learners. This project will also study the learning practices within parks planning departments as opposed to focusing on learning within more senior positions, as was the case in Campbell's study (2009).

One of the learning practices that most cities engage in is networking, which according to Keiner and Kim (2007), has experienced an "explosion" of activity in the past two decades (1370). Keiner and Kim (2007) raise the question: "does the growing popularity of (and faith in?) transnational networking justify people's expectations in it?" (1370). According to Keiner and Kim's (2007) review of literature related to networking activity, the "main basis of criticism lies in reconciling the wide-spanning virtual nature of these networks with the specific culture and details of place" (1371). Do networks utilized by Metro Vancouver's municipalities provide knowledge that is most beneficial for designing projects within a local context? An empirical examination of the learning practices within these municipalities could highlight the impact and implications of network activity on urban development within Metro Vancouver.

Another reason for looking at how cities learn can be found in McCann's (2009) work on "policy mobilities" (2), which examines how policies are transferred from one city to another. In his work, McCann (2009) proposes a research agenda to further understand the process of how policies travel from one place to another. McCann (2009) suggests that further studies should consider "the role that apparently banal activities of individual policy transfer agents play in the travels of policy models and must also engage in fine-grained qualitative studies of how policies are carried from place to place" (2). Although this project is focused on parks projects rather than policies, and is focused on the site where projects are implemented rather than the policy itself, it could be considered a "fine-grained" (McCann, 2009, 2) study on the movement of

knowledge from place to place. Yet another reason for engaging in this study is that city learning has been "largely overlooked" by the literature (Campbell, 2009, 195). Besides the work of McCann (2009), this project may be one of the first to examine the learning process within Metro Vancouver's municipalities.

The goal of this project is to explore the variety of 'learning environments' and 'learning practices' that exist within the parks planning departments of Metro Vancouver's 23 local governments and to determine how these two variables are related. More specifically, the project will examine the learning process within the parks planning departments of these local governments. Each of these local governments is responsible for the municipal parks within its jurisdiction. Parks planning for regional parks within Metro Vancouver (also known as the Greater Vancouver Regional District), is the responsibility of the parks planning department at the Greater Vancouver Regional District (Metro Vancouver, 2010a). As the focus of the project is on the learning process within municipalities rather than regional districts, the learning process at the Greater Vancouver Regional District has been excluded from this project.

One of the challenges in undertaking this project has been the observation and measurement of learning because of the complexity of the learning process. Learning has been defined in several ways within the organizational learning literature, for example Spector and Davidsen (2005) have described learning as the "systematic efforts to transfer knowledge throughout an entire organization" (64). In order to define the scope of this project, learning has been defined as:

the activities related to acquiring the technical knowledge necessary to design a specific parks project.

The variable of 'learning environment' has been defined as the set of circumstances that parks planners find themselves working within while designing parks projects. The organizational learning literature reviewed for this project has provided a useful context for developing the concept of the learning environment. There are nine features of a learning organization that reoccur throughout the organizational learning literature (Orthner et al, 2006)¹. These features have formed the basis for creating the definition for 'learning environment' as it relates to this project. These features or structures have been outlined in Table 1. For the purposes of this project, the structures of the learning environment that are considered to support learning and for which data

Table 1: Learning Environment

From the Organizational Learning Literature:	As well as Characteristics of the Municipality:
"valuing new ideas"	Municipality population size
"tools for reflection"	Budget spent on Parks and Recreation
"team learning"	Parks Planning Department Size
"communities of practice"	Parks Planning Department Staff

Sources: Orthner, Cook, Sabah, and Rosenfeld (2006, 72-73); author

¹ These will be discussed further during the literature review in the next section.

has been collected are: the valuing of new ideas, tools for reflecting on completed projects, team learning, (Orthner et al, 2006), and informal groups that support learning and which are often referred to as "communities of practice" (Lave and Wenger, 1991)². These structures of organizational learning have been chosen because they are both measurable, and are related to project-based learning. It should be assumed that other structures of organizational learning and even other types of learning are present within each of the parks planning departments despite the fact that the data and findings may not reflect this as such. The data collected has not been used to evaluate organizational learning within each department; the organizational learning literature has simply provided a framework for measuring certain elements within the learning process.

In addition, Table 1 outlines the characteristics of the municipality, which also make up the learning environment, namely the size of the municipality, the budget for parks and recreation, the parks planning department size and the staffing. As a result of these characteristics, each municipality within this project will likely have a unique learning environment.

The learning environment within Metro Vancouver's municipal parks planning departments also includes several other features, which are beyond the scope of this project. For example, parks planners operate within the confines of what is doable from the perspective of capital costs and maintenance costs.

Parks planning is also subject to support from senior management and elected

² The concept of "communities of practice" (Lave and Wenger, 1991) will be discussed further during the literature review.

officials who may bring with them their own platform, and vision. Senior levels of government, at the provincial and federal level may also have an impact on the types of parks planning activities that take place in terms of their spending patterns and levels of transfer payments to municipalities. Projects implemented by the provincial or federal government may also affect parks planning at the municipal level. Parks planners may also be working within the context of emerging trends, such as the trend towards sustainable development. Another trend within the past few decades has been the "downsizing of the ... government's workforce" (Perl and White, 2002, 56). Perl and White (2002) have suggested that this "downsizing" has resulted in the increased use of consulting firms (56). This trend has likely impacted parks planners in terms of fewer resources being available for in-house designs, as well as the increased presence of consulting firms within the design process. Therefore, the learning environment within municipal parks planning departments has several features that are likely to impact the learning process, however, for the purposes of this project, the learning environment has been limited to the structures of organizational learning and characteristics of the municipality that have been outlined above in Table 1.

The learning environment is distinct from learning practices in that learning practices, for the purposes of this project, refers to the types of learning activities that parks planners engage in order to gain the technical knowledge necessary for their part in the process of designing parks. Each municipal parks planning department will choose from a range of learning practices during the parks

design process. For example, parks planners may learn by looking to precedents in other municipalities, networking with colleagues in other communities, learning from consultants, as well as a variety of other learning practices. Table 2 outlines the main learning practices related to the gathering of technical knowledge necessary for planners to take part in the design of parks.

Table 2: Learning Practices

Learning from other municipal departments i.e. engineering

Learning from user groups, other groups i.e. RCMP

Learning from various sources, i.e. Internet

Learning from colleagues or site visits in other municipalities

Learning from consulting firms

Source: author

In terms of the field of urban studies, the findings of this project have the potential to add to our understanding of the learning process within parks planning departments and the implications for the design of urban parks spaces.

3: LITERATURE REVIEW

In order to provide a background for the concepts of learning environments and learning practices, this section includes a review of literature related to policy learning, organizational learning, "communities of practice" (Lave and Wenger, 1991), the role of experts, and networks.

3.1 Policy Learning

Kemp and Weehuizen (2005) define policy learning as "a change in thinking', not any change in thinking but a structured, conscious change in thinking about a specific policy issue" (3). This "change in thinking" ...[often results in innovation or a]... "change in doing" (Kemp and Weehuizen, 2005, 3). They state that "sometimes practices change gradually and only later when reflected on they lead to change in thinking and to a change in policy" (Kemp and Weehuizen, 2005, 3). Kemp and Weehuizen (2005) also suggest that policy learning is "conscious" (7) and "structured" (7) and is associated with "values, goals and the framing of issues that are important for policy" (7).

In their review of the policy learning literature, Bennett and Howlett (1992) state that "there are several different explanations of policy change based on the notions of learning" (275). The explanation provided by Sabatier (1987) is that ""policy-oriented learning" result[s] from experience and...[is]... concerned with the attainment or revision of the precepts of one's belief system" (672). Sabatier (1987) states that the major actors in this learning process are "coalitions"

seek[ing] to translate their beliefs into "governmental-action programs"" (664) and that these coalitions "include actors at various levels of government active in policy formulation and implementation, as well as journalists, researchers, and policy analysts" (1988, 131). "Coalitions" (Sabatier, 1988, 131) and "belief systems" (Sabatier, 1988, 664) are likely to have a major influence on the design of parks within Metro Vancouver as parks are an important part of the public realm. Sabatier argues that "policy change is best seen as fluctuations in the dominant belief system (i.e. those incorporated into public policy) within a given policy subsystem over time" (1988, 158).

Other literature on policy learning also has the potential to describe learning within the parks design process. Rose (1991), states that policy learning is based on the notion of "lesson-drawing" (3). He suggests that these "lessons can be sought by searching across time and/or across space" (Rose, 1991, 5-6). Rose (1991) argues that when "confronted with a common problem, policy makers in cities, regional governments and nations can learn from how their counterparts elsewhere respond" (1991, 4). One of the "distinguishing feature[s] ... [of this type of policy learning is]... a concern with the transferability of a program from one place to another" (Rose, 1991, 7).

According to Hall's (1993) review of policy learning literature the "key agents" (277) in the learning process are the "experts in a given field of policy, either working for the state or advising it from privileged positions at the interface between the bureaucracy and the intellectual enclaves of society" (Hall, 1993,

277). The implications of this situation are that a small group of professionals could potentially have a major influence on policy formation (Hall, 1993, 277).

3.2 Organizational Learning

Based on their review of recent literature on organizational learning,
Spector and Davidsen (2005) have defined "organizational learning....as an
information management strategy that consists of systematic efforts to transfer
knowledge throughout an entire organization" (2005, 64). Orthner, Cook, Sabah
and Rosenfeld (2006) suggest that the concept of organizational learning
"typically include[s] a culture of innovation and openness and ...[a]...set of
mechanisms through which agency staff regularly exchange information" (70).
They further suggest that organizational learning structures should "promote
opportunities to systematically create or invent, collect, analyze, store and use
knowledge...[as well as]... a set of cultural conditions conducive to personal and
organizational knowledge building"(Orthner et al., 2006, 71).

In their study of organizational learning in after-school programs, Orthner, Cook, Sabah, and Rosenfeld (2006) have outlined what they consider to be the standard organizational learning model. The

"key components...[are]...leadership engagement,...tolerance for errors,...vision sharing,...asking learning questions,...use of tacit and practical knowledge,...time given to reflect on learning,...value given to new knowledge and ideas,...[and a]...process driven toward results" (Orthner et al., 2006, 72-73).

Orthner, Cook, Sabah, and Rosenfeld (2006) also argue that organizational learning "requires more than an initial training and a few meetings; the capacity

of the organization to learn must be stimulated and then sustained over time" (76). It is clear that these organizational learning theories suggest that success is based on a systematic approach to learning.

Other concepts developed in the literature are related to teams and leadership. Lick (2006) argues that "authentic' teams" are important elements in organizational learning (90). Lick (2006) defines "authentic teams" as teams that are committed to the process of learning (92). Lick (2006) also indicates that successful organizational learning is based on leadership "implementing a strategic... [plan which]... would transition people, processes and, most importantly, the culture from the old paradigm to the new one" (89).

Senge (2006) furthers the discussion on successful learning organizations by presenting an organizational learning model which has "five new component technologies" that promote effective learning (6). According to Senge (2006), "systems thinking" (7) is essential to organizational learning because organizations are "bound by invisible fabrics of interrelated actions" (7). Senge (2006) also states that another key element which makes organizational learning successful is "personal mastery... [which]... is the discipline of continually clarifying and deepening... [one's own]...personal vision" (7). This is important because organizations are comprised of individuals and organizational learning and change is therefore partially dependent on individuals within an organization (Senge, 2006). According to Senge, the changes to the individual's "mental model... [require them]to unearth... [their]... internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny" (Senge, 2006, 8).

Senge suggests that success is partially based on a "shared vision ... [which]...involves the ...unearthing ... [of]...shared 'pictures of the future' that foster genuine commitment and enrolment rather than compliance" (Senge, 2006, 9). According to Senge, teams are also a key element within successful learning organizations as they "are the fundamental learning unit in modern organizations" (Senge, 2006, 10).

Most of the organizational literature reviewed for this paper has been related to large-scale organizational learning that has relevance to organizational change, policy changes or paradigm shifts and less relevance to learning on a project basis. It describes organizational learning in very broad terms that are difficult to translate into specific learning structures. This literature has presented a normative approach to organizational learning and has focussed on discussing the ideal circumstances in which organizational learning flourishes rather than an observation of how organizations are, or are not learning. These principles are also most likely to be associated with Campbell's (2009) "proactive" learning approach (197).

It is therefore useful to consider literature that looks beyond the normative theories on organizational learning to some of the other issues within organizational learning such as the key concepts of "single-loop learning" and "double-loop learning" which were developed by Argyris and Schon, (1974).

Cook, Stanforth and Stewart (1997) have outlined these concepts effectively.

Single-loop learning...is the way most organizations deal with problems. It means that if there are changes internally or externally affecting the organization, it will respond to these in such a way as to maintain its organizational norms and

values; ...[and]...it will stay within its natural response to any problem that enables its service to continue without having to change its culture (Cook et al., 1997, 5).

In contrast, "double-loop learning" (Argyris and Schon, 1974) can be summed up as "the response to either external or internal problems ... [that]... leads to a shift in the organizational norms, strategies and assumptions" (Cook et al, 1997,5). A key element in this type of learning is "vigilant monitoring of the effectiveness of the implemented actions to assess ... [their]...degree of effectiveness" (Argyris, 2004, 6). In this situation, organizations would have well-developed tools to reflect on their activities and in cases where change is necessary to adopt different operating strategies (Cook et al., 1997).

It is not surprising to find literature that outlines the barriers to organizational learning. Argyris (1997) presents the concept of the "organizational defensive routine ... [which] ...is any action, policy, or practice that prevents organizational members from experiencing embarrassment or threat ... [and maintains] ... tacit, automatic behavior" (1302-1303). Senge states that these practices are "habitual ways of interacting that protect us from threat or embarrassment, but which also prevent us from learning" (2006, 220). These barriers are likely to play a role in the learning activities associated with the design of parks projects as the process of designing parks includes "routines" (Argyris, 1997, 1302) ingrained within the practice of landscape architecture.

Although Senge (2006) insists that teams are the basis for a learning organization, Argyris and Schon (1974) consider individuals to be at the centre of organizational learning. Pelling, High, Dearing, and Smith (2008) also argue that

"the adaptive behaviour that an organization manifests emerges from the individual behaviours of its members" (2008, 872). However, they also acknowledge "the social environment in which individuals find themselves shapes the space of possibility for individual" actions (Pelling et al., 2008, 872). This "social environment" (Pelling et al., 2008, 872) is one of the many features of the learning environment in which parks planners conduct business.

Another feature of organizational learning which has been given a lot of attention in the literature is "organizational memory ... [which]...refers to stored information from an organization's history that can be brought to bear on present decisions" (Walsh and Ungsen, 1991, 61). According to Walsh and Ungsen (1991) "this information is stored as a consequence of implementing decisions" in the past (61). This information has "behavioral consequences when retrieved" in the future (Walsh and Ungsen, 1991, 61). It is essential for organizations to have a means of storing past experience as a frame of reference for assimilating new information, however these experiences also have the potential to influence future decisions (Walsh and Ungsen, 1991).

3.3 Communities of Practice

Another important element in the learning environment within municipal parks planning departments is the existence of "communities of practice" (CoP) (Lave and Wenger, 1991). CoPs are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Synder et al., 2003). According to most of the literature reviewed, CoPs are of an informal

nature and one of their "crucial characteristic[s]...is voluntary participation" (Synder et al., 2003, 18).

According to Koliba and Gadja (2009), a CoP is considered to exist if "a group has formed... a physical or virtual space exists for these members to interact directly with one another, ... [and]...the group possess a domain, practice or set of practices" (102). Another characteristic is that CoPs are "often not officially recognized by the organizations they permeate" (Pelling et al, 2008, 869).

With respect to how these groups form, Faulconbridge (2007) states that "professional associations seed urban communities of practice that emerge outside of the formal activities of professional associations" (965). Benner (2003) also suggests that "communities of practice emerge not simply through informal social interaction, but are being actively built at least in part through the formal activities of professional associations" (1810). Benner (2003) also adds that the "professional association provide[s] a critical network of relationships to help people sort through information and develop the new knowledge required to be successful in their work" (1821). Koliba and Gadja (2009) state that "CoPs are increasingly being considered for, and suggested as, a key strategy for system change and professional development" (101). Within the realm of parks design, CoPs could be linked to membership in the professional associations that are related to parks planning. Keen and Mahanty (2006) point out that CoPs do however have some limitations when the new knowledge that they provide does not "fit with existing organizational thinking" (215).

There is a relatively small amount of literature related to the constraints that CoP's impose on learning. CoPs are an effective vehicle for best practice ideas to circulate within a region (Benner, 2003; Faulconbridge, 2007) and therefore are a possible barrier to learning. Although Bulkley's (2006) discussion of best practice is not directly related to CoPs, it is useful in underscoring the potential for best practice thinking to restrict the learning environment and learning practices within parks planning departments. Bulkley (2006) concludes that best practice "is at once a political rationality about appropriate urban futures and a governmental technology through which the urban sustainability problem is rendered governable" (1041). In other words, CoPs have the potential to both expand and restrict learning in situations where a municipality's learning practices are limited to searching out best practice ideas through the CoP.

3.4 Experts

In his review of policy learning literature, Hall (1993) asserted that there were "key agents" of learning who influenced the outcome of policy change events (277). McCann (2008) also suggests that there are groups with the power to influence policy changes and that their activities in the form of

speeches, reports, power point presentations, documentary films, spreadsheets, models, rankings, maps, lists of best practices and the like...facilitate the production of a particular form of relational knowledge in and through which policy actors understand themselves and their cities' policies to be tied up in wider circuits of knowledge—regional, national, and global networks of teaching and learning, emulation, and transfer. (McCann, 2008, 6).

The implications of the actions of experts are important for parks planning in Metro Vancouver's municipalities because experts are a common fixture within the parks design process, and their influence could result in projects that are the global version of best practice rather than projects better suited to the local context.

3.5 Networks

As discussed previously, Campbell (2009) has completed a study on "proactive cities" who adopted learning practices that were "deliberate and systematic" (196). On the other end of the spectrum Campbell describes a more "passive" (2009, 196) learning style which he associates with network membership. In this case, member cities pick and choose information as needed in relation to projects that are currently being developed (Campbell, 2008). Most of the parks planning departments within Metro Vancouver fall within this category as they react to issues on a project-to-project basis.

The characteristics of networks have been further developed by Keiner and Kim (2007) who have outlined a typology of networks based on "spatial scope...thematic issues... membership characteristics" and operational style (1374). In terms of operational style, networks vary in their administrative set up, such as in the "organizational structure... [and]...location of headquarters" as well as in the nature of the knowledge exchange (Keiner and Kim, 2007, 1381). Some networks may transfer knowledge through websites, podcasts or through conferences (Keiner and Kim, 2007) and may achieve "networking goals without forming a formal network", by simply awarding prizes and showcasing projects

(Keiner and Kim, 2007, 1381). According to Keiner and Kim (2007) networks "primarily function as clearinghouses of information... [some focussed]... on ... information dissemination and exchange (i.e. best practice databases), while others are more involved in actively producing new information" (1382). Keiner and Kim further argue that this "pooling of know-how and exchange of expertise in unforeseeable and unexpected ways makes networks the productive and flexible workshops of the twenty-first century" (Keiner and Kim, 1382).

More literature on the restrictive features of network membership would be useful in fully understanding the potential impacts of networks on urban planning. In terms of the learning environment within the parks planning departments in Metro Vancouver, networking activity takes place within informal networks or CoPs in most cases.

The literature reviewed has provided a background from which to examine learning environments and learning practices within the parks planning departments of Metro Vancouver's municipalities. It outlines the learning structures that have the potential to support organizational learning as well as several of the potential barriers within the learning process. As mentioned previously the organizational learning literature has provided a framework for measuring elements within the learning process. The data collected by this project is not likely to capture the existence of all of the structures of organizational learning or even all learning that takes place within each of the municipal parks planning departments of Metro Vancouver. With respect to the learning environment, the scope of this project has been limited to exploring

whether new ideas are valued, as well as the existence of tools for formal reflection, team learning (Othner et al., 2006), and "communities of practice" (Lave and Wenger, 1991). Many of these concepts will be revisited during the following sections.

4: METHODOLOGY

This project consists of qualitative case studies of the 23 local governments within Metro Vancouver (see Table 3 below). The methodology is based on the case study model as data was collected using three different sources (Yin, 1989). The sources were: (i) statistics from the BC Civic Info Website (BC Civic Info, 2010); (ii) qualitative data from semi-structured interviews; and (iii) qualitative data from the municipal websites. The municipalities of Metro Vancouver were chosen for their proximity, and the similarity in challenges that they face, such as population growth and rapid development. Each municipality within Metro Vancouver was required by the Liveable Region Strategic Plan to develop a strategy for green spaces, open spaces, and conservation of natural and ecologically sensitive areas (Metro Vancouver, 2010b). Because of this commonality, the parks planning department in each of the municipalities has been chosen as the unit of study. This choice has generated a manageable amount of data. As mentioned previously, the focus of the project is on parks planning at the municipal level and therefore the parks planning process at the Greater Vancouver Regional District has been excluded from the research. Table 3 below presents the municipalities, population size and case study project. Although the project findings cannot be generalized to other departments within municipal governments, the findings will

provide a window into the mechanics of learning within municipal governments in Metro Vancouver.

Table 3: Municipality, Population Size and Case Study Project

Municipality	Population 2006	Case Study Project ³
Bowen Island Municipality	3362	Greenways Strategy
City of Abbotsford	123864	Mill Creek Spray Park
City of Burnaby	202799	Metro Skate Park
City of Coquitlam	114565	Various
City of Langley	23606	City Park Lacrosse Box
City of New Westminster	58549	Queensborough Walkway
City of North Vancouver	45165	Wagg Creek Park
City of Pitt Meadows	15623	Whonnock Lake Berm
City of Port Coquitlam	52687	Minnekhada Lacrosse Box
City of Port Moody	27512	West Hill Trail
City of Richmond	174461	Garden City Play Environment
City of Surrey	394976	Holland Park renovation
City of Vancouver	578041	Pigeon Park renovation
City of West Vancouver	42131	Capilano Cemetery expansion
City of White Rock	18755	Marine Drive retaining wall
District of Maple Ridge	68949	Whonnock Lake Berm
District of North Vancouver	82562	Fromme Mountain Alpine Study
The Corporation of Delta	96723	Recognition Square
Township of Langley	93726	Milner Heights rain gardens
Tsawwassen First Nation	N/A	N/A
UBC ⁴	N/A	N/A
Village of Anmore	1785	N/A
Village of Belcarra	676	N/A
Village of Lions Bay	1328	N/A

Sources: Metro Vancouver (2009); BC Civic Info (2010); Interviews with respondents

³ A slightly more detailed description of the case study projects has been included in Appendix 2

⁴ The University of British Columbia was chosen as the municipality within Electoral Area A as it represents the largest urban area in Area A and maintains a parks planning department.

According to several of the interview respondents⁵, parks planning departments within Metro Vancouver's municipalities are responsible for the design of projects that range from children's playgrounds, sports facilities, the renovation of existing parks, to the design of new parks and trail systems. In most cases, parks planning departments also provide input into the design guidelines for parks and green spaces within new and privately developed neighbourhoods. The parks planners that were interviewed during this research were responsible for the design of: children's playgrounds, skate parks, lacrosse boxes, urban parks, parks renovations, trail systems, trail classification studies, rain gardens, cemetery expansions, berms, greenways and guidelines for noncapital projects which were part of private developments (see appendix 2 for a complete list).

There are several names for the parks departments within the various municipalities such as: 'Parks Recreation and Culture' and 'Engineering, Parks and Environment'. In order to use a common term, the departments in the role of parks planning have been referred to as the 'parks planning department' and individuals have been referred to as 'parks planners' within the coding and analysis sections.

4.1 Statistics

Data for the population size of the municipalities was collected from the BC Civic Info website and consisted of 2006 census data provided by Statistics Canada (BC Civic Info, 2010). The BC Civic Info website provided "Total"

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⁵ See Interview portion of the Reference List for list of interviews.

Government Expenditures" and "Expenditures for Parks Recreation and Culture" for the years 2005, 2006, and 2007 (BC Civic Info, 2010). BC Civic Info (2010) collects this data from surveys completed by the municipalities. The value for Expenditures on Parks, Recreation and Culture represents the total amount spent on parks capital projects, parks programming, recreational programming, cultural programming, as well as operations and planning, and it is therefore limited in its ability to provide accurate information regarding the expenditures directed to parks projects and parks planning. For example, some municipalities appear to have a relatively high parks budget, such as in the City of West Vancouver. It may appear that this municipality devoted more of its total budget to the building and maintenance of parks than other municipalities, however the relatively high value could also indicate that there is simply more spending on recreational programming, or cultural programming within that particular municipality. Despite the limitations of the data, the BC Civic Info website data provided standardized information for each of the municipalities. Comparable statistics for Total Government Expenditures and Expenditures on Parks Recreation and Culture were not available for the University of British Columbia and the Tsawwassen First Nation and therefore these local governments were omitted from the analysis.

4.2 Qualitative Interviews

Semi-structured interviews were chosen as the most effective method of gathering data because the complexity of the learning environments and learning practices would have been difficult to capture in a standard survey or

questionnaire. The interview questions have been included in appendix 1. The interview was designed to be completed within a 30 minute time frame and interview questions were designed to encourage respondents to recall the entire history of a project beginning with the reason that the project was initiated through to implementation of the project and its evaluation. More general questions relating to the learning environment were also included.

Each of the respondents was contacted by telephone or email to set up an interview appointment. The contact information was obtained from the municipal websites. In some cases it was necessary to interact with several individuals before the individual with the most information about the parks planning process was identified. The interview questions and consent form were emailed in advance and in most cases respondents took the opportunity to review the questions in advance of the interview. The interviews lasted between 15 minutes to 75 minutes and were transcribed using Windows Media Player.

One interview was conducted for each municipality, except for the City of Vancouver, where two interviews were conducted as Vancouver's parks planning process has two steps. In each municipality the respondents were parks planners, or in the case of smaller municipalities parks managers who had other responsibilities as well. The one exception was Bowen Island, where the Mayor was interviewed because at the time of the interview Bowen Island had only an interim planner who worked 10 hours a week and was not available for an interview due to time constraints. Given the size of the staff, relative to other municipalities, the mayor seemed an appropriate choice. The Bowen Island

Interview was also unique as it was focused on land-use planning issues rather than parks design. This was noted during the analysis portion of the project. Parks planning in the District of Maple Ridge and the City of Pitt Meadows is the responsibility of the parks planning department at the District of Maple Ridge and therefore only one interview was conducted for both municipalities. The respondent in the City of Coquitlam described a general picture of the parks planning process rather than describing the design process as related to a specific project, which was the case in each of the other interviews. This variation was reflected in the presentation of the data.

The Municipalities of Anmore, Belcarra and Lions Bay did not take part in this research. According to the office receptionists in Anmore (Telephone Conversation #1, 2009) and Belcarra (Telephone Conversation #2, 2009) these municipalities have neither staff planners, a parks department or park space to design. The 2005-2007 report provided by BC Civic Information (2010) states that Anmore and Belcarra had a relatively small budget, or zero budget for Parks Recreation and Culture during these years thereby confirming that few capital parks projects were undertaken between 2005-2007(BC Civic Info, 2010). This may have changed in 2008 and 2009⁶. The Village of Lions Bay did have a small budget in 2007, but the receptionist at the general office stated that no parks planning activity took place in Lions Bay because all areas have been built out (Telephone Conversation #3, 2009). The Villages of Anmore, Belcarra and Lions Bay have therefore been omitted from the analysis. As mentioned previously

⁶ This data was not available at the time writing.

the analysis also excludes the Tsawwassen First Nation and the University of British Columbia.

4.3 Municipal Websites

Data relating to parks planning departments, and the specific project examined was collected from municipal websites in the form of parks master plans, council minutes, and the parks department web pages. This data was used to supplement, confirm and clarify the data collected during the interviews.

5: CASE-WISE ANALYSIS

The data has been presented in two different formats: a case-wise description and a variable-wise analysis. The first format is a case-wise description for each of the municipalities and the project examined within the municipality. This format was intended to provide the reader with "rich, detailed data" (Babbie and Benaquisto, 2002, 308) and a contextual understanding of the learning environment and learning practices associated with the parks design process in each of the municipalities. Twelve of these cases have been included in the findings section because they represented a selection of the various sizes of municipalities within Metro Vancouver. These twelve cases also represent municipalities with a variety of budget sizes, as well as a selection of project sizes and types of projects.

The cases were based on data collected during the interviews. During each interview, data was collected on the learning environment as well as the design of one recent park project. Supplemental data was collected from the municipal websites. It should be noted that the data presented in the case-wise descriptions is largely based on information provided by the respondents and less so on information from the websites. Therefore, the data represents mainly the knowledge and opinion of the respondents. Elements of the story may have been omitted due to lapses in the respondent's memory or hesitancy to share certain details, and the data may reflect these omissions.

5.1 Case-Wise Findings

The cases have been presented alphabetically according to size groupings. The first three cases describe the learning process within large municipalities and where large projects were examined. The fourth case describes events surrounding a small project in the City of Vancouver. The City of Abbotsford, District of North Vancouver and the Township of Langley represent the medium-sized municipalities and each case describes a different size and type of project. Bowen Island, Langley, New Westminster, the City of North Vancouver and the City of Port Moody are considered small municipalities and each of their case study projects was also of a different size and type.

5.1.1 City of Burnaby (Interview #15, 2009)⁷.

The City of Burnaby's Parks Design and Development Department has a manager, two parks designers, and a landscape technician. According to the respondent, the department's "work encompasses the supervision of many others" such as hired consultants, or other development staff. The respondent reported that the department tries to "do a lot of work in-house, design-wise" but also hires "other landscape architects and or engineers to do designs" when there are time pressures or where projects require specialized knowledge.

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Quotation marks have been used to indicate direct quotations from respondents that were taken from interview recordings. The text within quotations has not been cited however citations for these direct quotations can be found in the 'Interview' portion of the Reference list. Information from the interview that has no quotations has been paraphrased from the interview recording by the researcher. When text appears in quotations and a citation is present or where only citations are present this information has been provided by websites for which further information can be found in the Reference List. This format has been utilized within all of the following case-wise accounts except in the cases of the City of Surrey and the City of Vancouver where direct quotations from each of the two respondents have been distinguished by using citations.

In 2004, Burnaby completed the Metro Skate Park project. This project was initiated because of a lobby from youth in the community who wanted a space to practice their sport. There was also pressure from the private sector in Metrotown who were "having problems with skateboarders all over Metrotown". According to the respondent the City had built other skateboard parks in the past but the sport was "coming out rather big and the youth were getting organized with skateboarding". Since the time of the construction of the other skate parks in Burnaby, consultants that "specialize in that field" have emerged and the respondent reported that the City saw this as an opportunity to create something unique. According to the respondent, this was also made possible by the City's large budget, which allowed planners to be more creative in their designs. According to the respondent, it is possible to "individualize each design effort no matter what it is, a neighbourhood park, a specific playground, a skateboard park ... [or]...a bicycle facility".

The parks planning department utilized several learning practices in the process of designing the Metro Skate Park. The job of finding a location for the park was passed on to the Landscape Architecture firm of Van der Zalm and Associates and New Line Skate Parks. The respondent reported that these firms were able to "address a lot of issues" related to the location of the park such as noise and proximity to dense residential areas.

After securing a location in Bonser Park, the next phase was to design the park. According to the respondent the parks planning staff had to "educate" themselves in terms of recent trends in skate park design through internet

research, site visits around the lower mainland and contacting "cohorts in Landscape Architecture" to talk about the "pros and cons" of what they had done. An acoustic consultant was also hired to research "the noise of skateboard parks". The respondent reported that it was important for the staff to not only consider location but also issues surrounding skate parks, for example, potential "conflicts" with BMX bike riders, artwork and the style of the park. The parks staff engaged the services of Space 2 Place Design Incorporated (Space 2Place, 2004) and Spectrum Skate park Creations Limited (Spectrum Skate Park Creations Limited, 2010) in order to assist with the open house and, according to the respondent, to teach the parks department staff to talk "about skateboarding intelligently with the community". The process of design was "extremely heavy in youth input". The design team accessed input from youth at the nearby youth centre, elementary schools and high schools. The respondent reported that although some of the ideas were not feasible, many of "the design aspects were based on the spirit of what the youth had expressed", particularly the "street style" design that is based on the concept of skate boarding in an urban plaza. The respondent also reported that valuable input from the contractor was also provided during the construction phase of the project.

The parks planners and the designers made major modifications to typical skate park design. Metro Skate Park was within an urban area while most skate parks are located in isolated areas. This skate park has been located near a playground in order to attract families and users of various ages. The respondent reported that the challenge was to design a place that would be

"attractive to the general public", and to include a "hang out" seating space and viewing platform at the facility. Typical skate park design discourages "hanging out". The park was designed to be accessible for wheelchairs and provides an effective wheelchair training area. The planning team also decided on an experimental material called EcoSmart concrete, which contains fly ash, a byproduct of the coal burning process. The project's concrete supplier introduced this idea to the group (Space to Place, 2004).

The respondent reported that user groups who come from "all over the lower mainland" have deemed the project successful. The staff has also won major design awards for the project such as the Canadian Parks and Recreation Association "Award of Excellence for Innovation" (City of Burnaby, 2010).

One important feature of the learning environment in Burnaby's parks planning department is that the department has regular monthly meetings with the "design, planning, development, maintenance and horticulture staff" to review work that has been completed, to update ongoing projects and plan future projects. According to the respondent, this is a valuable exercise for discovering issues that may have arisen and for collecting input from other departments. Issues are typically brought to light by the maintenance staff that is responsible for the long-term care of projects. The respondent reported that another effective tool for reflection is the feedback that comes from the development crews. Burnaby's own development crews and horticulture staff undertake construction of some of the capital project work. The respondent reported that these crews provide "firsthand" feedback if "anything is poorly designed." These reflective

activities are evidence that the learning environment within the parks planning department at the City of Burnaby includes at least some of the elements of organizational learning.

Also in terms of the learning environment, the staff in the Parks Planning department are members of the British Columbia Society of Landscape Architects (BCSLA) and the "public sector committee" of that organization. The respondent reported that this subcommittee provides a network to access other professionals and is considered the most valuable tool for collecting information and new ideas. The respondent stated that "everybody is willing to share".



Figure 1: Metro Skate Park, City of Burnaby

The British Columbia Recreation and Parks Association also hosts conferences that the planning staff often attends. The City provides funding for most of these events.

The respondent reported that the parks planning department routinely engages in several types of learning practices. The BCSLA and the Canadian Society of Landscape Architects (CSLA) both have publications that are useful resources in Burnaby. The internet also continues to be a valuable tool in Burnaby's Parks Department in terms of being a "great place to start" and to find contacts in other municipalities. According to the respondent, most things have "been done somewhere".

Therefore, within Burnaby's parks planning department the learning environment appears to be a supportive one, in terms of a large operating budget and opportunities for staff to learn. This may have been reflected in the relatively large number of learning practices related to the Metro Skate Park design. The choice of learning practices may also have been a reflection of the nature of the project, which required knowledge and input from a wide range of sources.

5.1.2 City of Richmond (Interview #12, 2009)

The eight staff members in the Parks Planning and Programs section of the Parks and Recreation Department at the City of Richmond are "responsible for overseeing the design and construction of public open space" (City of Richmond, 2010). There are four park planners, one technologist, one landscape technician and one graphic drafts person. There are approximately 75 parks within the City of Richmond.

Richmond's Garden City Play Environment was part of the third phase of developing the 22-acre Garden City Park. According to the respondent, the planners were determined to build "something unique." They were hoping to

"break from the mould" and provide a playground that would offer different opportunities than were available elsewhere in Richmond. The Play Environment has introduced "natural elements ... [like]... water...plants, trees, rocks, logs, things that many people grew up with... before there were a lot of play structures out of catalogues."

According to the respondent, the parks planning department engaged in several types of learning practices in the design of the Garden City Play Environment. Space 2 Place, an international landscape architecture consulting firm (Space 2 Place Design Inc, 2008), was hired to assist the city staff in designing the park. The process lasted about six months and required the staff to engage in a wide range of learning practices that included a number of workshops with school classes ranging from kindergarten to grade seven. The design team presented them with ideas, recorded their feedback and provided opportunities for the students to illustrate their own ideas. An open house was held, and designs for the park were "left at various schools so that parents and kids could write in their comments." A committee was formed which included staff from the planning department, the recreation department, staff from the consulting firm and others in the community. This committee met monthly to review the project's progress and the design.

According to the respondent the consulting process "inspired" the design team to create designs that were "pretty ground-breaking in terms of how playgrounds have been built here in the last 2, 3, 4 decades." In addition to the extensive public consultation, ideas were also generated through an internet

search to determine what international precedents existed. The search looked to European cities as well as to playgrounds in the US. The respondent reported that the landscape architects at Space to Place had "the technical knowledge to back up what some people might think are pretty wild ideas."

According to the respondent, the project has been very successful "in terms of response from the community." The staff did not formally reflect on the process or the project. The respondent noted that there were many challenges during the design process because "there weren't a lot of local precedents to examine." There are few examples of this type of children's playground with natural elements like flowing water, rocks and trees. Some of the elements in the design resulted from educated guesses, and the hope that "some of these things would work."

The respondent reported that the staff members in the parks planning section routinely attend "workshops as a continuing education exercise, whether it's Landscape Architecture from an academic perspective or very practical hands-on technical upgrades." Funding is made available by the City and the staff is encouraged to take part in continuing education. The focus of the parks planning department's work is on culture, heritage and horticulture and therefore there is a "broad spectrum" of course work that is supported and funded by the city. According to the respondent learning is "fairly well supported" suggesting that the parks planners work in a supportive learning environment.

Figure 2: Garden City Play Environment, City of Richmond

Source: L. Jansons

The respondent reported that each of the staff members in the planning section has several connections with colleagues in other municipalities, which provides evidence of vibrant "communities of practice" (Lave and Wenger, 1991). According to the respondent, some individuals within the department have even attended university with others working in different municipalities. These individuals therefore feel comfortable connecting on a regular basis to discuss the use of different materials, the use of various consultants and other issues.

Therefore, there is evidence that that parks planners Richmond's parks planning department operate within a learning environment that supports new ideas, provides sufficient professional development opportunities and encourages strong connections with colleagues in other municipalities. The fact that Richmond's parks planners engaged in a relatively large variety of learning

practices during the design process of the Garden City Play environment may have been related to the supportive learning environment within the department. However, it may have also been related to the unique nature and scale of this project, which required a large public participation process and broad search range for precedents.

5.1.3 City of Surrey (Interview # 19, 2010a) (Interview #19, 2010b)

Parks planning and design in the City of Surrey is the domain of the Planning, Research and Design Division of the Department of Parks, Recreation and Culture. The division has three full-time planners and one half-time planner. Surrey has approximately 600 parks, which are located within more than 6000 acres of parkland. Recent projects have included "greenways projects, natural areas, a lot of neighbourhood parks and some major renovations" such as the Holland Park Project (Interview #19, respondent #1, 2010). Depending on the scale of a project, one of the first steps in parks design is the pubic consultation process. At the neighbourhood park level, which includes parks of up to 4 acres, the process would involve an "open house and some focus group meetings" and the design would likely be developed in-house by the planning staff (Interview #19, respondent #1, 2010). At the other end of the spectrum was the Holland Park renovation, which was a recent large-scale project.

Holland Park was acquired by the City of Surrey in 1960 (City of Surrey, 2009d, 1). The park is a focal point in the Surrey Central Plan (City of Surrey, 2009c, 3). The Holland Park upgrade was intended to create a "special events site and Surrey's first urban park" (City of Surrey, 2009c, 3). The key features of

the park are "a central water feature, formal gardens,... tree-lined promenades, ... an events lawn for public gatherings, space for future neighbourhood activities, and Public Art" (City of Surrey, 2009d, 2).

The planning staff engaged in a variety of learning practices during the design process for the renovation of Holland Park. As a starting point, the parks planners "looked at some precedents from other municipalities...nationally and internationally" (Interview #19, respondent #1, 2010). As part of the research process the consulting firm of Van der Zalm Associates (Van der Zalm and Associates, 2010) looked to precedents in Europe, the US and Canada. Millennium Park in Chicago, a site to which the consultant had travelled during a different project, was presented as useful example of "public infrastructure for sound and lights" as well as for the public art installations (Interview #19, respondent 2, 2010). The design concept of the park was also based on the "City Beautiful formal design" (Interview #19, respondent #1, 2010). The planners also took part in site visits to Yaletown's David Lam waterfront park and water front parks in Coal Harbour. These site visits included discussions with planning colleagues in Vancouver and the consultants who designed David Lam Park.

In addition to the broad scope of the research, "the City undertook an involved public input process to confirm the concept for the revitalization of Holland Park" (City of Surrey, 2009d, 2). The process was facilitated by "independent sub-consultants to... [the]... prime consultants" (Interview #19, respondent #1, 2010). A series of focus groups were conducted which ranged

"from a seniors group that lived in the nearby towers, to first nations, to...arts people, to...sports people, to other community groups and ...[to]... stakeholders" (Interview #19, respondent #1, 2010). The Business Improvement Association also held a focus group and provided input into the design. The input collected from the focus groups led to the open house where "different design direction options" were presented (Interview #19, respondent #1, 2010). The park upgrade was completed in 2008 (Van der Zalm, 2010).

The respondents reported that the project has been considered a success. According to one respondent, success can be measured by the new "demands on the park" (Interview #19, respondent #1, 2010) which have "succeeded beyond...[the department's]...expectations" (Interview #19, respondent #1, 2010). It has become necessary to "go back and do servicing and utility upgrades to better serve its user groups now" (Interview #19, respondent #1, 2010). The project has also won a British Columbia Recreation and Parks Association (BCRPA) Award for "Parks and Open Space in 2009" (BCRPA, 2010b). The planners do not formally reflect on their projects although "lessons learned" (Interview #19, respondent #2, 2010) are noted as they "go forward" to the next projects (Interview #19, respondent #2, 2010).

One of the respondents reported that the department has a supportive 'learning culture' (Interview #19, respondent #1, 2010) although it is "not the dominant culture" (Interview #19, respondent #2, 2010) because the job of parks planning in the City of Surrey is extremely busy and is the responsibility of a relatively small staff. Surrey is challenged by a "big work load and a small team

of people to do the work" (Interview #19, respondent #1, 2010). There is evidence therefore that learning, although important, is not given the highest priority.

Regardless of the time constraints, the learning environment appears to be conducive to a number of broad ranging learning practices. For keeping up-to-date with the best in international design, planners consult periodicals and journals, the internet, and attend large conferences such as the BC Land Summit, the BCSLA and the Planners Institute. The City is supportive of professional development offering funding for professional development courses necessary to maintain professional certifications.



Figure 3: Holland Park, City of Surrey

Source: L. Jansons

The parks planners maintain contact with other municipalities through the public sector subcommittee of the BCSLA, which organizes tours of various member municipalities where new projects are showcased. One respondent reported that another common learning practice was the use of consulting firms because the large workload requires the staff to "count on experts in the field" (Interview #19, respondent #1, 2010).

There is evidence to suggest that the City of Surrey's parks planning department has a supportive learning environment and that the parks planners also engaged in a variety of learning practices in the design of the Holland Park project, including international research for precedents. As with the cases of the City of Burnaby and the City of Richmond, this wide variety of learning practices may have been related to the supportive learning environment, but may also have been related to the unique nature and scale of the Holland Park renovation project.

5.1.4 City of Vancouver (Interview #14, 2009) (Interview # 16, 2009)

The City of Vancouver Parks Board has "one division that is called planning and operations" which oversees planning of the City's 200 parks (Interview #14, 2009). The planning division "is divided into three teams: the planners; ...the architects, who do ... buildings; ... and then landscape architects who deal with park related construction" (Interview # 14, 2009). The respondent reported that "planners typically do the long range studies and some of the public consultation" (Interview #14, 2009). There are presently five planners in this role. The architects and the landscape architects take the role of project managers

during the construction phase of a project. There are six staff members in each of the project management positions. In terms of the learning environment, the City of Vancouver maintains a relatively large parks planning staff which includes a variety of professionals.

The Pigeon Park renovation project was recently completed in Vancouver's Downtown Eastside. One respondent reported that it was initiated because of "an overarching initiative, for all departments including ... [parks]... to assist in the Downtown Eastside" (Interview #14, 2009). In 2005, the parks planners engaged in two key learning practices in the conceptualization phase of the design process for Pigeon Park's renovation. The first was the hiring of the "Environmental Youth Alliance... [who conducted a number of]...one on one interviews with people who actually use the park, or who would like to use the park" (Interview #14, 2009). According to the respondent, these were people were "hard to reach", and open houses would not work for them (Interview #14, 2009). The final report issued by the Environmental Youth Alliance indicated that the park is "situated in a key location...and is used predominantly by low-income residents" (Environmental Youth Alliance, 2004). One respondent reported that the study confirmed the "suspicions" of the planning department (Interview #14, 2009) by establishing that the "core users" of the park where members of the local community who had limited options for indoor living space (Interview #14, 2009). The respondent reported that the study was useful for confirming who the user groups were, but did not shed light on the "general needs ... [of the users]...in terms of what the park has to offer" (Interview #14, 2009). According

to the respondent, after the study was completed the parks planning department was firm in its view that the park design should minimize the "displacement" of the "core" park users (Interview #14, 2009). Therefore the design concept was based on the notion of a "Living Room" for members of the surrounding community who did not have access to sufficient indoor space (Interview #14, 2009).

After first providing the "key overarching principles" for the project (Interview #14, 2009), the parks planning department hired Durante Kreuk for the next phase of the project (Interview #15, 2009). The design principles were based on being "sensitive" to the current user group, and not to "displace" the current users by "marrying" it with the new design of the nearby Carrall Street Greenway that tends to support a different type of user (Interview #14, 2009). According to the respondent, the parks planners were concerned that Greenway users would have replaced the current users if the design had been left entirely to the consultant, and that the staff had to advocate for maintaining the park's flavour in the interests of the "core" user group (Interview #14, 2009).

The learning practices in this project were mainly limited to the EYA survey and the services of the consulting firm. The respondent reported that staff did not look to other municipalities for precedents because there are "not that many Pigeon Parks in the world... [where the]... poverty, mental illness ... [and]... addiction to substances is so concentrated" (Interview #14, 2009). According to the respondent, staff had limited resources to undertake travel to other comparable sites even if they did exist. The respondent also stated that the staff

instead drew on their recent experience with the refurbishment of Thornton Park and the Main Street Skytrain station where "residents that used to use those parks...low income residents are not feeling as comfortable" there anymore (Interview #14, 2010).

According to the respondent there was a lot of "on the project learning" because of issues related to nearby establishments such "fancy bars", the "arrival of the Greenway", and a nearby building "renovation" proposal (Interview #14, 2009). Each of these had the potential to "displace" the "core users" and forced parks planners to consider their responses to these new project proposals and the impact that such neighbours could make on Pigeon Park (Interview #14, 2009).

One respondent reported that the success of the renovation has not yet been determined, as it has just recently been completed (Interview #14, 2009). The parks planners involved at the conceptual phase rarely do "post occupancy" reports however planners do spend time reflecting informally on their project designs (Interview #14, 2009). The respondent reported that planners are left out of the final "detailed design and construction" because it is passed on to the project manager. However the initial parks planners typically "look at the end product" and hope that it is "more or less in line with the concept" that they had developed (Interview #14, 2009).

According to another respondent, the end product was somewhat different than the original design concept (Interview #16, 2009). The designs by Durante Kreuk were "massaged" at the implementation phase (Interview #16, 2009). For

example, this respondent reported that the engineering department and the construction crew indicated that the alignment of the benches and the choice of lighting were not appropriate for the park and therefore these features were reconfigured at the time of park construction (Interview #16, 2009). City crews who were working on the Carrall Street Greenway at the same time completed the construction phase of the project. As a result many of the same materials "that were being used on the Greenway were used in the park" (Interview #16, 2009).

According to this respondent, "it is actually quite seamless ... [and]... you wouldn't know where the park started and the street ended" (Interview #16, 2009). Therefore it remains to be seen whether or not the initial goal of "replacement not displacement" (Interview #14, 2009) has been achieved. The respondent reported that evaluation of the project, by project managers, is typically informal although post occupancy evaluations have occurred in a few rare situations (Interview #16, 2009).

In terms of learning practices beyond those utilized for Pigeon Park, the parks planners meet on an annual (or 18 month) basis with park planners from San Francisco, Portland, Seattle and Vancouver. The last meeting was in 2008 in Vancouver and some of the newer parks projects in Vancouver were "showcased" (Interview # 14, 2009). The event typically includes some training sessions and some sharing of knowledge and experiences. One respondent reported that this informal network is not typically utilized as a source of learning beyond what takes place during the annual meetings. In fact, the respondent

reported that the City of Vancouver's Park Planners rarely reach out to other municipalities, within the lower mainland, for ideas with small or midsized projects. This respondent stated that staff assumed that the practice of looking elsewhere for local precedents happens indirectly through the consultants who carry expertise and experience from other municipalities with them from project to project (Interview #16, 2009). Vancouver is a member of the BCRPA and does on occasion look to other municipalities in the case of larger projects such as the recent development of a horticultural strategy. Websites are also a source of information.

One respondent reported that parks planning staff would typically take part in more learning activities than they did in the past year, which has seen increased "fiscal restraints" (Interview #14, 2009). According to one respondent, another important feature within the learning environment is the lack of a supportive learning culture (Interview #14, 2009). The respondent indicated that the "three silos" of the planning department "really ... [are]...silos in our department" (Interview # 14, 2009) because "once a project gets transferred from ... [the planner's]... desk to either the architect or the landscape architect ... [there isn't]...enough conversation" (Interview #14, 2009). This respondent reported that there is typically little time to bring planners back into the "conversation" once the project is under construction (Interview #14, 2009). With respect to new ideas, the planning department is "attuned to saying yes let's do that" however financial, administrative and time constraints are a huge hurdle (Interview #14, 2009).

Therefore, there is evidence to suggest that the City of Vancouver's parks planning department has a limited budget for professional development.

Regardless of this limited budget and the "siloed" (Interview #14, 2009) nature of the learning environment, the parks planners still engaged in a variety of learning practices in the design of the Pigeon Park renovation.

5.1.5 City of Abbotsford (Interview #1, 2009)

The Parks, Recreation and Culture department in the City of Abbotsford consists of three planners who are all Landscape Architects. "Parks Services is responsible for the design, development, maintenance, and operation of 189 parks, totalling over 3392 hectares of land" (City of Abbotsford, 2010).

The Mill Lake Spray Park renovation was a project intended to reduce the demand for potable water from the City's water system as well as to treat the runoff water from the children's spray park through a series of bio filtration systems rather than through the City's sanitation system. A discussion with the manufacturers of the spray equipment determined that there were no options to reduce the amount of water use, by way of alternative spray mechanisms.

Therefore, parks planners were forced to consider other on-site options to minimize the demand for water on the City's system. The concept of using onsite water and on-site treatment was developed in-house. After confirming that the area had a well, which could provide potable water, and an area for a potential bio filtration system, the parks planners developed the initial concept for the spray park renovation. The "technical requirements" (City of Abbotsford, 2009b) were prepared by the parks planning department and were then passed

on to the "design build" company called Habitat Systems Incorporated for design and implementation (City of Abbotsford, 2009b).

The respondent reported that the parks department hopes that the project will be successful when completed in May 2010, and that success will be measured in terms of reducing the demand for water on the City water system, as well as reducing the need for the runoff to flow through the sanitation system.

According to the respondent, most learning related to various projects typically occurs informally on the job, or in courses and conferences provided through the BCSLA. The City provides funding for professional development and the focus of this professional development is dependent on the City's "priorities, mandates, and goals." According to the respondent, new ideas are supported as long as they fit "with the parks program" as outlined by the City.



Figure 4: Mill Creek Spray Park, City of Abbotsford

Source: L. Jansons

The parks planning staff also take advantage of the networks that are associated with the Canadian Society of Landscape Architects (CSLA) and the International Federation of Architects (IFA). Maintaining membership in the BCRPA allows the staff to attend the monthly meetings and connect with colleagues in other municipalities.

Evidence suggests that the learning environment within the parks department in the City of Abbotsford has several features that enable learning such as a training budget, opportunities to network with professionals and colleagues in other municipalities, as well as a supportive learning environment. Regardless of the supportive learning environment, the parks planners decided on only two learning practices during the design process of the Mill Creek Spray Park, discussions with manufacturers and engaging a consulting firm. Perhaps other factors such as the nature of the project and the expertise available through the "design-build "consulting firm played a role in their decisions not to look to other municipalities or other colleagues during the design process.

5.1.6 District of North Vancouver (Interview #4, 2009)

The District of North Vancouver Parks and Environment Division is a branch of the Environment Parks and Engineering Department (District of North Vancouver, 2010) and consists of three planners, and various other experts in construction, horticulture, and arboriculture who "work with the planning and design team." There are over 100 parks in the District of North Vancouver.

In 2003, the District of North Vancouver "initiated a study, entitled the Alpine Recreational Strategic Study (ARSS), with the goal of developing a

comprehensive strategy for managing mountain recreation" (District of North Vancouver, 2007b, 6). Several recommendations for protecting the natural environment of Fromme Mountain "emerged" (District of North Vancouver District, 2007b, 6). One of the recommendations was to "move forward on a Fromme Mountain Sustainable Trail Classification Study" (District of North Vancouver, 2007b, 6). The Study was to assess the existing trails and "develop Best Management Practices to address environmental concerns" particularly in areas where mountain biking had affected the trail system (District of North Vancouver, 2007b, 6).

According to the respondent, the parks planning staff initially engaged in learning practices focussed on the American approach to parks issues "because the mountain biking ...[trail management strategy in the US]...was actually... ahead" of the Canadian management strategies. The staff looked to Moab, Seattle, Oregon and Whistler for precedents because each had well developed mountain biking areas. Most useful were the "models of how they approached their issues," particularly in Moab, Seattle and Oregon where stakeholders were involved in the process of developing a management strategy. The American parks planners were contacted by telephone and provided reports as well as direction to informative links on their websites. The respondent reported that it was valuable to get a "head start on a process...rather than starting from square one." The flow of information was "funnelled through" a project manager who assimilated the information and reported to the larger group as necessary.

The respondent reported that the parks planning staff then realized that the project would require a "huge amount of public consultation" because it was a "divisive issue" between park users who wanted to maintain the natural qualities of the mountain, and others who wanted to use the trails for mountain biking and other forms of recreation. According to the respondent, the parks planners had never been involved in such a large public process and found the American information helpful in this regard. Stakeholder meetings secured "additional information on ecosystem and community values important to the creation of a trail classification system and best management practices" (District of North Vancouver, 2007b, 137).

Beyond the large number of public meetings, the learning process also included the hiring of consulting firms "to do a whole inventory review of the trees, and their condition... [and to]...inventory the trails." "The ecological assessment was conducted by ... Keystone Environmental Limited ...[who]... provided information around the location and nature of high value habitat areas" (District of North Vancouver, 2007b, 157). "The trail sustainability evaluation of Fromme Mountain was completed by Bear Environmental" (District of North Vancouver, 2007b, 157) and the landscape architecture firm of Lees and Associates was also involved in the design process (District of North Vancouver, 2007a, 2).

According to the respondent, the project was successful because it had passed a council review and the council was set to act on the recommendations of the study. The parks planning department did not reflect on the success of the

project and in fact does not have a mechanism in place for formal reflection. The respondent reported that the reflection process is typically informal and happens on a "cursory level."

In terms of the learning environment within the parks planning department, the respondent reported that there is "a lot of back and forth between the park planners in the lower Mainland" providing evidence of "communities of practice" involving parks planners working in different municipalities (Lave and Wenger, 1991). The District provides the department with a training budget for "most of the local trainings". Evidence of a commitment to learning was observed when the respondent reported that keeping "up to speed" was essential for the parks planning department, particularly around issues relating to "climate change which is really impacting parks".

In terms of learning practices, an important resource for the parks planning department is the staff in other departments. The respondent reported that there was "a real effort to bring a lot of different staff from different departments to problem solve", which forces the parks department to consider issues beyond their "own little world ... [and]...see that...the District has a lot of skills and talents". For example, as a result of advances in technology, and because these advances have become incorporated into almost all design projects, the staff in the parks planning department finds it necessary to look to other departments for individuals "who have that skill base." In terms of learning practices beyond other District departments the parks planners in the District of North Vancouver often take part in "field trips" to other municipalities to meet with

planners, designers or project managers in order to "fast track" their own projects. The respondent reported that these parks professionals would often share their studies, reports and design details. The parks planning department also creates staff teams to manage the design process for most projects. These teams are an important learning opportunity as they include a variety of individuals from different departments with different expertise. Consulting firms are often hired to take part in the design process and, according to the respondent, their expertise is also an important learning resource.

It appears that the District of North Vancouver's learning environment in terms of funding for professional development, a commitment to learning, and informal networking opportunities has provided a supportive learning culture for parks planners. The variety of learning practices that the parks planning department engaged in during the Fromme Mountain Trail Classification Study may reflect this supportive learning environment.

5.1.7 Township of Langley (Interview # 3, 2009)

The Township of Langley's Planning for Parks, Design and Development

Department has a "manager, three designers, one landscape design technician,
an urban forestry technician and an urban forestry tradesman." Recently the

Township of Langley has been "coordinating rainwater management in parks and
in...greenways."

According to the respondent, one of the Township of Langley's parks planning staff members attended a conference on rain garden development.

Upon returning to the department, this information was presented to the staff team in hopes of initiating a discussion about the potential applications of bio swales within the Township. The staff team was a "multidisciplinary team involving drainage, operations, transportation and road design, development engineering, planning, development planning, and parks design".

After deciding to include rain gardens in the design guidelines for a new residential development at Milner Heights, the staff team engaged in a study tour of some of the rain gardens in the District of Maple Ridge and in the city of Seattle, Washington where they conferred with the design consultant. According to the respondent, these tours were "really effective" as a means to understand many of the issues related to rain gardens. Along with the study tours, the design team also conducted internet research. Using this information the staff team was able to create their own designs and drawings in-house and subsequently added these designs to the neighbourhood plan for Milner Heights.

According to the respondent, another feature of the rain garden project is an educational component that will take the form of signage at the various sites and brochures to be handed out at various events such as Water Week.

The respondent reported that the project has been considered successful in terms of the interest shown by landscape architects working in other municipalities. The parks planning department has since developed a "rainwater management seminar" which, according to the respondent, has been well received at a recent BCSLA event. The responded stated that the rain gardens in the Milner Heights development have not been implemented in accordance

with the neighbourhood plan design guidelines, however, discussions between the developers and planning staff have been on going to resolve this.



Figure 5: Rain Gardens, Milner Heights, Township of Langley

Source: L. Jansons

According to the respondent, some of the features of the learning environment are funding for professional development and BCSLA conferences, and a supportive learning culture that values new ideas. However, the respondent reported that the staff could benefit from "sharing knowledge" with other departments in the Township. The Milner Heights rain garden project was unique because it was an example of a "proactive" (Campbell, 2009) approach to learning. Most learning practices in this study were of a reactive nature.

5.1.8 Bowen Island Municipality (Interview #2, 2009)

The planning department on Bowen Island consists of a senior planner and one planning clerk. The planning department is also responsible for issues related to parks and land use (Bowen Island Municipality, 2010c). Bowen Island's Parks and Recreation Commission, which also would have had input into parks issues, is presently on hiatus and its responsibilities have been shifted to the Bowen Island Greenways Advisory Committee (Bowen Island Municipality, 2010a). The Bowen Island Greenways Advisory Committee was created to "provide advice and input into future park, trail and outdoor recreation planning, land use decisions, eco-tourism and nature conservation opportunities on Bowen Island" (Bowen Island Municipality, 2008). Parks planning services are also contracted out to consulting firms.

The Planning Department is currently "working on an island-wide Greenways strategy to help guide the development of Greenways" (Bowen Island Municipality, 2010b). According to the respondent, before 2001 the parks strategy on Bowen Island focused on acquiring areas of ecological importance and did not take into account the "connectedness" of greenways. The Greenways strategy has developed "around ...island needs for watershed protection, stream corridors, and wetlands and their uplands". These protected areas serve as "wildlife corridors, also as potential trail corridors." The respondent further reported that Bowen Island has begun to pursue "a series of parks that with time will create interconnectedness across the island." The Greenways strategy has allowed for the acquisition of property through rezoning and through new developments on the Island.

The learning practices related to the development of the Greenways strategy are wide ranging. The respondent reported that in 2001 the "notion" of a Greenways Strategy was discovered by a "citizens' committee" mainly through internet research. Following the conceptualization of the Greenways Strategy, developers and their consultants provided the next opportunity for learning. According to the respondent, the "developer who did most...of these developments really was the teacher in this" because they understood the concept and therefore proposed developments "that had embedded in ... [them]... a Greenways logic." Each new development required "environmental assessments" that were completed by the environmental consultants contracted by the developers, and each report included the "rationales for each of these Greenways acquisitions". According to the respondent, these reports provided important learning opportunities for the staff within the parks planning department.

The respondent reported that the parks planning staff on Bowen Island has also learned about Greenways from various "community groups" with a "large knowledge base" and who supported the principles of Greenways.

According to the respondent, on Bowen Island "the community ultimately drives the process and... staff are facilitators in land use planning and it's not the other way around."

The Greenways Strategy has been successful in acquiring seven parks since 2001 and "when assembled ... [they]... are, even though each of the parcels is small, they are forming a connected network of trails and streams for

protection." According to the respondent, reflection on the process is on-going by way of the public review process of the new Greenways Strategy. "There is a public debate over its strengths and weaknesses... [and]... that is the reflection."

In terms of the learning environment, the parks planning staff routinely take part in municipally funded learning activities, although according to the respondent, a major challenge is making time for these activities. Another feature of the learning environment is the fact that parks planning staff liaise with planners at the Islands Trust organization a "federation of independent local governments ...which plans land use and regulates development in the trust area" (Islands Trust, 2010). The Trust includes islands in the Howe Sound and Islands in the Georgia Straight "as far north as Comox" (Islands Trust, 2010, 1). The respondent's comments suggest that the values and knowledge of the community members are an important feature within the learning environment when community members engage with planners to share their viewpoints.

5.1.9 City of Langley (Interview #17, 2010)

The City of Langley Engineering, Parks and Environment department does not have a planning department. Parks planning is the responsibility of the Engineering and Parks Operations Department (City of Langley, 2010) which has six full-time staff members. The respondent reported that staff members typically take the role of project managers and that parks design projects are "contracted out" to consulting firms.

The City Park Lacrosse Box has been the focus of a recent update and has required staff to engage in a variety of learning practices. In order to

understand the latest developments in lacrosse Box technology, the parks staff utilized their connections with other parks managers. The staff took pictures of Maple Ridge's new facility, and the staff in Maple Ridge "shared the information and the documents that they used for their tender." These were modified for use in the City of Langley 's lacrosse box renovation. Coquitlam's Parks Supervisor also provided information regarding Coquitlam's latest renovations and hosted a site visit to three lacrosse boxes in Coquitlam. According to the respondent, these types of opportunities and connections are valuable to the parks planning department because "you don't have to reinvent the wheel."

Further learning took the form of phone calls made to "the presidents of the ... [local]...user groups" and the local network of "outdoor sports user groups" According to the respondent, this input was taken into consideration in the final designs.

Recently, a new system for parks project management has been introduced in the City of Langley. The respondent reported that the role of project manager or "general contractor" has always been "in-house" and within the new system, this role has shifted to consulting firms. The new system was launched during the City Park Lacrosse Park renovation. A consulting firm "called ISL engineering ...administered the contract...and oversaw the project". ISL Engineering and Land Services operates across Canada and specializes in several fields such as, engineering, landscape design, transportation and planning (ISL, 2010). According to the respondent, ISL engineering "made a recommendation ... [for]...their choice... [of bids]..., they did research on the

company to make sure that they were a reputable firm... [and]...they checked their references". The respondent reported that the department did however "make sure that ... [the lacrosse box]... was at the same level as all of the other ones" as they did not "want to have a sub-par project."

According to the respondent, the project was successful in terms of the construction process because most features were completed on time and under budget.

The Langley Parks department staff typically reflects on projects after completion to determine "what went well." According to the respondent, in the case of the City Park Lacrosse Box, the parks staff spent time assessing the effectiveness of the new management system. There were concerns that the new system was not fiscally responsible, however, according to the respondent "having seen how smooth this project went, it seems to be the way to go especially for larger projects." The respondent reported that the parks planning department also plans to use this new project management system for an upcoming park renovation.

In terms of the learning environment, the parks planning staff take part in regular training to "upgrade" their skills. These upgrades are typically funded by the City. The respondent reported that the monthly meetings and the email list serve provided by the BCRPA are a "great opportunity to ask questions, share information, [and]...get ideas" and that parks department staff involved with the BCRPA have evolved into "a tight community." According to the respondent,

Figure 6: City Park Lacrosse Box, City of Langley

Source: Linda Jansons

most parks planning staff are "very generous" with information, "everyone wants to see the other person do well" and if one municipality is working on an idea others will "try to improve on it, try to make it one step better." Another networking opportunity comes in the form of a summer job program for students attending Kwantlen College who are, according to the respondent, "anxious to share their ideas" with the parks staff.

Key features within the learning environment in the parks department at the City of Langley seem to be, connections with user groups within the community, and connections with other parks planners within the Lower Mainland. These features were reflected in their choice of learning practices.

5.1.10 City of New Westminster (Interview #11, 2009).

The Parks Division of the Parks, Recreation and Culture Department manages parks planning in the City of New Westminster (City of New Westminster, 2010). The department manages both capital projects and oversees parks spaces created by developers. One staff person manages the design and planning of these projects.

In terms of learning practices, the respondent reported that the parks planning department works with park design consulting firms both in the design of capital projects, and non-capital projects that are developed privately. The department is also frequently involved in inter-departmental activities with the engineering and planning departments. According to the respondent, the first step in the design of a new park project is to discuss the project with other departments "and then begin to get the consultants" that are most helpful.

When a developer proposed a new residential development in Queensborough, the respondent reported that the City "pushed" to ensure that a walkway around the tip of Lulu Island was included in the development because it had been outlined within the Master Plan for the island. According to the respondent, the City wanted "to get as much park space and parkland space" as possible. The design of the park was developed by the team of "geotechnical engineers, civil engineers and the landscape architect" hired by the developer. The respondent reported that several discussions between the parks department and the developer took place to make sure that the developers were "looking at what angles would be best for the City." According to the respondent, the parks planning staff has its "own opinion on best practices" developed by learning from

contact with colleagues in other municipalities, and from experience working with other consultants and developers on other projects. The respondent also stated that in the case of the Queensborough development, the ideas brought forward by the consultant were continually reviewed and modified by the city staff to ensure that they proceeded according to the City's Master Plan.

The respondent reported that the project has been successful "because it has provided exactly what ... [the City]... wanted to have: the open space, people can view the river, watch the river. It's very wide...they can cycle, they can jog, they can walk ... enjoy the scenery ... [and]...relax." The parks department did not formally reflect on this project but did evaluate it informally after completion by making sure that all of the features had been installed and were operating effectively.

In terms of the learning environment, the respondent has reported that the parks planning staff is continually encouraged to "come up with something new," suggesting that the learning culture within the department supports and values new ideas. The respondent also reported that the informal network of parks managers who attend the BCRPA events is a valuable resource for discussing "issues" and gaining valuable feedback. However, according to respondent, when confronted with the design of a large project it is not typical to "chase down someone" in another municipality, unless there is evidence that the municipality has "something valuable to offer."

Figure 7: Queensborough Pedestrian Walkway, City of New Westminster

Source: L. Jansons

Inter-departmental learning has also been a key component of the learning environment for the past 15 years. The parks department will routinely consult with engineering or planning and vice versa. Another important feature within the learning environment is the extensive use of consulting firms in the design process.

5.1.11 City of North Vancouver (Interview #6, 2009)

The Engineering, Parks and Environment Department "oversees the development and maintenance of parks, trails and greenways" within the City of North Vancouver (City of North Vancouver, 2010). The department consists of one landscape architect and two parks technicians (City of North Vancouver, 2010).

The re-design of Wagg Creek Park was a recent project undertaken in North Vancouver. The project was a "storm water improvement project... [intended to]...improve storm water quality and thus enhance fish habitat" in the Mosquito Creek watershed (City of North Vancouver, 2009,1). The project included a fish ladder, bio swales, rain gardens and a corresponding educational component for users of the park. The respondent reported that the project was an in-house design in collaboration with the City maintenance and operations divisions.

In terms of learning practices, staff members from the maintenance and operations division provided input into the long –term maintenance of the project. This was important for creating a design that would minimize maintenance costs. According to the respondent, this is considered an important measure of success. The engineering department was also consulted to determine the size of the bio swales needed to accommodate the volume of water run-off.

According to the respondent, the parks staff did not look to precedents in other municipalities because they already had experience with other projects within the City and considered themselves "pioneers in bringing the water up onto the surface and treating it." The respondent reported that although other municipalities have also installed rain gardens, the practice was more extensive in the City of North Vancouver because the City Council "seems to be very open and very progressive...[and are willing to]... spend a little bit more money and a little bit more time designing...all these things".

Although the project has just recently been completed, and it is too early to determine the effectiveness of the project, the respondent reported that success was anticipated and that the collaboration between the three City departments has contributed greatly to this success. The parks planners have not reflected on the process of designing the project, but are continuing to monitor its effectiveness.

In terms of the learning environment in the parks planning department, the respondent reported that the management system has changed recently to embrace a more open discussion amongst staff members because "ideas come from a lot of different places." Individuals within the department routinely take part in conferences and lectures presented by the BCSLA. Collaboration with other municipalities has started in the form of a partnership with the District of North Vancouver and the City of West Vancouver on a Parks Master Plan. The staff utilizes contacts in other municipalities, particularly where similar projects have been implemented. According to the respondent, issues of project costs, project value, and options are often discussed with colleagues in other municipalities to "draw on that experience." Therefore, learning environment within the City of North Vancouver's parks planning department appears to be a supportive one.

In terms of learning practices, the parks planners utilize connections with other City departments and colleagues within different municipalities around Metro Vancouver. According to the respondent, the department also hosts "lunch and learns" which are an opportunity for manufacturers to profile new

Figure 8: Wagg Creek Park, City of North Vancouver

Source: L. Jansons

technology during the department's lunch hour. The respondent reported that these events provide an opportunity for the parks planning staff to "keep up" with the latest developments in landscape design.

5.1.12 City of Port Moody (Interview #18, 2010)

The Parks Recreation and Cultural Services Department is responsible for the design and development of parks in Port Moody, and one staff person is in charge of managing new capital projects. The parks planner is also part of an "inter-departmental group" that reviews all new developments within the City.

According to the respondent, many of the parks in Port Moody are natural areas

and therefore require a type of management similar to that of regional or provincial parks.

A large project that was recently completed by the parks planning department was the West Hill Trail Greenway system, which is part of the City's Master Transportation Plan and connects various neighbourhoods to the shoreline trail. In terms of learning practices, the parks planning department looked to a variety of sources of information. The respondent reported that the parks trail manager who had extensive experience building trails within other parks in the City completed the initial design of the project largely in-house. In addition to this in-house design, the parks department team was also "looking at different models of trails from other municipalities ... [and]...how they have handled, different challenges." The trail linked onto the TransCanada Trail that continued into Burnaby and therefore it was also necessary to confer with planners in Burnaby.

The respondent reported that after the trail was designed by the parks planning staff, Golder Associates, an international engineering firm, was engaged to review the trail plan and provide bioengineering services and geotechnical advice. Golder Associates is a firm that has "international expertise in ground engineering, earth and environmental services" and employs a staff of various professionals (Golder Associates, 2010, 1). According to the respondent, input from Golder Associates was essential because of the steep terrain, environmentally sensitive areas that the new trail system would travel through, and the aesthetics of the trail in terms of views and protecting the privacy of the

neighbouring houses. The respondent reported that the RCMP was also included in the design process in terms of the "Crime Prevention Through Environmental Design" (Design Centre for CPTED, 2010) features of the park.

According to the respondent, the trail has been considered successful from a physical perspective, as it has maintained its quality through two seasons, including the winter season. The respondent attributes this success to "a lot of effort on the pre-planning." The parks planning department routinely reflects on the success of their projects and in the case of the West Hill Trail this reflection took place during a walk through with the members of the Parks Commission who provided useful feedback.

In terms of the department's learning environment, the staff typically takes part in courses offered by the BCRPA. The respondent reported that the parks department encourages staff "to take advantage of the training" and funding provided by the City. According to the respondent, another key feature within the parks planning department learning environment is the email network that is associated with the BCRPA managers group. The respondent reported that the parks planning department recently considered installing trail counters on the new trail and used the list serve to conduct research. Several parks planning departments in other municipalities responded to this request for information. According to the respondent a characteristic of most parks planning departments is a tendency to share "things because they support the concepts or the principles ... behind good planning". The respondent stated that the idea is to try and not have to "reinvent the wheel".

Figure 9: West Hill Trail, City of Port Moody

Source: L. Jansons

Other features of the learning environment are memberships in the "northeast sector" which includes the municipalities of Coquitlam, Port Coquitlam and Port Moody, networks for black bear, wildlife and stream stewardship, the subcommittee on climate change within Metro Vancouver, the "Burrard Inlet Environmental Action Plan" and the International North West Parks and Recreation Association. According to the respondent, networking is important for Port Moody because of its small size. The respondent stated that access to parks managers in larger cities with more resources and more experience with a variety of projects is a very valuable resource.

6: VARIABLE-WISE ANALYSIS

In order to highlight the salient dimensions of the learning process, the second format for analyzing data utilized an excel spreadsheet. This format represented a more systematic analysis of the each of the learning environment and learning practice variables. The learning environment data was grouped into categories corresponding with the five variables that describe learning environments: (i) size of municipality; (ii) budget expenditures on parks and recreation; (iii) parks planning department size; (iv) parks planning department staffing; and (v) project specific characteristics. Project specific characteristics were included in the learning environment categories because the nature of each project would likely have required different types of learning practices. For example, some projects may have required a public consultation process, such as in the case of the City of Burnaby's Metro Skate Park where others, like the retaining wall renovation in the City of White Rock would not have required public consultation. These requirements are a feature of the learning environment within which planners work and make decisions. As mentioned previously, the learning environment within which Metro Vancouver's municipal parks planning departments also includes several other features, which are beyond the scope of this project, such as the influence of senior management and various levels of government, trends in planning, and the increasing use of consulting firms (Perl and White, 2002).

The data for learning practices was coded into the 10 categories for learning practices. After the data was entered into the spreadsheet, it was simplified and placed into a summary excel spreadsheet table (see appendix 3). The system of coding and process of simplification is discussed in the next section.

In order to discover relationships between the variables, the "custom sort" feature in excel was used systematically with each variable, beginning with "municipality size". The sorted data was then visually inspected and any relationships that were observed have been presented in the findings section.

6.1 Coding

Table 4 below presents the variables that describe learning environment, and Table 5 presents the variables that describe learning practices. In Table 4 the first category describes the population size of the various municipalities. The second category presents budget values for each of the municipalities. Size of the planning department for each municipality is the next category, followed by parks planning department staffing and finally project specific characteristics.

Table 4: Learning Environment Variables

Categories	Codes	Codes
Size of Municipality	SmallMediumLarge	
Budget	% budget spent on parks	

Parks Planning Department Size Parks Planning Department Staffing	 Small Medium Large Landscape Architect on Staff 	Yes No
	 Learning Opportunities Through Associations 	BCSLABCRPABCSLA/BCRPABRSLA/BCRPA/Other
	 Formal Networking Activity 	HighMediumLow
	Provincial NetworksInternational	YesNoYes
	Networks Informal Networks	• No • Yes
	Formalized Tools for Reflection	NoYesNo
	Learning Culture	HighMediumLow
	Use of Consulting Firm	AlwaysIn-house
Project Specific Characteristics	Capital Project Project Type	YesNoNew
	Urban or Peripheral	RenovationUrban
	Reason for Project	 Peripheral Issue Master Plan NP OCP Public Lobby
	Specialized Expertise NeededSize	YesNo
	• SIZE	LargeMediumSmall

Source: author

Table 5 below presents the learning practices observed during the specific project examined in each case study. These 10 categories range from

Table 5: Learning Practice Variables

Table 5: Learning Practice Variables			
Category	Codes		
Other City Departments Involved	• Yes		
	• No		
Other Groups Consulted	• Yes		
	• No		
Other Municipalities Consulted	• Yes		
	• No		
Site Visits	• Yes		
	• No		
Other Sources of Information	• Yes		
	• No		
Consulting Firms Engaged	• Yes		
	• No		
Number of Consultants	• value		
Head Office of Consultant	No Consultant		
	 Various 		
	Metro Vancouver		
	• BC		
	 International 		
	Regional		
Range of Consultant	No Consultant		
	 Various 		
	Regional		
	National		
	 International 		
Search Range for Precedents	None		
	• Local		
	Regional		
	 International 		

Source: author

learning from other city departments, other municipalities, and other sources of information, to conducting site visits. The categories also indicate the number and variety of consulting firms that were engaged.

6.1.1 Size of Municipality

"Size of municipality" was based on population size as provided by

Statistics Canada 2006 census data retrieved from the BC Civic Info website (BC

Civic Info, 2010). The data was coded in to "small" which represents

municipalities with a population of less than 75000; "medium" for municipalities

with a population of between 75001 and 125000; or "large" which represents

municipalities with over 125000 residents. This coding system has created three

groupings of roughly the same number of municipalities. The codes for "small",

"medium" and "large" were included in the summary table.

6.1.2 Budget Expenditures on Parks Recreation and Culture

"Total Government Expenditures" and "Expenditures for Parks Recreation and Culture" for the years 2005, 2006, and 2007 were accessed from the BC Civic Info Website (BC Civic Info, 2010). The "% Budget Spent on Parks" was calculated by dividing the Total Government Expenditures by the Expenditures for Parks, Recreation and Culture. These percentage values were then added together and divided by three in order to find the average over the years between 2005 and 2007. This average was used in the analysis in order to minimize any possible distortion caused by unusually high or low expenditure years between 2005 and 2007. This data is the most recent data available and provides a

general idea for the level of spending. As mentioned previously, the figure for Expenditures on Parks Recreation and Culture represents the total amount spent on parks capital projects, parks programming, recreational programming, cultural programming and may therefore be somewhat distorted. As indicated previously, comparable statistics for UBC and the Tsawwassen First Nation were unavailable through the BC Civic Info website and therefore these local governments were omitted from the analysis. The average percentage value for "% Budget Spent on Parks" has been included in the summary table.

6.1.3 Parks Planning Department Size

The next category described the number of parks planning staff within the parks planning departments. The data has been coded into "small" for departments with one staff member, "medium" for departments with 2-3 staff members and "large" for departments with more than three members. This category has been added to the summary table.

6.1.4 Parks Planning Department Staffing

The staff of the parks planning departments within Metro Vancouver's municipalities may include a variety of professionals such as landscape technicians, graphic technicians, horticulturists, arbour culturists, forestry technicians and landscape architects. The focus of this analysis has been on "landscape architects in department" because of the need for their technical expertise in providing drawings for the design process. The category for "learning opportunities through associations" describes staff memberships in the

British Columbia Society of Landscape Architects (BCSLA) and/or membership in the British Columbia Recreation and Parks Association (BCRPA), which both provide courses and conferences to planning and parks professionals. The BCSLA is a "self-governing professional society among whose objectives include the furtherance and maintenance of proper standards of professional practice" (British Columbia Society of Landscape Architects, 2010,1). The association publishes the newsletter "Sitelines ... [which]... showcases work" (British Columbia Society of Landscape Architects, 2010,1). The Society also requires that members maintain their Landscape Architecture certification through courses accredited by the Society (British Columbia Society of Landscape Architects, 2010). The BCSLA hosts regular conferences that provide an opportunity for Landscape Architects to network with colleagues and learn about new developments within the industry (British Columbia Society of Landscape Architects, 2010).

Parks planners who are not landscape architects were in most cases members of the BCRPA, "a central resource agency for members and stakeholders of the parks, recreation, physical activity and culture industry" (British Columbia Recreation and Parks Association, 2010a,1). The association has "a diverse network of partners and extensive programs and services" and has a variety of members including some within the corporate sector (British Columbia Recreation and Parks Association, 2010a). The BCRPA hosts a yearly "Spring Training Conference" (British Columbia Recreation and Parks Association, 2010a,1) which provides opportunities for parks professionals to "to

learn about hot topics in the industry while networking with others in the sector" (British Columbia Recreation and Parks Association, 2010a,1). The Association also supports a Public Sector Committee, which meets monthly to focus on issues related to parks planning in the public sector (Interview #9, 2009). The BCRPA publishes the journal "Recreation and Parks BC" (British Columbia Recreation and Parks Association, 2010a), which features "the latest innovations in the sector, news reports from the regions, and a calendar of events, courses, workshops and conferences" (British Columbia Recreation and Parks Association, 2010a,1).

The features of the learning environment in terms of BCRPA and/or the BCSLA membership are networking opportunities and courses focused on offerings at either one or the other association. This is also true for municipalities with memberships in associations such as the *Western Canada Turf Grass Association* or the variety of other associations mentioned by the respondents.

Landscape architects within the parks planning departments of Metro

Vancouver's municipalities are typically members of the BCSLA and BCRPA and
those who have dual membership may have access to a relatively larger range of
learning practices. The category labelled "learning opportunities through
associations" indicates the respondent's associations and has been added to the
summary sheet.

The networking activity of the municipalities has also been included in the category of parks planning staff. The reason that it has been included here rather than in the learning practices category is that it describes a feature of the

learning environment that may affect a parks planner's choice of learning practices. The category labelled "formal networking activity" has been calculated by totalling the number of associations for which the respondent reported having a membership. This was not multiplied by the number of staff members, as there may have been some overlap, which may have caused a distortion in the results. Although these associations might not be considered networks in some situations, respondents have often acknowledged them as the foundation for informal networking connections between colleagues in different municipalities. As outlined within the literature review, networks "primarily function as clearinghouses of information" (Keiner and Kim, 2007, 1382) and therefore networking activity, even informal networking is an important feature within the learning environment.

It is beyond the scope of this project to determine which associations or networks are most important in the learning process and therefore the coding has been based on the number of memberships: "low" for 0-1memberships; "medium" for two memberships; and "high" for 3 or more memberships.

Categories for "provincial networks" and "international networks" with "yes" and "no" values indicated the range of the learning opportunities. The category for "informal networks" relates to whether or not the respondent indicated that he/she had informal connections with colleagues in other municipalities that were used as an avenue for information. These informal networks meet the criteria for "Communities of Practice" (Lave and Wenger, 1991) as outlined by Koliba and

Gajda (2009) and therefore were considered as such in the findings section.

Each of these categories has been included on the summary sheet.

The "learning culture" of the municipality has been coded as "high", "medium", or "low". These codes describe a combination of the opinion of the respondent, some of the learning environment characteristics, and the observations of the researcher. The availability of funding and the opinion of the respondent regarding "learning culture" have been coded as "yes" or "no". Much of the literature reviewed on organizational learning suggested that reflection was an essential element in learning organizations (Arygris, 2004; Senge, 2006; Spector and Davidsen, 2005, Orthner et al, 2005), and therefore the data for "formalized reflection" in terms of the specific project examined has been included in this category and has been coded as "yes" or "no". The organizational learning literature also points to the importance of valuing new ideas in order to create a supportive learning environment (Lorenz and Lawson 1998; Senge 2006) and therefore this data has been included as a category to determine learning culture with coding of "yes" or "no". "Commitment to leaning" has been coded as a "yes" or "no" based on the researcher's impressions of whether or not the respondent and other members of the parks planning staff simply attend conferences and courses in order to maintain certifications or rather demonstrate their commitment to learning by seeking out learning opportunities to broaden their knowledge base. In order to establish values for learning culture a "yes" in only 1 of these 5 categories would indicate a "low" learning culture, a "yes" in 2-3 categories indicated a "medium" learning culture

and "yes" in four or more represented a "high" learning culture. The values have been included in the summary sheet.

"Consulting firm use," indicated whether in some situations design work was completed in-house by the parks planning staff or if a consultant was used in every project, such as was the case in some of the smaller municipalities. This category refers to the general practice of employing consulting firms rather than whether or not a consulting firm was engaged for the specific project examined, in which case this would be indicated in the learning practices variable list.

Consulting firms are a common fixture within the municipal parks design process bringing knowledge and experience from a variety of projects from around the world. Their role as teachers in the learning process is complex. In some cases, planning departments may rely on their services to simply design a project and no learning on the part of the parks planner is involved. In other cases, learning may result from these interactions. For the purposes of this project, consulting firms have been considered an important element in the learning environment. The code "always" refers to planning departments where the planners did not ever undertake in-house designs and the code "in-house" indicates that for some projects the planning department undertakes the design process with no consultant. Again, these codes refer to consultant use in general terms rather than in terms of the specific project examined. This category has been included in the summary sheet.

6.1.5 Project Specific Characteristics

The coding related to "project specific characteristics" describes the projects examined. The category for "project type" describes whether the project was "new" or was a "renovation". A "capital" project refers to a project developed by the municipality and a non-capital project refers to a project that was privately developed. The size of the project has also been coded as "small", "medium" and "large". These values are based on the scale of the project in relative terms, for example, the renovation of a lacrosse box has been coded as "small", a storm water management project has been coded as "medium", and the development of a new skate park was considered a "large" project.

The "reason for the project" has been recorded as: "OCP", "Master Plan", "NP" for neighbourhood plan, "Public Lobby", or "Issue" for projects that have resulted from a need to replace aging infrastructure, for example a crumbling retaining wall. The characteristic "specialized expertise needed" refers to projects that required expertise beyond what would normally be associated with an urban park. For example, a public process which includes school children, or projects that require geotechnical engineering or other expert knowledge are projects that require specialized knowledge. The projects have also been coded as "urban" or "peripheral" depending on their location within the municipality. To maintain the fine-grained quality of the analysis these categories have been included on the summary sheet.

6.1.6 Learning Practices

The next grouping of categories describes the learning practices that were involved in the design process for the specific project examined. For the purposes of this project, consulting with other groups, whether with other departments within the City or user groups, or any other groups, has been considered a learning practice because it would be likely that knowledge in some form would, in most cases, be transmitted to the park planners by way of these interactions. The categories for "other departments involved" indicates whether professionals from other departments within the City provided input into the design process. An example of this type of learning practice might be looking to the engineering department or the environmental department for technical knowledge. "Other groups consulted" refers to any groups that may have provided input into the design of the project for example stakeholders, community groups, or the RCMP. The category for "other municipalities consulted" refers to the practice of looking to other municipalities within Metro Vancouver, or elsewhere for precedents or any other information. Colleagues in these municipalities may, or may not, have been contacted directly during this process. "Site visits" refers to the activity of visiting precedents in other municipalities within the Lower Mainland and Washington State. The category for "other sources of information" indicates whether the design team conducted research on the internet, through journals, or gained knowledge through manufacturers, or contractors or any other sources of information. The data for each of these categories has been coded as "yes" or "no" and has been included on the summary sheet.

Whether or not a "consultant firm was engaged" has also been coded as "yes" or "no" and has been included on the summary sheet. Data related to the number of consultants engaged for the specific project examined has also been recorded as a value on the summary sheet. For the purposes of this project, the hiring of consulting firms has been considered a learning practice because in it is likely that in most cases some knowledge would be transmitted from consulting firm staff to parks planning staff during the interactions that take place. Learning may not be a part of every interaction, however several of the respondents indicated that consultants were an important learning resource because of their experiences working in other municipalities and with other projects.

Categories for "head office for consultant" indicated where the consulting firm was based. "Metro Vancouver" indicated that the head office of the consulting firm was in the lower mainland. "International" and "national" indicated that the head office was located elsewhere in Canada or overseas. The "range of consultant" indicated where in the world the consulting firm has taken part in design projects. A "regional" range indicates a consultant who has completed projects in BC and/or Alberta, "national" indicates Canadian projects and "international" refers to US and overseas projects. The information for "head office" and "range of consultants" was retrieved from the websites of the various consulting firms. In each of these categories a code of "none" indicates that municipality did not use a consultant or the project was not a capital project in which case a consulting firm was hired by a developer. The code of "various" indicates that data for a specific project was not collected, as in the case of the

City of Coquitlam. The "?" indicates that the data for that category was not collected. In order to highlight the complexity of the learning process all of these categories have been included in the summary sheet.

6.2 Variable-Wise Findings

The variables describing learning environments have been analyzed in relation to the variables that describe learning practices. Each of these variables has been systematically analyzed both within itself and in relation to other variables. Data for the Village of Anmore, the Village of Belcarra, and the Village of Lions Bay was not included within the analysis, as these municipalities do not have a parks planning department. Data for UBC and the Tsawwassen First Nation was not included as comparable statistics were not available.

The next sections present the findings of the analysis only where relationships were observed. Situations where no relationships were observed have been omitted except in cases where these situations have the potential to assist in describing the types of learning models that exist.

6.2.1 Population Size

As expected, the "municipality population size" was related to the "parks planning department size" in the majority of the municipalities. In most cases "large", "medium", and "small" municipalities have corresponding parks planning staff sizes. There were a few exceptions. The City of Coquitlam, District of North Vancouver, and the Township of Langley maintain "large" parks planning staffs while being "medium" sized cities, and the City of North Vancouver and the City

of West Vancouver have a "medium" staff while being "small" municipalities.

The data collected does not provide insight into why these variations have occurred. It may be linked to differences in staff responsibilities and the organization of the various parks planning departments. Further discussion of the "parks planning department size" as it relates to learning practices will follow in the next section.

A relationship between the "municipality population size" and "learning opportunities through associations" was observed. In most cases of "large" and "medium" municipalities, learning practices included courses and conferences from both the BCSLA and the BCRPA. This is likely because the larger departments typically include a landscape architect with access to membership in the BCSLA. It is interesting to note that despite the broader access to learning activities "learning culture" was not related to "municipality population size". These relationships and others related to the staffing of the parks department will be further discussed in a following section, which focuses on parks planning department staffing.

With respect to the design process of the specific projects examined, the population size of the municipality did not, in most cases, directly affect the choice of learning practices for the project examined. There was however, a relationship observed between the "municipality population size" and the "number of consultants" in the case of some of the larger municipalities. For example, the City of Surrey (large) utilized four consultants for the Holland Park restoration and the City of Burnaby (large) employed five consultants for the Metro Skate

Park project. This may have been due more to the scale of the projects rather than the size of the municipality as the City of Vancouver (large) parks planners employed only one consultant for their smaller project in Pigeon Park. Therefore, it is likely that other factors beyond "municipality population size" have affected the choice of learning practices for these projects.

In conclusion, learning practices in most municipalities within Metro

Vancouver were rarely connected to "municipality population size" except in the

case of a corresponding larger staff, which was more likely to include a

landscape architect who would have provided access to the courses and

conference learning opportunities of the BCSLA. However, some smaller

municipalities such as Delta, Port Coquitlam, and Pitt Meadows/Maple Ridge,

where landscape architects were employed, also had access to the BCSLA.

6.2.2 Expenditures on Parks, Recreation and Culture

Within the 19 Metro Vancouver municipalities that were analyzed, there was a variety of parks expenditure rates from 8% to 21% during the period from 2005 to 2007. An analysis of the various learning environment variables and "% budget spent on parks" indicated that there were no noteworthy relationships between budgets and other features within the learning environment, including "learning culture". These findings suggest that a larger budget does not necessarily correspond with an enhanced "learning culture". It may be that in Metro Vancouver's municipal parks departments, learning culture may be more of a reflection of the individual "behaviours" (Pelling, High, Dearing and Smith, 2008, 872) than the budget environment in which individuals find themselves.

The data collected for this project cannot provide further insight into the learning activities of individuals within the parks departments.

There were no relationships observed between budgets and formal networking or informal networking. Most parks planners in the municipalities of Metro Vancouver take part in "informal networks with colleagues from other municipalities". These relationships exist regardless of budget size and in some cases, according to some respondents, are a direct result of the formal networking provided by BCSLA and BCRPA membership. Many of the interview respondents consider these informal connections as an important, if not the most important, learning opportunity for most parks planners. This finding is in line with Lave and Wenger's (1991) concept of "communities of practice" which typically operate outside of institutional structures. In this case, the institutional structure is the budget of the municipal parks planning department.

In terms of the design process of the specific parks projects, no connection was observed between "% budget spent on parks" and "other city departments involved", "other municipalities consulted", or "site visits" indicating that a smaller budgets did not necessarily send parks planners down these less expensive learning routes.

A small pattern emerged when "% budget spent on parks" was compared to "other groups consulted" and "other sources of information". For the specific projects examined in the municipalities of Burnaby (19% of budget), West Vancouver (20% of budget) and the District of North Vancouver (21% of budget), parks planners looked to "other groups" and other "sources" of information during

the design process. Reaching out to "other groups" for input in Burnaby, and the District of North Vancouver were likely big budget activities. However, in each of these municipalities the nature and scale of the projects would have also had an impact on what types of learning practices were chosen. The nature of the project rather than the large budget was also likely a factor in West Vancouver's choice to host the unique and relatively inexpensive "workshop" event as part of the design process. In fact, most of the municipalities with a variety of budget sizes sought the input of "other groups" where it was appropriate (i.e. in the case of user groups).

With respect to the "other sources of information", each of the big budget municipalities used the inexpensive learning practice of internet research. This again may have been more related to the nature of the projects than their budgets. The "search range for precedents" was not related to "% budget spent on parks" likely, because the internet offers an inexpensive international learning practice which is independent of budget. Therefore, the size of the parks budget had little impact on the types of learning practices that were chosen for the specific project examined. The "% budget spent on parks" did not restrict municipalities to using relatively inexpensive practices such as internet research, looking to other departments within the city or looking for precedents in other municipalities. More expensive methods such as consulting with "other groups" were also not limited to big budget municipalities for the projects examined.

The "% budget spent on parks" was not related to the use of "consulting firms" in the design process of the specific project examined because most of the

projects examined included a consultant in the design process. The "% budget spent on parks" was also not related to the number of consultants used, as the small budget City of Surrey (8%) engaged a relatively large number of consultants (4) for the Holland Park Renovation project.

Therefore the findings suggest that, in the case of the projects examined, it was not possible to predict the types of learning practices that parks planners would use based on the size of their parks budget.

6.2.3 Parks Planning Department Size

As mentioned in the previous section, the "parks planning department size" was related to the existence of a "landscape architect in the department". Planning departments that had a landscape architect on staff tended in most cases to be members of the BCSLA and the BCRPA. Staff in most "small" municipalities with a corresponding "small" parks planning department tended to focus their learning practices on courses and conferences provided through the BCRPA and other associations such as the International Western Canada Turf Grass Association (Interview #7, 2009). The exceptions were Port Coquitlam, and Pitt Meadows/Maple Ridge, which had a landscape architect on their "small" parks planning staff and engaged in learning opportunities through both the BCSLA and the BCRPA. Therefore, the size of the parks planning department and/or the existence of a landscape architect on staff may help to broaden the learning practices in most cases where the staff are members of the BCSLA and the BCRPA. Interestingly the municipalities who had a "low" learning culture all had access to this broad learning base through their landscape architect.

Perhaps this is another situation of individual "behaviours" (Pelling et al., 2008, 872) governing the learning practices of the department.

A relationship was observed between "parks planning department size" and "consultants used". In the case of "small" parks planning departments, consultants were "always" engaged in the design process. As was expected most of the "small" parks planning departments also engaged consultants for the specific project examined. Interestingly the "range of the consultants" hired by these "small" departments was in most cases "international" with the exception of Delta where a "national" consultant was hired. The data collected does not provide insight into the reason for this connection however, it may be related to the nature of the project and/or the expertise required as in the cases of the Whonnock Lake Berm and the West Hill Trail projects, where geotechnical engineering was required.

The implications of the findings related to "consultants used" depends on one's perspective. Interactions with consultants during a parks planning design process could be considered valuable learning opportunities, therefore in the case of smaller departments the standard practice of hiring consultants could be considered beneficial. From another perspective, consulting firms could be considered a type of "expertise" which may bring to the design process their own ideas of what best practice should be (McCann, 2008, 6) rather than what would be best in the local context.

A relationship between the "parks planning department size" and "other sources of information" was observed. Where there were "large" parks planning

departments with large scale projects, municipalities took advantage of learning practices that involved "other sources of information". This may also have been related to the nature of these large-scale projects, which required parks planners to research sources beyond their colleagues, and beyond precedents in other municipalities, as was the case for Burnaby's Metro Skate Park.

Therefore, the most notable findings related to the "size of the department" were that large departments were more likely to have access to the BCSLA course and conference offerings and small departments were more likely engage a consultant on a regular basis.

6.2.4 Parks Planning Department Staffing

As mentioned previously, the focus of this part of the analysis has been on landscape architects within parks planning departments, as they are a key element in the design of parks projects because their technical expertise is required to provide drawings for the design projects. In terms of the design process for the specific project examined, having a "landscape architect in the department" was not related to choosing locally sourced learning practices such as looking to others within the different city departments, or others within the community, or to colleagues within other municipalities, or even formal or informal networking activity.

A relationship was observed between having a "landscape architect in department" and using "other sources of information". The departments that utilized "other sources of information" all had a landscape architect on staff with the exception of Bowen Island. Bowen Island's Greenways project design did

include an "other source of information" in the form of an internet search despite the fact that a landscape architect was not on staff. However, the project was focussed on land use issues rather than parks design and therefore landscape architects may not have been involved. In order to attempt to understand the relationship between the use of "other sources of information" and landscape architects, a closer examination at the types of other information was conducted revealing the internet, manufacturers, contractors, specialized seminars, and journals were the main learning practices. This may suggest that in some cases these landscape architects may have been more involved in the design process for the specific project examined than their non-landscape architect colleagues were in their projects, meaning that a greater variety of learning practices were necessary. An alternative conclusion is that the relationship between landscape architects and "other sources of information" may simply be related to the types of projects that were examined and the corresponding knowledge that was necessary.

It was not surprising to find a relationship between "landscape architect in department" and whether or not a "consulting firm was engaged". All municipalities used at least one consultant in the design process for the project being examined, with the exception of the City of North Vancouver, where a landscape architect was on staff. In the other cases where no consultant was hired, such as in the Township of Langley, which designed its rain garden inhouse, and Bowen Island and New Westminster, which were non-capital projects, consultants were indirectly involved in the design process through the

private developers who implemented the projects. Therefore, consulting firms are an important element in the learning process, except in rare cases where time and resources permit department staff to develop their own designs.

A relationship between "learning culture" and "landscape architect" was observed in situations where no landscape architect was in the department. Almost all of the departments where there was no landscape architect on staff had a "high" learning culture with the exception of the City of New Westminster who scored a "medium". New Westminster was unique in this group, as the planning department did not reflect on their projects upon completion, and this lowered its learning culture score from "high" to "medium". A "high" learning culture and "formalized tools for reflection" were however not limited to "small" planning departments or departments with or without "landscape architects". Therefore, it is not possible to conclude that having a landscape architect in the department contributes to learning culture, or is related to whether or not the department has tools for reflection.

There seemed to be a small connection between having a "landscape architect in the department" and the "search range for precedents". In the case of the parks planning departments in the City of Langley, New Westminster, Port Moody, and White Rock, none of which had a landscape architect on staff, the "search range for precedents" was local or did not take place at all. Although not all of the municipalities looked internationally for precedents, all of the ones that did look internationally, with the exception of Bowen Island, had a landscape architect on staff indicating a potential relationship between "landscape

architects" and "international search ranges". However, the "search range for precedents" may also have been related to the nature of the project. For example, the Fromme Mountain Classification Study in the District of North Vancouver and Richmond's Garden City Play Environment both required a wideranging precedent search. Therefore, in the case of the projects examined, having a landscape architect on staff may, or may not, have slightly increased the use of learning practices involving international sources.

6.2.5 Project Specific Characteristics

It was discovered that most of the parks planning departments within Metro Vancouver's municipalities take part in designing both capital projects and private development projects; new projects and renovations of existing infrastructure; urban or peripherally located projects; projects that require specialized expertise, and projects that were implemented for a variety of reasons. In most cases each of these involved unique learning practices.

In terms of the design process for the specific project examined, a relationship was discovered between "capital projects" and "other city departments involved". Most parks design projects that were not "capital projects" but rather private development projects, included input from "other departments" while "capital projects" only sometimes included "other city departments". In other words, the design process for most non-capital projects involved the input of other departments. This was likely due to the nature of non-capital projects, which were typically elements in larger residential developments and therefore the process likely included individuals from the city-planning

department. Other city departments were also involved in many of the capital projects as well. Therefore, most parks planners will have the opportunity to learn from other departments within their municipality at some point.

In most cases, for the projects examined, both "capital" and "non-capital" and "new" and "renovation" projects were designed by consultants with a variety of experiences, and learning came via many routes and extended to a variety of search ranges. However, "renovation" projects were linked to "other groups involved" in the Cities of Langley, Surrey, Vancouver and Port Coquitlam where user groups were consulted in the design process.

A small link was found between "peripheral" projects and "site visits". In the municipalities of Bowen Island, Maple Ridge/Pitt Meadows, and Port Moody where peripheral projects were undertaken, each of these parks planning departments did not partake in "site visits" to other municipalities. This was likely due to the unique nature of these projects and the fact that few local precedents existed. No other relationships between "urban" and "peripheral" projects and other learning practices were found, suggesting that a variety of learning practices were associated with both urban and peripheral projects.

A relationship was found between the "reason for project" and, "other city departments". "Other city departments" were consistently involved in the cases of "issue projects", "NP" (neighbourhood plan) projects, "OCP" projects, and projects that were a result of a "public lobby". "Master plan" projects did not include "other city departments" with the exception of the City of Richmond where the design process included a design committee with a variety of community

members, parks planners and planners. It is possible that "other city departments" have input into the parks master plans at the time that they are developed and then are less directly involved in the related projects. There is an obvious connection between projects that are a result of "public lobbies" and "other groups consulted" because most parks planners would likely include lobby groups within the planning process of this type of project. In the situation of projects being launched because of the "master plan" or "issues", other municipalities were not consulted, nor were there any site visits conducted. Accordingly, in the situation of "issue" projects there was no search for precedents.

A relationship was observed between "public lobby projects" and the large number of consultants engaged in the District of North Vancouver and in Burnaby. However, this could have been more related to the scale of the projects than the fact that they were "public lobby projects". Learning activities related to large-scale projects launched because of pubic lobbies tended, in most of the cases studied, to have broader reaching learning activities in the form of large-scale public process events, user group inputs and a larger number of consultants.

For the project examined, where "specialized expertise" was needed, the municipalities looked to other city departments in most cases, except in the case of Port Moody, where the expertise included biologically sensitive area mapping that was not likely available through other city departments and was therefore referred to a consultant with the appropriate expertise. Although projects

requiring specialized expertise in Bowen Island, Burnaby, New Westminster, Pitt Meadows/Maple Ridge, Richmond, White Rock, the District of North Vancouver and Delta also had some consultant input, the city staff met at least some of their expertise requirements. For example, in Maple Ridge/Pitt Meadows, the berm project required geotechnical engineering, which was provided, by a consulting firm, as well as expertise in managing Department of Fisheries and Oceans protocols, which came from another City department. Therefore, in the case of the projects examined, parks departments requiring specialized expertise in most cases looked to other city departments for some of their learning. Not surprisingly, where specialized expertise was needed, the learning practices, in most cases, also included external sources and consulting firms.

6.2.6 Conclusions

Surprisingly few noteworthy relationships were found in the data analysis. Learning practices in most municipalities within Metro Vancouver were, in most cases, not related to the population size of the municipality or the size of the parks planning staff. The exceptions were cases where smaller municipalities and smaller departments did not have a landscape architect on staff or did not have the resources to create in-house designs and therefore were required to engage the services of a consulting firm. This was the case in most smaller municipalities. Larger parks department staff included landscape architects and therefore these municipalities had access to learning practices offered by the BCSLA conferences and courses. The size of the parks budget did not result in more or less expensive learning practices. Learning practices were in most

cases more likely to be dependent on the nature of the projects designed.

Consulting firms of every range and experience were a major element in the learning process for most municipalities, particularly where specialized expertise was required. Therefore, in most cases, a variety of learning practices were observed within the parks planning departments in Metro Vancouver's municipalities.

7: LEARNING MODEL

One dominant learning model was observed within the municipalities of Metro Vancouver's parks planning departments. Table 6 below outlines this learning model.

The first feature of the learning model is that most parks planning department staff took advantage of the informal "communities of practice" (Lave and Wenger, 1991) that evolved from membership in the BCRPA and/or the BCSLA. Many of these connections resulted from attending conferences and courses provided by the BCRPA and the BCSLA. According to most of the respondents, connecting with colleagues in other municipalities is a key element in the learning process and there is a strong culture of sharing between parks planners in many municipalities within Metro Vancouver. According to one respondent, "everybody wants to see the other person do well" (Interview #17, 2010).

Another feature of the learning model was that consulting firms were engaged during the design process in almost all of the projects examined. In the case of most smaller parks planning departments, or where there was no landscape architect on staff, consulting firms were typically engaged as part of the design process. In the case of larger departments where landscape architects were on staff, the design process had the potential to be completed in-house. Therefore, consulting firms are prevalent within the parks design process.

Table 6: Learning Model

Features	Observations
"Communities of Practice"	Active informal connections between parks planners within different municipalities
Consulting Firms	 Consulting firms were engaged in most cases particularly when no landscape architect was on the parks planning department staff
	 Larger municipalities occasionally completed designs in-house
Professional Staff	In most cases, on-staff landscape architects looked to alternative sources for learning more often than parks planners who were not landscape architects
	 Landscape architects were members of BCSLA and/or BCRPA
	 Other professionals were part of BCRPA
Project Specific	In most cases learning practices were specific to the project
Reactive	 In most cases parks planners were responding to the challenges of a specific project
Organizational Learning	In most cases new ideas were valued
Structures	 In some cases tools for reflection and team learning opportunities were in place
	 In most cases, informal team learning was observed
"Single-Loop Learning"	In most cases learning was limited to specific projects

Source: author

The learning model was also dependent on the staffing of the parks planning department in other ways as well. In most cases, where parks planning departments included a landscape architect, there was more of a tendency to look further afield for precedents, and to use alternative sources of information. Where a landscape architect was on staff, course work and other

related learning practices were, in most cases (but not all cases), directed to BCSLA offerings. In the case of smaller departments, or where no landscape architect was on staff, courses and conferences were more likely to be provided by the BCRPA. BCRPA membership includes a broad range of professionals beyond just parks planners and therefore networking opportunities provided by the BCRPA have the potential to include a larger number of individuals with different types of training. The learning model was therefore slightly dependent on the professional make-up of the parks planning staff in terms of the search range for knowledge and types of courses and informal networking opportunities.

The learning model varies in terms of each different type of project. For example, learning through public process, user groups or site visits was appropriate for some projects and not for others. Finding expertise within other city departments was a common practice, as was engaging consulting firms.

Looking to other groups such as the RCMP was essential in designing the West Hill Trail system in Port Moody, as was learning from contractors and manufacturers in the design of the Metro Skate Park in the City of Burnaby. Internet research was also a common learning practice. It would likely be possible, in most cases, to develop a learning model specific to each different type of parks project designed within the municipalities of Metro Vancouver.

In most cases, learning practices were reactive or "passive" (Campbell, 2008, 196) in nature, in other words, parks planning departments looked for knowledge based on a need to respond to the challenges of designing a new project. For the specific projects examined within each municipality there was

little evidence of Campbell's "proactive" (2008, 196) learning approach, where parks planners "aggressively ... [seek out]...new developments" (Campbell, 2008, 197). However, the conclusion that most of the learning observed was reactive rather than "proactive" (Campbell, 2008, 196) is based exclusively on the one specific project examined in each of the case studies. There may have been situations within each of the planning departments where a more "proactive" (Campbell, 2008, 196) approach to parks design was employed. One example observed was the development of the rain garden design for the neighbourhood plan at Milner Heights in the Township of Langley. In this situation, planners "deliberately" (Campbell, 2008, 196) sought out a new approach to rainwater management based on a vision to do things differently within the Township. There may have been other cases where this approach may have occurred, but these were not brought to light during the interview process.

In terms of organizational learning, only a few of the elements associated with organizational learning (and for which data was collected), were observed as part of the learning process for the case study projects. As indicated previously the process of data collection for this project was limited to whether or not new ideas were valued, whether tools for reflection were in place, and whether or not team learning was used during the design process (Orthner et al, 2005). Most respondents stated that new ideas (Orthner et al, 2005), were valued within their department. In many situations respondents indicated that many new ideas failed to be implemented because of the limitations of budgets and/or maintenance costs. In terms of tools for reflection, few of the parks planning

departments had tools in place for formalized reflective learning. With respect to team learning (Lick, 2005; Senge, 2006), formalized teams were observed only in the City of Richmond, Bowen Island, and West Vancouver where committees of planners, consultants and members of the community managed the learning and design process. Respondents in the City of North Vancouver and the Township of Langley indicated that for the projects examined in their municipalities, a team approach was a part of the learning and design process. It is likely, however, that most parks department planners at some point come together as a team in an informal way to discuss projects. For example, in the case of the City of Abbotsford, the respondent indicated that the parks planning team checks in on a "daily basis" (Interview #1, 2009). Therefore, in terms of the data collected, the learning model had few of the structures of organizational learning. The valuing of new ideas (Orthner et al, 2005), was the only structure that was observed in almost all cases.

With respect to the notion of "double-loop" (Argryis and Schon, 1978) and "single-loop" learning (Argryis and Schon, 1978), the learning model observed in most parks planning departments in Metro Vancouver was based on "single loop" learning for the projects examined. In other words, in the case of the specific project examined, the learning process did not result in "a shift in the organizational norms, strategies and assumptions" (Cook et al, 1997, 5), particularly where departments did not have formalized tools for reflection (Orther et al, 2005). However, the learning model should not completely rule out "double-loop" (Argryis and Schon, 1978) learning, as it may have occurred during the

design of projects not examined here, and there is a high likelihood, in many cases, that at least some of the learning involved in the design process of one project may be applied to future projects.

It should be mentioned that learning within the parks planning departments of Metro Vancouver might be related in some way to the individuals within each of the parks planning departments because it was observed that the variable for "learning culture" was independent of many of the other features of the learning environment. Further research could possibly shed more light on the relationship between individuals and learning practices.

In conclusion, the learning model within the parks planning departments of Metro Vancouver was in most cases reactive, included a few of the elements of organizational learning (for which data was collected), and was based on "single-loop" (Argryis and Schon, 1978) learning. The most noteworthy characteristics of the learning model were the existence of "communities of practice" (Lave and Wenger, 1991) and the prevalence of consulting firms within the design process.

8: CONCLUSIONS

This project has examined the learning process within the parks planning departments of the local governments within Metro Vancouver. More specifically, it has examined the relationship between the learning environment within these parks planning departments and the types of learning practices that parks planners engaged in during the design of parks projects. The findings, the learning model, the conclusions and the implications have been based on the examination of one case study project within each of 19 municipalities (and an abbreviated framework for organizational learning), and therefore are limited in their ability to provide a broader picture of the learning process beyond these specific case study projects. The data for this project does not allow the generalization of the findings to other city departments, or other local governments beyond the Metro Vancouver region. The data also does not provide insight into the impacts of the broader context within which parks projects are designed, such as the effects of: budget cutbacks, the platforms of elected officials, the actions of senior levels of governments, new trends in planning, and the increased "outsourcing" of services by government (Perl and White, 2002, 56).

With these limitations in mind, there are two key implications of the dominant learning model in the shaping of urban spaces in Metro Vancouver.

One implication is related to innovations in parks design, and the other is connected to the influence of "experts".

In terms of innovations, the implications of the learning model are that new and innovative parks designs that exist outside of the present learning paradigm have the potential to be overlooked by parks planners. The existing learning paradigm is in most cases limited to "hot topics" (BCRPA, 2010), or best practice ideas found in journals published by professional associations, conferences or circulated through informal networks. The design of park spaces is a highly institutionalized process bound by the principles and practice of landscape architecture. The result is that despite the existence of strong "communities of practice" (Lave and Wenger, 2991) and supportive learning environments within most parks planning departments in Metro Vancouver's municipalities, there is a relatively small pool of ideas to draw from. Further studies into the nature and activities of professional associations such as the BCRPA and the BCSLA, as well as the landscape architecture profession, would be useful in exploring issues surrounding how parks planning innovations enter the existing learning paradigm. Further research into the notion of best practice, and how ideas become best practice, a topic previously studied by Bulkeley (2006), would also provide insight into the existing learning paradigm.

The implication of the "single-loop" learning (Argyris and Schon, 1978) approach that was observed in most cases, is that the existing design paradigm appears difficult to change. As "single-loop" (Argyris and Schon, 1978) learners, most parks planning departments are likely to maintain their "natural response"

(Cook et al., 1997, 5) to design issues and many innovations outside of the existing paradigm have the potential to be overlooked. As this conclusion has been based on the examination of only one project within each of the case studies, further research over time and over several projects within a municipality could determine if in fact there is evidence "double-loop" learning (Argyris and Schon, 1978) within parks planning departments. Further research could determine whether parks planners, through reflection on their design process, have ever taken part in an overhaul of the operating routines and design process within their departments.

With respect to the influence of consulting firms on the learning process and on the design of parks, one important implication is that consulting firms have the potential to have an important influence on the design of urban spaces. The data has confirmed that consulting firms are an important fixture in the design process of most parks projects. It is likely that at some point in the design process consulting firms take on the role of teacher to parks planning department staff, although with the data that has been collected for this project it is difficult to confirm the extent of this teaching role or their influence on learning. McCann (2009) has suggested that consulting firms have an incredible capacity to transport best practice ideas from place to place. In these roles of teacher and of transporter of best practice ideas (McCann, 2008), consulting firms have the potential to influence the shape of urban spaces, particularly in smaller municipalities where they are engaged in the design of virtually all parks projects. Further research into the nature of the relationship between municipal parks

planners and consulting firms would be useful in understanding the extent of the influence that consulting firms have on learning process and the shaping of urban spaces.

APPENDICES

Appendix 1: Interview Questions

- 1. What is your professional training? How long have you worked in this department? How many people work in your department?
- 2. What parks design projects have been implemented (in last 3 years) or are in the planning stages?
- 3. For the purposes of this interview, which project would you choose as a model to demonstrate the organizational learning within your department?
- 4. Why was the project launched? Was there a particular issue or event within the municipality or within the city staff? Did you consider other options?
- 5. Where did the knowledge/framework/model for the initiative(s) come from? Inhouse? Conference?
- 6. Was the initiative modified for use in your municipality? If yes, then please describe the original initiative and then how it was modified for your municipality. Who was involved? What was involved?
- 7. Did implementing the initiative require any training for your team? What process was involved?
- 8. Was the implementation of the initiative successful? In what ways?
- 9. In the process of learning about, modifying and implementing this innovation, what worked well and what didn't work well?
- 10. Do individuals within your department routinely take part in any learning activities? For example: internal workshops, conferences? If yes, what types of activities? Are resources made available? Funding?
- 11. Is your municipality a member of any networks, or city-to-city partnerships?
- 12. Would you consider your department to have a 'learning culture'? If yes, in what ways?
- 13. Do you have any other comments?

Appendix 2: Project Summaries⁸

Municipality	Project Description
Bowen Island Municipality	park land acquisition
City of Abbotsford	water source and bio filtration system
City of Burnaby	new skate park
City of Coquitlam	all projects
City of Langley	lacrosse box renovation
City of New Westminster	waterfront pathway design with developer
City of North Vancouver	storm water system
City of Pitt Meadows	berm to maintain lake levels
City of Port Coquitlam	lacrosse box renovation
City of Port Moody	new pedestrian trail system
City of Richmond	new children's playground
City of Surrey	renovation of urban park
City of Vancouver	renovation of urban park
City of West Vancouver	expansion of columbarium, and crypts
City of White Rock	replace retaining wall
District of Maple Ridge	berm to maintain lake levels
District of North Vancouver	study to access existing trails, and develop best practices
The Corporation of Delta	spirit square at municipal hall entrance
Township of Langley	rain garden design guidelines

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⁸ Source: Interviews with respondents, see reference section

Appendix 3: Summary Excel Spreadsheet 9

Municipality	Population Size	Budget Dept Size	Landscape Architect	Associations	Formal Network
Dawen Jaland	a ma a II	•		Oth or	
Bowen Island	small 	10% Small	No	Other	Low
Abbotsford	medium	8% Medium	Yes	BCSLA/Other	High
Burnaby	large	19% Large	Yes	BCSLA/BCRPA	Medium
Coquitlam	medium	15% Large	Yes	BCSLA	Low
Langley City	small	10% Small	No	BCRPA/Other	Medium
New Westminster	small	13% Small	No	BCRPA	Medium
North Vancouver City	small	16% Small	Yes	BCSLA	Low
Pitt Meadows	small	11% Medium	Yes	BCSLA	High
Port Coquitlam	small	14% Small	Yes	BCSLA/BCRPA	Medium
Port Moody	small	13% Small	No	BCRPA/Other	High
Richmond	large	13% Large	Yes	BCSLA/Other	Low
Surrey	large	8% Large	Yes	BCSLA/Other	High
Vancouver	large	17% Large	Yes	BCSLA/BCRPA/Other	Medium
West Vancouver	small	20% Medium	Yes	BCSLA/BCRPA/Other	High
White Rock	small	16% Small	No	Other	Medium
Maple Ridge	small	15% Small	Yes	BCSLA/BCRPA/Other	High
North Vancouver District	medium	21% Large	Yes	BCSLA/BCRPA/Other	Low
Delta	medium	14% Small	Yes	BCSLA	Low
Township of Langey	medium	8% Large	Yes	BCSLA	Low

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⁹ Sources: Interviews; municipal and consulting firm websites; BC Civic Info (2010); author. Municipality names and variable names have been abbreviated.

Municipality	Provincial Networks	International Networks	Informal Networks	Reflection	Learning Culture
Bowen Island	Yes	No	No	Yes	High
Abbotsford	Yes	Yes	Yes	No	High
Burnaby	Yes	No	Yes	Yes	High
Coquitlam	Yes	No	Yes	Yes	Medium
Langley City	Yes	No	Yes	Yes	High
New Westminster	Yes	No	Yes	No	Medium
North Vancouver City	Yes	No	Yes	No	High
Pitt Meadows	Yes	No	Yes	No	Low
Port Coquitlam	Yes	No	Yes	No	High
Port Moody	Yes	Yes	Yes	Yes	High
Richmond	Yes	No	Yes	No	High
Surrey	Yes	Yes	Yes	No	Medium
Vancouver	Yes	Yes	No	No	Low
West Vancouver	Yes	No	Yes	No	Low
White Rock	Yes	Yes	Yes	Yes	High
Maple Ridge	Yes	No	Yes	No	Low
North Vancouver District	Yes	No	Yes	No	Medium
Delta	Yes	No	No	No	Low
Township of Langley	Yes	No	Yes	No	High

Municipality	Use of Consultants	Capital Project	Туре	Urban	Reason	Expertise
Bowen Island	Always	No	New	Peripheral	OCP	Yes
Abbotsford	In-house	Yes	New	Urban	Master	No
Burnaby	In-house	Yes	New	Urban	Public	Yes
Coquitlam	In-house	Yes/No	New/Reno	U/P	All	Yes/No
Langley City	Always	Yes	Renovation	Urban	Master	No
New Westminster	Always	Yes	New	Urban	OCP	No
North Vancouver City	In-house	Yes	New	Urban	Issue	No
Pitt Meadows	Always	Yes	New	Peripheral	Issue	Yes
Port Coquitlam	Always	Yes	Renovation	Urban	Master	No
Port Moody	Always	Yes	New	Peripheral	Master	Yes
Richmond	Always	Yes	New	Urban	Master	Yes
Surrey	In-house	Yes	Renovation	Urban	Master	No
Vancouver	Always	Yes	Renovation	Urban	Issue	No
West Vancouver	Always	Yes	New	Urban	Master	No
White Rock	Always	Yes	Renovation	Urban	Issue	No
Maple Ridge	Always	Yes	New	Peripheral	Issue	Yes
North Vancouver District	In-house	Yes	New	Peripheral	Public	Yes
Delta	Always	Yes	New	Urban	Public	No
Township of Langley	In-house	No	New	Urban	NP	No

Municipality	Size	Other Departments	Other Groups	Other Municipalites	Site Visits
Bowen Island	Large	Yes	Yes	No	No
Abbotsford	Large	No	No	No	No
Burnaby	Large	Yes	Yes	Yes	Yes
Coquitlam	S-L	Yes	Yes/No	Yes/No	Yes/No
Langley City	Small	No	Yes	Yes	Yes
New Westminster	Large	Yes	No	No	No
North Vancouver City	Medium	Yes	No	No	No
Pitt Meadows	Medium	Yes	Yes	No	No
Port Coquitlam	Small	No	Yes	Yes	Yes
Port Moody	Large	No	Yes	Yes	No
Richmond	Large	Yes	Yes	No	No
Surrey	Large	No	Yes	Yes	Yes
Vancouver	Small	Yes	Yes	Yes	No
West Vancouver	Large	No	No	Yes	Yes
White Rock	Small	No	No	No	No
Maple Ridge	Medium	Yes	Yes	No	No
North Vancouver District	Large	Yes	Yes	Yes	Yes
Delta	Small	No	Yes	No	No
Township of Langley	Medium	Yes	No	Yes	Yes

Municipality	Other Info Sources	Consultant	Consultants #	Head Office	Consultant Range	Search Range
Bowen Island	Yes	No	1	?	?	International
Abbotsford	Yes	Yes	1	Metro	Regional	None
Burnaby	Yes	Yes	5	Metro	International	International
Coquitlam	Yes	Yes/No	various	Various	?	Various
Langley City	No	Yes	1	BC	Regional	Regional
New Westminster	No	No	1	None	No	None
North Vancouver City	No	No	0	None	No	None
Pitt Meadows	No	Yes	1	International	International	None
Port Coquitlam	Yes	Yes	1	?	?	Regional
Port Moody	No	Yes	1	Metro	International	Regional
Richmond	Yes	Yes	1	Metro	Regional	International
Surrey	Yes	Yes	4	Metro	International	International
Vancouver	No	Yes	1	Metro	Regional	None
West Vancouver	Yes	Yes	2	?	?	Regional
White Rock	No	Yes	2	Metro	International	None
Maple Ridge	No	Yes	1	International	International	None
North Vancouver District	Yes	Yes	3	International	International	International
Delta	Yes	Yes	1	Metro	National	None
Township of Langey	Yes	No	0	None	No	International

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