

**Learning From LoLo:
Neighbourhood Sustainable Development in the City
of North Vancouver**

**by
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B.P., (Planning), University of Northern British Columbia, 2012

Project Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Urban Studies

in the
Urban Studies Program
Faculty of Arts and Social Sciences

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Fall 2018

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Abstract

This research investigates the integration of policies, processes and priorities in planning for sustainable development. Following case-study methodology at the neighbourhood scale in the City of North Vancouver, assessment and governance frameworks are used to understand planning for sustainable development and its outcomes. The findings uncovered rigorous planning processes that prioritized form-based planning alongside a systematic pursuit of public amenities. This was complemented with policies requiring sustainability focused items. Together these contributed to a LEED-ND comparable neighbourhood which was achieved in the absence of any 3rd party neighbourhood assessment frameworks. Other findings included: a purposively opportunistic planning practice that avoided structured assessment or monitoring; a planning process and governance arrangement that relied on a shared understanding of sustainability amongst City staff; and facilitation through leadership and a supportive political regime. The research highlights the risk and opportunity associated with the political nature of governing for sustainable development without assessment frameworks and emphasizes the importance of leadership, policy frameworks, and corporate culture.

Keywords: neighbourhood sustainability assessment; placemaking, sustainability governance; sustainability planning; sustainable development

Acknowledgements

Thank you to my senior supervisor Professor Meg Holden for your patience and guidance. You are always one step ahead. You have challenged and encouraged me to become a more critical thinker.

This research wouldn't have been possible without the cooperation of a number of staff members at the City of North Vancouver who were more than accommodating in sharing of their experiences and opinions. I admire your hard work at the front lines of the challenging world of municipal planning and development. Your achievements in pushing for improvement is not to be understated.

I owe thanks to Eliot Allen for his input and support for the integration of a modified LEED-ND evaluation.

Thanks to my external examiner, David Hendrickson, for your insightful and constructive comments that made this a better thesis.

Terri Evans thank you for the unfailing positive support!

The Urban Studies community is a wonderful comradery of wildly diverse opinions and backgrounds that all come together in similar spirit. Thank you to all my classmates and colleagues - I have taken a wealth of knowledge and inspiration from you all. To the professors in the Urban Studies program and especially those whose classes I attended: thank you for facilitating and inspiring such a rich and supportive learning environment.

Most of all thank you Shannon for your love and support.

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Chapter 1. Introduction

In the context of growing urban populations, anthropogenic drivers of climate change, and increasingly complex challenges to resolve growth in urban areas, there has developed an explicit need to direct development towards both sustainable and livable outcomes. The reaction to this pressure is espoused by thinkers, decision-makers and the public in many variations and at different scales - from individual habits and decisions to the interactions between nation-states and global economies. The neighbourhood has become recognized as an appropriate scale at which to deploy sustainability focused priorities (Sharifi and Murayama 2013). It is the scale at which most of daily life is played out.

This research investigates what an arrangement of policies, processes, and priorities that contribute to desirable and often pursued sustainable development outcomes might look like. Using a case study analysis at the neighbourhood scale, it investigates this through a lens of urban sustainability governance. The research gains a deep and nuanced understanding about the incorporation of sustainable development priorities into neighbourhood planning and development processes in a city that has developed an agenda of sustainability priorities and culture of sustainability at City Hall (Kristensen 2012). However, while this unambiguously clear agenda of sustainability priorities suggests that the City of North Vancouver 'takes sustainability seriously', it doesn't display the typical characteristics of one that does so, namely a dedicated sustainability department or plan. In the context of investigating various approaches to sustainable development where it is a priority of a given City, these approaches of institutional arrangement and policy have been found to be most common in the pursuit of sustainable development and are one basis for 'taking sustainability seriously' (Portney 2013).

Sustainability as process or outcome cannot necessarily be proven and what constitutes the components or process of this pursuit is not always agreed upon. We do have metrics that support what we think sustainable development outcomes might look like; these range from diverse points of view of improved physical and social processes of change, establishing limits of biophysical impacts, and establishing better integration of socio-economic values into growth and governance processes, alongside the use of

measurement and indicator systems to track such changes and states. The pursuit of sustainable development can incorporate any combination of such perspectives, amongst others, depending on a host of localised conditions and needs.

The City of North Vancouver has facilitated the creation of a neighbourhood in Lower Lonsdale that meets a number of criteria for being a 'sustainable neighbourhood', including a concentration of energy efficient infrastructure and socio-cultural amenities, extensive transportation and land-use integration, a diversity of housing and business types, contaminated site remediation and repurposing, a pedestrian focus, and a governance model that incorporates sustainability as a priority. Achieving these outcomes is challenging, but research demonstrates that results are possible. Sustainable development in this case entails the pursuit of all of these outcomes within one neighbourhood that has emerged as an exemplary model of development in the Metro Vancouver region.

This research attempts to understand the combination of policies, development priorities and planning processes that contributed to these outcomes in this particular case. In this City of North Vancouver case, a clear policy agenda of sustainability is displayed and demonstrable results in sustainable development are evident, but the City of North Vancouver has not followed a typical path to get there. A 'typical path' can include the use of dedicated sustainability plans or structured frameworks and typologies (Portney 2013) such as the popularized LEED-ND, BREEAM, or Living Community Challenge to name a few. What about North Vancouver's path towards sustainability has allowed for sustainable development outcomes in this given area, and what policies, priorities and planning processes have emerged to offer insight into this pursuit of sustainable development? What can be learned from this particular experience of neighbourhood planning and context of sustainability governance?

The conceptual framework of understanding for this research is built upon the basis of what are expected or desired outcomes for neighbourhood scale sustainability planning and by calls for research into examples of 'actually existing sustainabilities' put forth by Krueger and Agyeman (2005), who suggest that rather than looking at macro concepts, investigation should focus on "policies, practices and their implications for local places and their differences across space and between places". In doing so, we may realize the opportunities that are presented from such practices and newly emerging processes and

help to build on the vagaries surrounding governance for sustainable development. In a typical case driven by a LEED framework, necessary criteria could influence the items that are incorporated into neighbourhood design to meet accreditation on a point by point basis. In another case, other typologies may impose a limited or contextually inappropriate pursuit of sustainable development (Garde 2009, Reith and Orova 2014) into neighbourhood development. A process outside of these hypothetical examples, such as one that avoids prescriptive approaches taken within the City of North Vancouver, could yield insight into unique models of governance that do not necessarily need to fit into a programmatic format of redevelopment but still offer lessons that can be transferred to other locations and municipalities or research.

Rather than focus on the particular sustainability outputs, this research therefore identifies how an existing neighbourhood is sustainable, based upon the popularized neighbourhood sustainability framework of LEED-ND, and reflects on the history and policy context of the Lower Lonsdale neighbourhood, while also investigating the governance and process dimensions of the pursuit of sustainable development that have resulted in such outcomes. This is done in the context of the City of North Vancouver being a recognized leader in sustainability initiatives throughout the redevelopment of the Lower Lonsdale neighbourhood.

Chapter 2. Research Question

The question that guides this research is the following:

How have the City of North Vancouver's policies, development priorities, and planning processes contributed to outcomes resembling sustainable neighbourhood development in Lower Lonsdale following the Lower Lonsdale Planning Study?

The conceptual framework for this research is rooted in theories of urban municipal sustainability governance. This research explores and develops an understanding of the history and interactions amongst various components of sustainability governance and sustainability planning: organizational structures, decision-making, certification systems, and assessment protocols. The research looks at these components of governance as they comprise a framework for sustainable development in the context of a small urban municipality in British Columbia, Canada: The City of North Vancouver. In the context of CNV's objectives of fostering sustainable development and its achievements to date, this research will contribute to an understanding of this City's development and implementation of a sustainability framework. This research is conducted as a case study at the neighbourhood scale, established by the time, geography and scope of the Lower Lonsdale Planning Study.

This research questions whether established criteria for what it can be considered to mean to 'take sustainability seriously' – namely dedicated sustainability plans or frameworks and organisational 'units' of sustainability within City Hall (Portney 2013) – are either necessary or sufficient to implement a governance structure for sustainable development. It also seeks to understand how, in the absence of such a framework, the City of North Vancouver has achieved results. The underlying hypothesis is twofold: It may not be necessary for a municipality to employ a dedicated plan or department to develop a sustainability oriented decision-making governance structure and, in the absence of such a framework, creative or unknown solutions can be identified.

To guide this research, I have developed three sub-questions based upon components of the main research question and the conceptual framework discussed in Chapter 4.

These sub-questions are:

1. *What are the features in Lower Lonsdale that contribute to its latent status as a sustainable neighbourhood?*
2. *What policies and key events contributed to the development of the neighbourhood?*
3. *How were decisions reached to incorporate sustainable development in the neighbourhood?*

The problem that this research addresses is that one size fits all typologies and frameworks are often inappropriate; context based planning and policy solutions may yield more unique results and place-appropriate solutions. This responds to calls in research to arrive at examples of localised understandings of sustainable development pursuits with demonstrable results (Krueger and Agyement 2005, Portney 2013). A rephrasing of the research question, in more general terms asks the following: What is a planning and policy arrangement that can help guide municipal decision making for sustainable neighbourhood development in the absence of a dedicated framework, strategy, or institutional structure? This research focuses on both the object-oriented (built environment) and process (Talen 1997) sides of planning for sustainable development, but with a stronger focus on the procedural and decision-making side of planning activities, framed within the concept of sustainability governance, that lead to outcomes in the built environment.

2.1. Significance of this Research

The interest in this research topic is fueled by the contemporary challenges facing virtually every municipality in the Canadian context and has applicability to any local government considering how to organize priorities for sustainable development. These challenges, such as the growing infrastructure deficit, decreasing housing affordability, fragile economic and climate resiliency, and increasing social inequality, are broad, systematic, and complex. Sustainable development presents itself as a potential solution to these problems and furthermore has the potential to cut across the typical structural, procedural and policy barriers within government that stand as an impediment to solutions (Smith and Wiek 2012).

While much has been written on sustainability, in a broad sense, evidence of 'actually existing sustainabilities' lacks coherence and sometimes applicability (Krueger and

Agyeman 2005). By its very nature, sustainability, as a holistic guiding concept, is incompatible with the typical compartmentalized structures of government and thus requires a rethinking of organizational operations, agenda setting, and policy-making/implementation (Campbell 1996). To achieve sustainable development, consideration of the multiple factors comprising it are required in formulation and implementation of policies (Holden 2010). To operationalize sustainability, let alone to achieve sustainable outcomes, is a separate but interconnected challenge in itself. This research combines considerations and theories of planning for sustainable development alongside institutionalizing sustainable development into governance processes. It applies them at a neighbourhood scale, to practically engage with understanding the activities of a rapidly developing urban municipality.

Unlike its nearby neighbour, the City of Vancouver, which has enacted a broad slate of sustainability priorities, branded itself as striving to be the world's 'greenest' city, and made sustainability a clear component of the public agenda, the City of North Vancouver has taken a subtler approach to sustainability. However, sustainability is clearly an item on the public agenda, as is typified by its inclusion in the City's OCP and the city's consistent messaging in municipal documents and media releases.

What might be considered leadership in sustainable development, or 'taking sustainability seriously', can, by comparison to other locations, only be considered a judgement and not an objective measure (Portney 2003) given the lack of agreement around how to go about pursuing sustainable development. Despite this, a leading case is worthy of further investigation. As Portney (2003, 15) states: "If cities are able to set an agenda that stands out or contradicts their peers and contemporaries at different levels, in terms of the pursuit of sustainable urbanism, then they constitute important jurisdictions in terms of governance and thus of investigation."

Portney (2013) asserts that, based upon extensive research into sustainability priorities in US cities, the characteristic that distinguishes the 'more' serious from the 'less' serious is whether sustainability is 'clearly and unambiguously' on the public agenda at different levels. Considering this and its achievements to date, it would be presumptuous to attribute the CNV's success to the 'free rider' syndrome given its influential neighbour (Hawkins et al 2016); the drafting and adoption of an extensive sustainability framework within the OCP alongside the named policy accomplishments are not small tasks.

Drawing this back to the question that guides this research, what is the arrangement of policies, processes and priorities that has facilitated this implementation? This research intends to address this and build an understanding of policy implementation and contribute a local example of answers of how and what urban governance facilitates the implementation of sustainability policy. Hughes (2016) helps to situate this:

While previous research has identified the broad patterns of climate change policy adoption by U.S. cities, we lack insight into the nuanced ways in which sources of authority, institutional constraints and opportunities, and political interests shape the investments and trade-offs cities are willing to make as they pursue their climate change goals.

The findings of this research can contribute to ongoing theory-building for sustainability governance, establishing sustainability principles, understandings of applicability and usefulness of sustainability assessment, and to informing future policy and program development surrounding municipal sustainability frameworks and development planning. Specifically, research into how sustainability governance is occurring, particularly in the British Columbia context, will contribute to future scenarios where the integration of sustainability priorities and the implementation of development plans for sustainability are being considered. More broadly, it will contribute to the ongoing dialogue about how to plan for and incorporate sustainability principles in Canadian municipalities and develop supporting policy and process. Municipalities within the Province of British Columbia, which have been said to already have a provincially established 'head start' on innovative sustainability oriented policies (Burch et al 2014), and share the same legislative policy framework as this case study, may in particular find this research useful.

Chapter 3. Context: City of North Vancouver

The small 12 km² urban municipality of the City of North Vancouver, population 52,898 (Statistics Canada 2016) is as its name suggests located north of the City of Vancouver, across the Burrard Inlet, in the Province of British Columbia. It is a municipality that has taken an extensive and ambitious role in the pursuit of sustainable urban development compared to many of its Metro Vancouver peers while experiencing rapid growth over recent years. Between 2011 – 2016, CNV's population increased by 9.8% (Statistics Canada 2016) with the majority of this growth being concentrated within the Lonsdale Corridor (City of North Vancouver 2014). That corridor, extending from the shore of Burrard Inlet to the City of North Vancouver's municipal boundary at 29th Street is identified as a Regional City Centre in the Metro Vancouver 2040 Regional Growth Strategy (Metro Vancouver 2017) and thus designated to accommodate housing, employment, transit, and services intensification through the coming decades.

The City presents itself as a development-friendly community (Shepherd 2018) with the City's Mayor Darrell Mussatto even coining himself "Density Darrell" (Gold 2017, Culbert 2018), supported by rapidly rising property values (Seyd 2018a, Seyd 2018b) and a lack of greenfield development opportunities (City of North Vancouver 2002). This has been coupled with a slate of progressive-oriented policies and programmes to encourage innovation and create a 'livable' environment based upon sustainable development principles for its residents (City of North Vancouver 2014, Towns and Evans 2010).

Lower Lonsdale

Lower Lonsdale benefits from being identified as an area of growth and densification and from its proximity to the City of Vancouver, as well as by providing favourable redevelopment and growth conditions both politically and in terms of lands (in the Lonsdale Corridor) that are earmarked and available for densification projects. The Lower Lonsdale neighbourhood portion of the City, bounded generally by 3rd Street and the shores of the Burrard Inlet, has undergone a dramatic and planned transformation to accommodate population growth during the past 25 years. Between 2011 and 2016, the Canadian census tract that covers Lower Lonsdale (Statistics Canada 2016) saw a growth rate of 13.4% in dwelling units and 10% in population. (Accurate neighbourhood-

scale data is not available prior to this, due to census tract boundary changes). These growth rate changes exceed that of the broader region, approximately 5% annually (Metro Vancouver 2017). Within the Lower Lonsdale area of approximately 25 hectares, nearly 16 hectares of land have been redeveloped since the mid 1990s, encompassing more than 20 parcels of land that transformed during this time from surface parking lots and 1 and 2 storey commercial buildings to mixed use commercial and residential towers ranging from 6 to 12 stories. This extensive redevelopment has also included the construction of a new community centre, art gallery, commercial space, waterfront pedestrian amenities, pedestrian pathways and outdoor gathering areas, the development of a district energy system, several 'green' certified buildings, and the corresponding socio-cultural changes that come with rapid urban population growth (Duggan 2016, Smith 2013, McCready 2018).

Planning for Sustainable Urban Development

CNV first incorporated sustainability as an integrative theme into its 2002 Official Community Plan. For the time this was considered a progressive approach (Kristensen 2012). It has since been recognized on several occasions for its sustainable development achievements. In 2007, the City was awarded the first ever "Green City Award" from the UBCM for efforts, leadership and progress in sustainability (City of North Vancouver 2007). It stands out for its adoption of an ambitious 100 Year Sustainability Plan in 2009. This outlined a plan of carbon neutrality for the entire city for which the Canadian Institute of Planners gave an 'Award of Planning Excellence' in "environmental leadership" (City of North Vancouver 2010a). Its 2010 Community Energy and Emissions Plan was also recognized by PIBC for its innovative approach and given an "Award for Excellence in Planning Policy" (City of North Vancouver 2011a). In 2011 the City was acknowledged for its commitment to greenhouse gas reduction by the Federation of Canadian Municipalities (FCM) and was officially recognized as achieving the 'fifth milestone' in the national Partners for Climate Protection (PCP) (City of North Vancouver (2011b). The City was an early-adopter of a green-building density-bonus policy – the first of its kind in British Columbia (City of North Vancouver 2010b). Other initiatives include a long-standing and profitable¹ district energy heating system

¹ City of North Vancouver Financial Plan 2010 - 2019

with mandatory connections, a reputation for ‘embedding’ and integrating sustainability principles across operations (Kristensen 2012), and ongoing sustainability programs that incorporate ‘livability’ initiatives, earning the City a finalist spot for the global “Earth Hour Challenge”, ultimately voted on by a panel of climate-policy experts (North Shore News 2016). In 2016, the City was honoured by the Community Energy Association and UBCM for innovation, leadership and sustainability for policy responses to a neighbourhood redevelopment proposal in the Moodyville area (Chalmers 2016). An independent Sustainability Review conducted for the City by the Fraser Basin Council in 2009 revealed that the City is “a leader in developing documents that comprehensively address sustainability” (Town and Evans 2010). These achievements and the corresponding recognition occurred in the absence of any dedicated sustainability department or an overarching sustainability strategy, which stands in contrast to what might be expected given existing research in this field (Portney 2013). This leads a researcher to question and seek understanding of how this came to be, whether by plan, by design, by gestalt, or other means.



Figure 1: CNV Sustainable City Framework (City of North Vancouver 2014, p12)

Until the adoption of the 2014 Official Community Plan, the City of North Vancouver had no explicit policy framework for sustainability initiatives. Yet despite this ‘institutional void’ – a situation where it could be considered that there were “no clear rules and norms according to which politics is to be conducted and policy measures are to be agreed upon” – the City has been able to institutionalize sustainability policies (Wejs 2014). The 2014 OCP includes the “Sustainable City Framework”, intended to foster “a more integrated approach to achieving the City’s short- and long-term goals” by linking community values amongst a set of six individual elements of a sustainable city, focused on achieving a “vibrant, diverse, and highly liveable community” (City of North Vancouver 2014, 11). Each section of the Official Community Plan identifies objectives linking back to the framework to achieve the overall vision. The objectives in this high-level document are intended to collectively integrate components of the Sustainable City Framework to achieve the community vision (City of North Vancouver 2014), thus establishing in policy the basis for an urban sustainability governance arrangement. Figure 1 is diagrammatic representation of the framework, detailing the six value categories that comprise the City’s definition of sustainability.

Chapter 4. Conceptual Framework

This project is situated within the broad topic area of sustainable development in cities. It draws from four specific topic areas to form a conceptual framework for a case study: the institutionalization of sustainability within local governments, urban sustainability governance in local government, sustainability assessment, and neighbourhood scale sustainable development/assessment.

4.1. Cities and the Uncertainty of Sustainable Development

Sustainable development has no widely accepted definition. Perhaps the most often cited is that of intergenerational equity and development within the limits of biophysical systems, established more than 30 years ago by the Brundtland Commission. Its use as an example of a definition has arguably become as commonplace as the phrase sustainable development itself. Also commonplace is the triple-bottom-line or 'triple-e' concept of balancing pillars of environment, economy and equity, attributed to Elkington (1997) and modified by many others, but neither of these offers insight into what the concept of sustainable development might look like. Hugé et al (2013) distinguish from literature a typology of three possible (but not mutually exclusive or exhaustive) discourses of sustainable development to interpret how it can be viewed and understood:

- i. As an overarching concept integrating goals of political, economic, social and cultural development;
- ii. As an emphasis on the limitations of human activities and growth;
- iii. As a process of directed change.

Hugé et al (2013) caution that, despite the existence of broadly accepted principles embedded within the sustainability concept – precaution, equity, integration, etc - attempts to arrive at a singular definition of sustainability or sustainable development will diffuse the importance of the theory; the term can have multiple meanings at once and different applications in particular contexts. This argument demonstrates the positive and negative duality of the concept: its desirability as a means to fuel change or as a concept lost to generalities and co-opted meanings.

Similarly, there is no consensus on how cities should plan for sustainable development (Jepson 2001) despite its movement to the forefront of agendas for cities in the 21st century (Berke 2002, Campbell 1996). This presents enormous challenges for local governments striving to incorporate sustainability principles into development activities, but, considering that sustainability as a municipal objective can be tailored to specific needs, also presents opportunities.

Most municipalities initially attempting sustainability planning and its implementation face the challenge of making institutional changes, alongside shifting their economic and political priorities (Connelly et al 2009). Those beginning to incorporate sustainability principles into their agendas also often enter into a relatively unknown territory, lacking sources of clear-cut direction from within their organizations to draw from or struggle to select frameworks and methodologies from elsewhere (Conroy 2006). Individual 'best practices' from research and other municipalities offer examples of specific policies and strategies, however the contingencies of these practices in various locations are not necessarily known or transferrable (Bulkeley 2006). In the absence of clear-cut measurement and evaluation systems, municipalities already engaged with sustainability in their existing policies or strategic planning question whether their policy efforts and governance arrangements are helping to realize their goals and objectives (Holden et al 2014).

The lack of consensus on how to go about achieving sustainable development make sustainable development an inherently normative concept, argues Næss (1994); this is despite ongoing debates over whether sustainability is normative or not (Jordan 2008). What is widely accepted is that sustainable development is an ongoing process rather than a fixed end point (Roseland and Spiliotopoulou 2016) despite the many contentions of what the process might entail. Gibson (2006, 172) offers that "in the pursuit of sustainability, the means and ends are intertwined and the process is open ended. There is no end state to be achieved." Regarding this process, Jordan (2008, 17) states, "The more effort that society has put into developing more sustainably, the more clearly it has started to comprehend the full complexity of that task." Theorization on the topic has become, arguably, too complex to offer concrete insight. Krueger and Agyeman (2005, 416) suggested that research was at a disconnect with practice, a point of 'sustainability schizophrenia'. They suggest rather than conceptualize the "enormous differences in social, institutional and discursive practices that often seem irrational at

best and schizophrenic at worst”, research should exemplify what already and actually exists as sustainable – provide examples and not abstract ideas – and build a theory from the ground up. Many others have written eloquently on the challenges and interpretations associated with sustainable development pursuits within this broad topic of study.

The rise of sustainable development as a guiding concept for municipalities, despite its conceptual, procedural and contextual challenges, is seen as an alternative to contemporary sprawling, economically driven urban development and top-down planning that was a focus throughout the 20th century. Its future-oriented and comprehensive scope stands in contrast to the ‘small step’ nature of incremental decision-making and progress that is typically associated with decision-making for an immediate future and assigned a negative connotation for giving little consideration for alternatives. This is opposed to treading carefully towards a distant future with specified objectives and consideration of alternatives (Næss 1994, Næss 2001, Meadowcroft 1999).

My purpose in highlighting these extremes is to situate this research within the understanding of sustainable development “as an essentially integrative process that can act as a framework for better decision-making on all undertakings - policies, plans and programmes as well as physical undertakings - that may have lasting effects.” (Gibson, 2006, 390). For reference, Appendix A contains ‘The Essentials of Sustainability’ written by Gibson (2006), which provides one example of a set of principles to define the concept of sustainability.

4.2. Sustainability Governance in Cities

Governance and sustainable development are intertwined. Combining these two fields of research can assist with the question of “How can sustainable development be operationalized?” (van Zeijl-Rozema et al 2008, 411). I use the concept of governance in this research as an arranging theoretical theme to situate, understand and further theorize the themes of decision-making and institutional context within local government discussed herein. In other words, sustainability governance is useful theory for understanding how and why cities choose to arrange, prioritize, strategize, and execute governing towards sustainable development outcomes and provides a theoretical lens to build upon the variation between such examples. Sustainability governance in practice,

as opposed to only plan documents, administrative function, and/or project driven exercises, is seen as necessary in order to successfully achieve sustainable development objectives (Joss 2015, Lange et al 2013, Pettibone 2016, van Zeijl-Rozema et al 2008, Smedby and Quitzau 2006, Jepson 2008). There is expansiveness in this field of study - what has been negatively referred to as “a great deal of discursive ‘smoke’ but little in the way of empirical ‘fire’” (Jordan 2008, quoting Lafferty and Meadowcroft (2000), 27). Within this broad body of literature there is a “governance is good” notion that, as a norm, has been widely but uncritically accepted (Evans et al 2006).

Governance addresses the broad processes and arrangements for sustainable development over time. The heavily theoretical research summarized below is testament to the challenges posed by a lack of clarity about how sustainable development should be treated within cities, or how it can be understood. As an organizing theme it requires a complete restructuring of thought surrounding governance and decision-making from what has become the norm. Perhaps the biggest challenge facing researchers addressing work in this topic area is that sustainability governance conflates two already conceptually vague topic areas, each with contested ideas of an ideal state. Governance is a term that is often used but less often defined.

At its most basic, urban governance - in a municipal context - can be defined as the total sum of interactions, process and institutions of local government and its departmental agencies, boards and commissions as well as external civil society groups (Tindal et al 2013). Governance provides a lens by which to view the individual components of government and their interactions. Summarizing an extensive field of literature, it can be said that governance describes processes of governing; it does not capture a static moment in time for government, but rather includes the context of interactions between institutions and actors in the context of supporting policy regimes and their interactions with those outside of formal government roles. Urban *sustainability* governance is limited to the governance of sustainability initiatives, which are succinctly defined by Portney (2013, 42) as “any set of activities, programs, policies, or other efforts whose purpose is explicitly to contribute to becoming more sustainable”. Urban sustainability governance can also be described as “the process through which sustainability principles are incorporated into political decision-making and social and cultural processes related to government” (Pettibone 2016, 62) or “as a process of –more or less

institutionalized–interaction between public and/or private entities ultimately aiming at the realization of collective goals. The particular collective interest in this context is sustainability” (Lange et al 2013, 406). These definitions lack specificity and struggle to function beyond a conceptual label.

Urban sustainability governance is articulately described by Joss (2015), who also sees it as a decision-making process, however identifies it as specifically incentivizing and steering outcomes towards a more sustainable society. Joss focuses firstly on process as a solution to governing challenges and secondly on the nature of interaction between the individual components that, overall, contribute to governance. Thus, urban sustainability governance:

presents itself as a potential solution for dealing with complex, systemic issues and what are sometimes referred to as ‘wicked problems’ – of which sustainable development is a prime example – facing contemporary decision making. [...] Its distinguishing feature is the explicit emphasis on decision-making processes; the institutions, organizations, structures and technique used to manage these processes; as well as the relationships and dynamics between the diverse governmental and non-governmental, public and private actors involved.” (Joss 2015, 62-63)(emphasis added).

Joss emphasizes that the study of urban sustainable development through a lens of governance can add clarity to these processes and relationships, but that the political motivations for governing processes cannot be overlooked. Stoker (1998) contextualizes this by emphasizing that a study of governance (referring to it from a broader political science perspective) is not to determine causality, but rather to act as a framework for understanding changing processes of governing. From this perspective, studying governance is a means to understand institutions and actors, the nature of relationships and power dynamics between them, the nature of blurred boundaries and responsibilities, and the use of tools and techniques to steer and guide outcomes. By looking at a study of governance in this way, the issue Joss (2015) raises about political dynamics and agency, given their inherent place in decision making, are key components of understanding structures and processes and the ‘framework’ of governance in a particular context.

That context of governance will change. Its nature in a given scenario will reflect the program or issue to which it is oriented; the strategies and instruments used will depend on a program’s nature and goals, and these will vary from location to location. This form

follows function argument for the nature of governance sometimes conflicts with prescriptive best practices that are identified through extensive empirical and theoretical work in this field (Lafferty 2004). The study of governance can expect to capture specific insights, but these insights may not transfer to other scenarios, localities, or scales of governance. Acknowledging that a governance arrangement is required for sustainable development, Kempt et al (2005) suggest that prescriptive frameworks for modes of governance that offer a contextual sensitivity, rather than a particular set of ideas for a specific outcome, are more likely to be successful. This importance of establishing a localised context is a theme throughout this literature review, and is repeated in the discussion about sustainability assessment and neighbourhood sustainability assessment systems.

Governance in theory and practice is scalar and incorporates hierarchies from local to national, broad networks that bridge those governments, jurisdictional boundaries between governments, and the space of interactions within these and between civil society and government (Joss 2015). Municipalities within senior jurisdictions that are supportive of sustainable development are more likely to adopt their own sustainability plans and governance frameworks (Burch et al 2014, Homsy and Warner 2015) and in many cases sustainability initiatives at the city scale are the direct result of initiatives or legislative requirements from higher levels of government (Homsy and Warner 2015) or collaboration and coordination between governments (McClean and Borén 2015), which again points to a sensitivity of context as to when sustainable development becomes an agenda item. In other words, governance at a regional scale can have great impact on the plausibility or capability of corresponding initiatives at the local scale.

Some literature roots urban sustainability governance in broader theories of transformative change, transition management, and socio-technical transitions (Pettibone 2013, Kemp et al 2005) which see a drastic shift in development pathways and socio-technical patterns as being necessary, with effective governance, to realize a change towards a more sustainable society. Through this theoretical lens, the processes of urban governance are seen as being able to include and offer new innovations to deliver new solutions (Joss 2015, Healey 2004) to assist with this broad change. Transition theorists suggest that innovative policies challenge common approaches and hold potential to trigger change towards a more sustainable society, infiltrating from a local scale to more widespread implementation. Burch et al. (2014, 468) suggest that

shortcomings in effectively addressing sustainable development are not technical in nature, but rather “the challenge is largely related to governance, policy, and the search for responses that achieve multiple objectives simultaneously while avoiding politically and socially undesirable trade-offs”. This is to say that technical solutions exist; effective policy and governance arrangements to implement them are needed.

The instruments of urban sustainability governance are broad and include strategic plans, integrative policies and institutions, the use of sustainability indicators, and the institutions and relationships that house them (Pettibone 2013). To research these components through a lens of governance is to investigate the processes by which they interact to mainstream and implement sustainable development, to build capacity in government and civil society, and contribute to a shift towards sustainable forms of development (Smedby and Quitzau 2006).

4.2.1. Administration of Sustainability in Local Government

Discussions of sustainable cities largely evade the organizational and administrative issues implied by sustainability, despite their known importance in the pursuit of sustainability and implementation of associated policies (Portney 2013, Krause et al 2014, Hawkins et al 2016). Yet, cities struggle with managing these aspects of sustainability from operational, conceptual, and political vantages, with respect to both capability and plausibility. Sustainability policies and indicators are but two components of sustainable development, which also comprises significant components of procedure, structure, policy, learning, and politics. The research summarized below offers testament to the importance of governance as a field of study for the implementation of sustainable development and situates this aspect of sustainability governance within this case study project with practical examples of the challenges of implementing sustainable development.

There is a large field of research that seeks to compare and explain variation of the pursuit of sustainability priorities within cities. Prominent from this field of literature is the work of Kent Portney. *Taking Sustainable Cities Seriously* (2013) seeks to quantify and compare the kinds of policies that municipalities implement in their pursuit of sustainable development. This work assists in establishing the importance of understanding what constitutes sustainability policy implementation at the city scale and discusses the

variation in resulting administrative governance arrangements, largely hypothesizing on the context that contributes to variation in arrangements and priorities amongst cities that have established sustainable development as an agenda item. The results, of cities that clearly had a sustainability agenda (ie dedicated plans or departments) showed a wide variation amongst the cities studied, from demographic statistics to economic function, to geography, which provided no clear correlation between 'seriousness' and contributing factors.

Similar work by Wang et al (2012) catalogues the strategies taken, across over 250 US municipalities, to build institutional capacity for sustainability policies. Using a combination of census data and questionnaires, focusing on causality, the study identifies an emergence of managerial capacity alongside sustainability priorities, and indicates a prominent role of key personnel in furthering sustainability initiatives, combined with sustainability practices being driven by efforts to develop organizational capacity in management, finance, and technical expertise.

Another group of collaborative researchers investigate ways in which the underlying reasons for why cities' commitments to staff and finances of sustainability efforts vary. They find that local variations in priorities strongly influence this, alongside participation in sustainability organizations and local sustainability focused governance networks (Hawkins et al 2016, Feiock et al 2013, Krause et al 2014). Lastly, Nye and Mulvaney (2016), surveying more than 1500 cities larger than 2500 people, found a correlation that larger and more dense municipalities were more likely to engage in a sustainability agenda, but observed 'scattered' results between this and socio-economic metrics. Common to all of this research is that wide variation exists in how sustainable development is pursued, and it also demonstrates an explicit need for detailed research into examples of sustainability governance arrangements at a specific municipal scale in line with the call for actually existing sustainability made by Krueger and Agyeman (2005).

Research into sustainable development in American cities with a more qualitative focus has found divergent understandings and interpretations of sustainable development agendas amongst municipal staff. Zeemering (2009) suggests that comparison of policy priorities across locations can help us understand the varied perspectives that sustainability agendas can encompass, but the divergent nature of the research findings

indicated a need to “investigate how sustainability is conceptualized by officials in individual cities and see how this understanding leads to different programmatic priorities.” Conroy (2006) investigated the uptake, familiarity and activities towards sustainable development in cities across three American states and found that the concept was not ubiquitously familiar below senior management roles and, as a guiding concept, failed to achieve an ‘integrative’ function at the implementation stage. While the idea and awareness of sustainability existed within city government, it was not accompanied by an explicit agenda. Moreover, the incorporation of sustainability talk in local governments did not include implementation of programs pursuing the benefit of interactions between components of sustainable development; descriptions of policy components tended towards compartmentalized approaches that fit within a definition of sustainable development but failed to coalesce. Conroy (2006) identified that what was missing was an integration of goals and activities within a specific sustainable development agenda for cities to better recognize and thus benefit from the interconnectivity of outcomes. Similarly, Saha and Paterson (2008), surveying 216 US cities, found that sustainability related initiatives were adopted in a ‘piecemeal’ approach and integrated aspects of sustainable development had not been adopted as a ‘paradigm’ across objectives and plans.

The ‘development path’ approach to understanding the need to overcome the institutional and political inertia behind extemporaneous urban growth, and better incorporate a consideration of synergies and trade-offs (Burch et al 2009), situates the challenge of administrative organization of sustainability against the implementation gap that Conroy (2006, 25-26) refers to: an approach that ‘explicitly’ incorporates the “integrative characteristic of sustainability” into an outcome based agenda that outputs mutually beneficial outcomes.

4.2.2. Sustainable Development in Canadian Municipalities

Research specific to Canada has explored these integrative sustainability governance themes within a local government policy-making and planning context. ‘Integrated Community Sustainability Plans’ have become a procedural norm in many Canadian municipalities, following 2005 financial incentives from the federal government for their creation. ICSPs can be seen as a foundation for sustainable development and governance, given their cross-cutting purpose of aligning municipal policies under an

overarching sustainability agenda. Research into these has found that while they include substantive content that forms a suitable basis for sustainability planning and implementation at the municipal scale (Stuart et al 2016), their adoption has been plagued by lack of implementation and misplaced resources, with some municipalities using the financial incentives to fund infrastructure costs (Grant et al 2016) and others suffering from weak implementation measures that are disconnected from local context (Stephens and Mody 2013). These findings support the underlying premise that plans alone are not sufficient for effective sustainable development and governance, a thread common through all of the literature.

Municipalities nearby to the City of North Vancouver have recognized this struggle. Research in the City of Richmond was conducted by Smith and Wiek (2012) to catalog barriers and opportunities in the initiation of a sustainability governance framework. The City of Richmond had adopted an overarching sustainability strategy in 2009 and created a dedicated sustainability department with a mandate to oversee sustainability operations across the City. Using an evaluative framework based upon findings in literature, these researchers explored the status of Richmond's sustainability governance arrangement, how it was understood by staff, operationalized, and situated within the broader administrative and operational priorities of the City. The findings indicate that despite Richmond's aggressive policies and explicit administrative commitment, the governance arrangement suffered from deficient conceptualization of targets, a lack of coordination and commitment amongst staff, and a lack of embeddedness within individuals' job responsibilities, leading to an overall lack of cohesion. After two years this department was restructured and moved into the City's Engineering Department; the reasons for this change are uninvestigated (Smith and Wiek 2012) and undocumented. Despite what is often considered a necessary institutional element – a dedicated sustainability department and sustainability agenda - the sufficiency of the governance arrangement was not present or not understood well enough to realize its contribution; this linking of and between objectives and outcomes for sustainable development is an additional consistent theme in this literature review.

The City of Victoria on Vancouver Island established a dedicated sustainability department in 2009, but disbanded it and eliminated staff in 2012, moving to incorporate the roles of its staff members into other pre-existing roles (Kristensen 2012). The department had succeeded in implementing their own sustainability framework into a

City-wide agenda and was then seen as unnecessary. The justification for removal was based largely on a logic of cost savings. There was a lack of performance metrics that could substantiate the value of the department's permanent retention (Maximus Canada 2013). In this case it appears that the benefit or function of the department was again not fully realized, or scoped, and draws into question what the appropriate arrangement could or should be.

These previous scenarios provide examples of how cities struggle with the organizational and operational components of sustainability governance and precisely how it should be 'integrated' in terms of policy, decision-making context and institutional arrangements. Research in this field generally supports the notion that the administrative organization and governance of sustainability priorities cannot be overlooked when considering other aspects of sustainable development, such as planning, policy-making, and assessment and/or monitoring, but also makes clear that there is no definitive approach. The particular field of comparative research and analysis described in the above two sections does lack focus on theoretical explanations (Hawkins et al 2016); however these are included within the conceptualizations of sustainable development and governance to situate this practical challenge within both this particular case study research project and the theories that inform it, establishing the 'culture' of governance in general and governance of sustainability in particular as a key component. Governance can be seen as the theme that links sustainability planning, institutionalization, operations, procedural and policy aspects of sustainable development with the theoretical side of sustainable development itself.

4.3. Sustainability Assessment

This overview of literature on sustainability assessment is oriented towards its governance aspects and how a framework of assessment and evaluation can play a role in local government initiatives for sustainable development. The focus is not specifically on technicalities of sustainability assessment but rather on considerations of procedural aspects of decision-making and evaluation for sustainable development. Sustainability assessment is discussed to contextualize its importance in municipal sustainability governance, particularly at the neighbourhood scale and, critically, how this is situated in the opportunities and constraints of planning process and its outcomes.

4.3.1. Sustainability Assessment Contextualized

Sustainability as a guiding concept does not guarantee sustainable outcomes (Gibson 2005). It becomes easy for decision-makers to include social and environmental considerations in decision-making until the fiscal economics of a situation demand otherwise (Morrison-Saunders and Pope 2013). Sustainability assessment (SA) has emerged as one response to this and the many challenges of sustainable development. The impetus for SA is to change the nature of decision-making from justifying socio-economic benefits over other considerations, to avoid poorly considered decisions made in an incremental or piecemeal fashion, and orient development driven decision-making towards an informed assessment of contributions to sustainable outcomes (Gibson 2005). Similarly, the concomitant use of indicators in SA processes is intended to embed an evidence basis into decision-making (Wong, 2003). SA requires commitment, accountability, and a willingness to adapt and change from what may be a previously desired path, whether it be for a particular project or for a strategic goal (Gibson 2006).

Sustainability assessment offers evaluative 'decision-criteria' for sustainability (Gibson 2006). It is an instrument of measurement for pursuing goals of sustainability (Bird 2015), "any process that aims to direct decision-making towards sustainability" (Pope et al 2017), or a "tool for better conceptualizing and defining urban sustainability" (Cohen 2017, p2). Sustainability assessment, ideally, forces decision-makers to practically understand the trade-offs of complex decision-making, which in turn is intended to result in multiple reinforcing gains across the theoretical aspects of sustainability (Gibson 2006, Morrison-Saunders and Pope 2013) discussed at the beginning of this literature review. These definitions can be summarized into an encompassing definition of SA as an evaluative and informative framework for decision-making that integrates components of sustainable development to establish mutually reinforcing benefits that improve upon the overall contributions towards sustainability of development projects.

Literature is agreed upon the evolution of environmental- into sustainability- impact-assessment. The principal difference is that the former evaluates and mitigates impacts on the environment, and the latter incorporates broader sustainability principles and invokes triple-bottom-line considerations. The distinction between the two can be further understood as: impact-based, where the decision to undertake a project is already made and the assessment is focused on hard reduction, and objectives led where there is a

vision of an end state and the assessment processes to get there is defined by some integrated aspect of sustainability principles (Pope, Annandale, Morrison-Saunders 2005). Gibson (2006, 179) articulates this latter as “an approach to decision making” rather than “a review at a particular stage”. Both methods are ex-ante; the former can be seen as reactive and the latter as proactive or strategic. (Ex-post forms of SA, looking back and evaluating what has already transpired, are not relevant to this research and not discussed). SA in some form, of which there are many variants, is widely considered by theorists and researchers as critical to the achievement of sustainable development goals. At its simplest, it could constitute the use of a checklist, a widely utilized tool (Devuyst 2000) or incorporate multi-criteria and/or cost-benefit analyses and stakeholders across jurisdictions (Bond et al 2012).

SA incorporates procedural and outcomes-based components, of which there are many varieties (Bond et al 2012). There are three components relative to this research: measurement/monitoring and accountability, determining principles and objectives, and establishing criteria for decision-making.

4.3.2. Indicators for Sustainability Assessment: Accountability

SA relies on indicators to guide decision-making. While there is no generally accepted indicator method amongst researchers, it is widely accepted that the use of indicators is necessary to benchmark sustainable development pursuits. Indicators have grown in popularity as an evaluative and informative decision-support tool for socioeconomic data, alongside the mainstreaming of sustainable development in urban policy and planning in recent decades (Phillips 2005, Wong 2003). Where SA is a decision-support strategy, indicators are a communication tool to support this strategy. They provide an evidence base of specifically how decisions may make changes to particular items under measure. Wong (2003, 257) identifies the procedure of developing indicators “as involving a methodological process of moving from abstract concepts to more specific and concrete measures to yield policy intelligence” – a means of moving from intangibles towards measurable outcomes. Indicators translate theoretical aspects of sustainable development into operational terms by identifying particular outputs (Phillips 2005). Specifically, they function to identify trends, create an evidence base, and use this to aid, evaluate and inform decision-making oriented towards the future. Within SA, and broadly sustainability governance, their communication utility is to engage participatory

discussions and frame meanings of sustainable development (Holman 2009, Phillips 2005) within a collective understanding of issues (Innes and Booher 2000).

Indicators challenge decision-makers to contemplate the theoretical basis of sustainable development priorities. Combined with SA decision-criteria, they provide a feedback mechanism and longer-term evidence base for the decision-making process towards sustainable development (Innes and Booher 2002, Wong 2003). Critically, they create an accountability measure through an evidence-base and reporting system (Phillips 2005). Innes and Booher (2003) discuss the need for public involvement and its concomitant dialogue during indicator selection in order to focus political attention on the indicator-driven issues—this can result in changing discourses and outcomes of public attention as well as policy direction over the long term. Associated with this need for public involvement is a requirement to report out on indicators. The combination of the two can result in a two-pronged outcome: indicators cannot be ‘dropped’ from measurement processes because they fail to identify a preferred or desired outcome, and public investment in the policy development and issue identification of indicator development creates a degree of oversight into the process of monitoring and the direction of change (Innes and Booher 2003).

The broad possibilities for selecting indicators (Cohen 2017) leads to a risk of information overload and ambiguity. This process reflects the challenges of defining sustainable development and its objectives: ambiguity of what may be a sustainable development or an outcome can result in arbitrary indicator selection (Tanguay et al 2010) and similarly result in an inability to report upon ambiguous outcomes stemming from those ambiguous goals. Determining principles and objectives, discussed below, assists in establishing clarity for an SA framework.

4.3.3. Reconciling Conceptualizations of Sustainability: Establishing Principles and Objectives for Assessment Frameworks

Scholars suggest that the inherently normative and subjective nature of sustainable development necessitates establishing principles and objectives (Pope et al 2004, Bond et al 2012, 56) to “tailor-make” an assessment framework based upon the contextual needs, aspirations, and conceptualizations of sustainability within a given place. Cohen (2017, 11) argues that when oriented around goals, SA can become “a driver of change

[rather] than a summative assessment tool.” Similarly, Devuyst (2000, 77) suggests that SA “will only be effective when its usefulness is clear to all those involved” by establishing it with contextual relevance and aligning it with local sustainability values (Berardi 2013, Gasparatos and Scolobig 2012, Gibson 2006). While this conflicts to a degree with calls for the establishment of universal principles of SA that can be found elsewhere in the literature (Cohen 2017, Luederitz et al 2013), it illustrates a theme in the literature surrounding the need for a framework of principles and objectives to provide structure to decision making and a guide for sustainable development.

The use of principles for pursuing sustainable development assessment outcomes, as an alternative to placing goals or outcomes within the categorical pillars is a prevalent theme in the literature on SA (Cohen 2017). It is a method which focuses on what must be achieved and what actions are involved. Gibson (2006) states: “Sustainability assessment criteria that avoid the pillars, and concentrate attention on the main requirements for improvement rather than the established categories of expertise, are therefore advantageous” as this avoids the risk of reductionist or compartmentalized decision-making that may lead to negative trade-offs between pillars. Gibson (2005, 2006, 2010) suggests this creates an opportunity for a more contextualized and locally developed set of specific criteria. In theory, a general set of principles could be adapted to particular contexts, as is proposed by Gibson (2006) and discussed at the beginning of this literature review (For example, the intergenerational principle, the ecological principle, precaution and adaptation, democratic governance, and so forth).

To partly address the challenges associated with establishing principle-oriented criteria, Cohen (2017) reinforces the importance of setting implementable goals framed around guiding principles, to achieve both a SA process and strategic assistance towards determining these solutions. Pope et al (2004, 2017, 211) suggest an ‘objectives led’ process to establish a “reference value in the form of a defined goal” which can accommodate strategy and a degree of flexibility to respond to changing circumstances along the pathway of pursuit of sustainable development outcomes; this is based on the premise that sustainability itself is a moving target and a well conceptualized SA process will incorporate strong principles and precaution but also adaptability (Bond et al 2012) to arrive at the set goals, objectives or minimum performance standards.

Complementary to the concept of guiding principles within a SA framework, Davidson and Venning (2011) argue for a systems-thinking approach to improve understandings of connectivity and interrelationships amongst considerations for outcomes, and similarly Bond et al (2012) suggest the need for a systems approach and integrated evaluation between categories. Morrison-Saunders and Pope (2011) make a call for those undertaking SA to establish time-frames around their SA outcomes from the beginning, and to make determinations initially about what localised and/or contextual understandings of sustainability are, so as to avoid the shortcomings of trade-offs being made due to a poorly defined goal. The interrelationships amongst objectives for development and their guiding principles need to be acknowledged and understood within an SA decision-making framework and taken together with a focus on principles and pre-determined objectives for the basis of a contextualized and rigorous assessment framework for sustainable development.

4.3.4. Decision-Making: Managing Trade-offs

Gibson (2010, 389) writes “The three pillars or triple bottom line approach also appears to encourage an emphasis on balancing and making trade-offs, which may often be necessary but which should always be the last resort, not the assumed task, in sustainability assessment.” Attempts to ‘balance’ components of sustainability between component categories for SA – whether through indicator selection or categorization of objectives – can quickly become a forced choice between “reductionism or holism” (Bond and Morrison-Saunders (2011, 2). The former can become a simplification of complex systems by using only minimal indicators or not fully understanding the relationships amongst the components of sustainability. The latter, the desired outcome, invokes the possibility of adopting a whole-system perspective that acknowledges complexity (Bond and Morrison-Saunders 2011), adopts a systems-thinking perspective of sustainability interactions (Davidson and Venning 2011) or becomes more integrative and inclusive (Stuart et al 2016). In this regard, SA is ideally built on the concept of identifying and improving “mutually reinforcing gains” between components of sustainability, and to avoid reductionism, should not become a series of trade-offs within or between components of sustainability (Gibson 2006, 172). An interpretation of this concept is that a gain in one area is not necessarily a sustainable outcome altogether and a net contribution does not necessarily reflect the most sustainable outcome.

Managing trade-offs is key to the procedural aspect of SA, particularly when it is an operational strategy as opposed to a project driven exercise. It is suggested in research that a well-designed assessment can avoid the need for trade-offs that become political decisions. Identifying the context of trade-offs is relevant to this research, as local government decision-making varies from day-to-day decisions to large-scale policy and procedural decisions, both of which can be inherently political and complex with significant consequences. Morrison-Saunders and Pope (2013) distinguish between process and substantive trade-offs: process trade-offs are procedural and/or operational in nature, whereas substantive trade-offs reflect options and outcomes derived from an SA process. Substantive trade-offs result from weighing and determining priorities, and are reflected in outcomes that give and take between components of sustainability.

Morrison-Saunders and Pope (2013) and Gibson (2006) discuss the establishment of 'trade-off rules', based upon principles already discussed, to be used where an either-or situation arises. Gibson (2006) elaborates on how this can assist in decision-making: to "clarify application of the sustainability requirements by setting out general rules, or at least guidelines, for decisions about what sorts of trade-offs may or may not be acceptable. Gibson considers most essential that "trade-off decisions must not compromise the fundamental objective of net sustainability gain" (Gibson 2006, 175). A particular policy framework will establish the nature of trade-off rules, for example by establishing certain criteria and requirements through bylaw or policies, and the requirements for amending such requirements.

Increased transparency in SA decision-making is intended to help identify where trade-offs are made (Sala et al 2015, Bird 2015, Villeneuve 2017), to engage discussion surrounding this process, and further to depoliticize decision-making. Research is clear on the incongruence between the nature of political decision-making as it might relate to SA and the required comprehensiveness (in other words lack of politicization) for SA to be successful (Sala et al 2015), a challenge which is vastly easier to identify than solve with any predictive certainty. Bond et al (2012) suggest that pluralism – an openly accessible, stakeholder driven, tailor made and contextual based arrangement – must be accommodated in an SA process. Regardless of how contested sustainability can be, the formation of a sustainability assessment process or protocol offers an opportunity for discourse on the values and conceptualizations of sustainability in a given context (Hugé et al 2013), and an opportunity for integration of various sustainability goals

amongst actors and practitioners whom are involved in what can be a messy process of learning, conflict, and discussion of change when introduced at the local level (Keen, Mahanty and Sauvage, 2006, Devuyst 2000).

4.3.5. Sustainability Assessment at the Neighbourhood Scale

The research and implementation of sustainable development becomes increasingly complex at the scale of the City. The neighbourhood scale presents an opportunity for sustainable development, by being a smaller and more manageable scope for administration, analysis and planning, but large enough to incorporate its own economic and social organization (Choguill 2008, Wangel et al 2016). The neighbourhood is also of sufficient size to contain complete technical systems (such as energy and waste) that allow for whole-system planning and operation but at a scale that allows for a relative ease of understanding of the linkages within and between those technical and socio-economic systems (Fraker 2013). The neighbourhood itself has been a functional and administrative planning scale for decades (Sturgeon et al 2016) but the relative popularity of sustainability planning at the neighbourhood scale has only recently taken hold (Sharifi 2016), emerging as its own field of study over approximately the past decade.

The proliferation of neighbourhood sustainability framework systems and the recent surge of research into this field that has followed suit are testament to the popularity of this scale of planning. Planned sustainable neighbourhoods offer a model that can incorporate new concepts of planning and governance, opportunities for living and interacting in a more sustainable way, and opportunities to apply learning and understanding to the resultant places, which by their nature will vary by location and process and allow for comparative research and understanding (Holden et al 2015). The evaluative nature of neighbourhood sustainability frameworks offers a means to demonstrate 'success' in sustainable development. Lastly, the operationalization of urban sustainability assessment is poorly covered in the literature (Cohen 2017), and the neighbourhood offers smaller-scale opportunities to understand this knowledge gap and apply the concepts of sustainability assessment. The 'scaling down' to the neighbourhood scale offers a more precise lens for the themes discussed in this literature review.

4.3.6. Neighbourhood Systems: Description and Function

Building on the strength of the neighbourhood as a manageable 'building block' or subsection of a city, and understanding that "no single city can contribute to overall sustainability if its own component parts are found not to be sustainable" (Choguill 2008), the neighbourhood has taken a new identity as a component part of the sustainable city. Neighbourhood sustainability as theory and practice was born out of this, the broader field of sustainability assessment, and the more narrow field of green building certification aimed at resource efficiency. It has evolved into becoming its own field of study and practice with a growing number of dedicated certification systems and frameworks (Retzlaff 2009, Sharifi and Murayama 2013). A common element of approaches at the neighbourhood scale is the use of widely accepted principles that can be applied equally across different situations, organized in the form of third party frameworks and criteria, in order to facilitate transformations towards more sustainable development oriented outcomes, impacting both functional and technical aspects (Luederitz et al 2013) as well as shifting behavioural outputs towards sustainable practices for both residents and policy makers (Williams and Dair 2007).

Neighbourhood sustainability systems are often referred to as 'tools', due to their partial evolution out of green building rating systems (Oliver and Pearl 2017). Sharifi and Murayama (2013, 74) offer the following definition:

a tool that evaluates and rates the performance of a given neighborhood against a set of criteria and themes, to assess the neighborhoods' position on the way towards sustainability and specify the extent of neighborhoods' success in approaching sustainability goals.

There is not, however, a widely accepted definition in literature of what constitutes the differences between a rating system, a tool, a certification, a framework, or neighbourhood sustainability assessment. This lack of specificity is a subject of research in itself (Joss 2015). In the absence of a definition, I refer to them simply as neighbourhood systems and point out any other specifics as necessary. The distinction that this broad label avoids is those systems which constitute 'sustainability assessment' and those which don't. For example, frameworks themselves, as a more generalized topic, offer a 'code of conduct' reference and a decision-support tool that roots a set of criteria within governance. Frameworks can be understood as 'embedding' practices, procedures, or principles within governance (Norman and Jennings 2008) or

alternatively as a means to understand how sustainable development may be implemented within a place (Roseland 2012). They therefore do not necessarily constitute sustainability assessment. Neighbourhood systems combine various aspects of such decision-making frameworks, sustainability assessment methods, and other evaluation and tools together, depending on their scope, content, and procedure. They offer an opportunity to apply these tools at a smaller scale and assist in supporting the integrative aspects of sustainability in a practical rather than theoretical fashion and provide a pre-formulated set of criteria, principles, and/or outcomes for sustainable development at the neighbourhood scale.

Neighbourhood systems vary in their approach to either outcomes, process, or both. Sharifi and Murayama (2013) distinguish between “spin-off tools” that evolved from building certification systems and assess sustainability as a static, and “plan embedded tools” which incorporate more temporal aspects of planning process, combining the plan performance with the performance of the outcome. Research by Oliver and Pearl (2017) makes a similar differentiation of neighbourhood systems between product based and process based. Product based tools focus on, for example, technical characteristics, performance criteria and indicator weighting whereas process based tools focus on who is involved, how decisions are made, and how collaboration functions. Oliver and Pearl (2017) looked at how neighbourhood systems were framed during the development process or were contextualized, by stakeholders, and what impact this had. The findings emphasize the important function of tools to convene conversations around the sustainable development theme, similar to the broader concept of sustainability assessment, and to align visions of a future beyond the certification product itself. Oliver and Pearl (2017) conclude that the context of planning cannot be separated from the tools, which is to say the tools themselves cannot be relied entirely on for sustainable outcomes if the process is faulted; the opposite could also easily be hypothesized.

The number of different certification systems is considerable. Criterion Planners based out of Portland, Oregon, surveyed 26 neighbourhood based tools, globally, in 2014 (Criterion Planners 2014) however this number continues to grow. Joss et al (2015) surveyed 43 frameworks globally that incorporated sustainable development, which included 19 focused on the neighbourhood scale (Bird 2015). Three of the most well-known worldwide (Berardi 2013) and which are reflected considerably in cross-case analyses (Sharifi and Murayama 2013) include the LEED-ND tool, developed by the US

Green Building Council, BREAM Communities, developed by UK based BRE Global, and CASBEE, developed by the Japan Green Building Council. The former two are independent, non-governmental organizations and the latter a consortium of government, academia and private sector; all three are typically oriented at new developments. The use of these third-party systems by local governments undertaking internally driven planning and policy work is less common (Talen et al 2013).

4.3.7. Other Neighbourhood-Scale Planning Themes

Other contemporary planning themes that can and have been used at the neighbourhood scale are relevant in this literature review and warrant discussion. These themes utilize a prescriptive and principle-based vision of new development and appear regularly in colloquial language. Two popular versions of these movements include smart growth and placemaking, which I will describe; others include notions of ‘complete communities’, new urbanism, compact communities, etc. The inclusion of these concepts in this literature review helps to illustrate the challenges in arriving at relevant and measurable definitions of sustainable development at a neighbourhood scale, and will also have relevance to the findings discussed in Chapter 6. These two themes discussed differ from those already introduced (LEED, etc) in that they do not have certification systems nor structured evaluative components. Despite this, movements such as these two draw from or are influenced by principles of sustainable development, and have an association with ‘good’ planning practices in this regard, but may not necessarily reflect an explicit sustainable development agenda (Conroy, 2006).

‘Placemaking’ is an umbrella term that generally refers to a movement which promotes the transformation of spaces into ‘places’ through a design-driven and public process of urban form and function alongside the creation of a unique identity for a place (Paulsen 2010, Voight 2012). The US-based non-profit organization Project for Public Spaces (PPS) advocates placemaking as an urban design philosophy for the public realm, focused on shaping the user-experience and function of public spaces, to establish these as enjoyable destinations rather than transitory areas. (Project for Public Places 2018). Literature does not reflect placemaking as a component of sustainable development, but rather lumps it in with other poorly defined concepts. Like ‘sustainability’, placemaking as terminology suffers vagueness from popularized use in the absence of a clear or established theoretical underpinning (Zitcer 2018). It is not

widely accepted as useful theory, but rather is seen as a 'fuzzy' term which relies on inclusion of other opaque concepts such as livability, vibrancy, and vitality. It relies on correspondingly vague indicators for these same concepts and thereby suffers from a near inability to be measured (Markusen 2013). Placemaking as both practice and discourse, focusing on the built environment and design-focused public engagement and individual projects, does not incorporate the breadth of approach and consideration of societal and equity issues that theories of sustainable development include (Fincher et al 2016) effectively a euphemism for gentrification. A similar but scathing criticism of placemaking is its reliance on branding and the co-optation of its meaning across the locations where it is used, referenced, or deployed as strategy by the development community (Markusen 2013, Friedmann 2010), particularly those with an interest in increasing values of development lands and the 'places' surrounding new developments (Paulsen 2010). Despite these challenges, it is a widely utilized term that is rooted and informed by the works of respected urban thinkers such as Jane Jacobs and William Whyte (Zitcer 2018, Voight 2012) and offers an ideology for urban design that is rooted in a drive for positive change to bring more than utilitarianism to public spaces and encourage the general improvement of urban locations for both functional and experiential reasons (Friedmann 2010).

Similarly, the smart growth movement has become synonymous with 'good' planning, the generalised improvement of urban places, and reduction of developmental sprawl. Beginning in the 1990s, the concept was developed in response to undesirable aspects of uncontained urban growth and singular land uses (Downs 2005). The movement is based on principles of land use mix and densification, preservation of open space, and cost savings from infrastructure efficiency (Alexander and Tomalty 2002, Downs 2005).

Smart growth aligns with components of sustainable development, but is criticized for its focus on land use patterns and efficiency over some social aspects such as housing affordability and market control (Downs 2005, Alexander and Tomalty 2002). This suggests that there is a poor integration of the widely accepted principles of sustainable development into smart growth (see Section 4.1). The contribution of smart growth, as a specific planning or development theory, towards sustainable development is unclear and largely unmeasured (Mohammed et al 2016). The deployment of smart growth principles in practice is challenged for the same reasons that sustainable development is challenged: complexity of definition, misunderstandings of goals and objectives, and

universal governance issues (lack of public/political support, other institutionalized practices, the inertia of past land use practices)(Downs 2005). Smart growth resonates with the public and decision-makers for its recognizable association with alternative development strategies such as compact growth, and has become popularized for this - strategic and creative plan documents and their outcomes have been attributed to the movement (REFBC 2016) – suggesting the numerous ways in which principles of sustainable development can be incorporated, albeit in a disjointed and unbalanced way, and not necessarily reflecting the trade-off principles already discussed.

4.3.8. Criticisms and Challenges of Neighbourhood Systems

The challenges surrounding the lack of consensus on what entails sustainable development crops up in criticisms of neighbourhood sustainability assessment systems as well. For Wangel et al (2016), certification is a misnomer, specifically in their study of LEED ND and BREEAM neighbourhood systems (and possibly others). They argue that while neighbourhood sustainability certification presents opportunities for an improved process and contribution towards sustainable development outcomes, a possible bettering of ecological and socio-economic states, and improved communication between stakeholders, it is not a replacement for broader forms of sustainability assessment. Due to an absence within neighbourhood systems of widely accepted sustainability definitions, certification does not necessarily result in universally acceptable sustainable outcomes or certification/acceptance under other SA models or neighbourhood tools. They argue that, because ongoing performance monitoring is not included in these tools, certification effectively only applies at a point in time.

Similar to challenges with the more broad field of sustainability assessment, research into neighbourhood systems has also found an unequal application or inclusion of sustainable development aspects (Reith and Orova 2014, Komeily and Srinivasan 2015, Sharifi and Murayama 2013, Sharifi and Murayama 2014). This lack of equal representation of sustainability aspects can, for example, neglect the social aspects or resulting 'livability' of sustainable neighbourhoods (Szibbo 2016). Neighbourhood systems can fail to take into account broader locational contexts, resulting in 'certified' neighbourhoods in what would otherwise be considered unsustainable places (Garde 2009, Talen et al 2013). Similar to investigations of administrative sustainability organization detailed in Section 4.1, research into sustainable neighbourhood systems

utilizes cross-comparison of tools. Examples such as Szibbo (2016), involving a case study of outcomes of sustainable neighbourhood planning when utilizing frameworks, is less common, as are studies such as Oliver and Pearl (2017) which look at the implications on process and stakeholders' involvement with the use of neighbourhood systems in individual case studies.

Research has highlighted other operational challenges with neighbourhood systems, such as calls that they should better incorporate and evolve with the constant learning, shifting understandings, and evolving technologies of sustainable development (Wangel et al 2016), that the cost, commitment and complexity associated with undertaking third-party assessments is a deterrence (Garde 2009), that there is a lack of ex-post neighbourhood assessment tools to evaluate existing neighbourhoods (Bird 2015), and that there is a shortfall of incorporating institutional aspects (such as organizational and operational considerations) and governance, including interactions between government organizations and civil society (Sharifi and Murayama 2013).

On this latter point, it is important to note that in practice the vast majority of neighbourhood systems are market-driven, third-party tools. Their intended universality across places may conflict with their applicability in an institutional context and, similar to the suggestion by Wangel et al (2016) they may not accommodate on-going assessment as an institutionally driven indicator/assessment system. The research surrounding neighbourhood sustainability systems, in light of the challenges of sustainability assessment more broadly, generally points to a need to incorporate context into systems, suggesting a disconnect between this intended universality and their applicability in practice.

4.4. Summary of Literature Themes

The conceptual framework I have provided through the literature reviewed in this chapter establishes a definition of sustainable development as an integrative process of decision-making for improved outcomes of development. The literature review focuses this definition of sustainable development at the municipal scale. Within such a definition, I apply several complementary and interconnected conceptual lenses:

- the difficulty of 'embedding' sustainability within an organization, and also the corresponding challenges of establishing organizational arrangements and institutional knowledge in order to establish a policy and procedural framework, acknowledging that there is no widely accepted arrangement;
- the theory of sustainability governance and sustainability frameworks can help us understand how sustainable development can be operationalized and connect decision-making with outcomes, but comparing diverse research findings demonstrates that there is no certainty in establishing a particular governance arrangement for implementing a sustainable development regime;
- assessment can be understood as a component of an effective sustainability governance arrangement with the understanding that decision-making for sustainable development should pursue reinforcing benefits as opposed to net gain and utilize a system of measurement to ensure accountability and pursuit of identified goals along a path of adaptability and precaution;
- the neighbourhood scale offers a manageable scope for planning and research for sustainable development, and provides several scaled examples of organizing frameworks. The challenges and criticisms of these frameworks in terms of their insufficient contemplations of sustainable development, and their lack of transferability and context are limitations to their application. This shows that despite a lack of consensus on issues, there are many opportunities to engage with sustainable development within municipalities that can be adopted and learned through both research and practice at this scale.

The proliferation of sustainable development in literature and policy speaks to the challenge of establishing and operationalizing it as guiding force within policy and decision-making. There are recurring themes throughout these broader themes in the literature review that put successful sustainable development at risk, including the pitfalls of not evolving a localised and contextual definition and goal of sustainable development, poorly conceptualizing goals, not engaging in a structured decision-making assessment process and potentially suffering reductionism of the potential benefits of interacting sustainable development ideals.

The literature here does offer a theoretical basis for understanding these challenges and also identifies opportunities and successes for sustainable development, as well as examples of defining and instituting an organizational and political arrangement, establishing it within the culture and practice of local government, operationalizing it through decision-making and evaluation, and determining an appropriate scale and indicator set. This is situated within the challenges of political priorities and shifting market demands that are inherent in any urban context driven by the demands of growth and change and intersectionality that present themselves in an urban context.

Chapter 5. Methods

This research is guided by theoretically derived normative principles of sustainable development to gain an empirical understanding of the research question. The literature review revealed that further detailed research into specific sustainable development undertakings in a particular locale would be a useful contribution. This was done through a case study of the Lower Lonsdale neighbourhood in the City of North Vancouver. The methods considered the policy framework, the function of the institution of the City of North Vancouver, municipal processes, and the unwritten priorities to the extent they were available to establish a detailed understanding of the context and history of development within the case study area.

5.1. Research Design

This research uses a case study methodology which focuses specifically on an area within the broader neighbourhood of Lower Lonsdale within the City of North Vancouver. The research is inductive, idiographic, and qualitative in design. Case studies are appropriate for answering 'how' questions and the investigation of a 'contemporary phenomenon' in depth when "the boundaries between phenomenon and context are not clearly evident" (Yin 2009, 18). For this case, the unit of analysis is the Lower Lonsdale Neighbourhood in the City of North Vancouver. I have drawn the boundaries of analysis following the geographical and organizational limits of the Lower Lonsdale Planning Study. The Lower Lonsdale Planning Study was chosen because of its discrete area and established time frame, offering a 'case' to focus the research. Neither sustainable development nor neighbourhoods would typically stop at hard boundaries, however this analysis focuses on a neighbourhood scale in keeping with the theories and approaches detailed in Chapter 4 and as such maintains focus on the delineated neighbourhood as the 'case'. The nature of this research, to capture the social and political interactions, required an evolving and purposive sampling strategy of primary data (Miles and Huberman, 1994, 28).

5.2. Sources of Data

The research relied on multiple data sources as is appropriate for a rigorous case study. These sources included multiple types of documentation, video records, site observations, and semi-structured interviews.

Documentation

Documentation sources included municipal bylaws, municipal plans, policies and strategy documents, staff reports to Council, discussion papers, background studies, and consultant reports. Other 'grey' material included the City's website, newspaper articles, media releases, and background documentation related to the policy making and development approvals process where available. I also relied on archived videos of Council proceedings to gain insight into particular decision making events that were identified as significant in relation to the case study.

My intent with document analysis was to establish the City's supporting policy framework for development in Lower Lonsdale that had occurred following the Lower Lonsdale Planning Study (completed in 1997) and through to the present.

Documentation was gathered through three sources: the City's website, the North Vancouver Museum and Archives, and directly from the City Clerks Department of the City of North Vancouver. To retrieve information from the Clerks Department at the City of North Vancouver, I identified all of the redevelopment projects that had Council Reports written within my study area, and requested these specifically from the City's Records Management and Privacy Coordinator. The staff representative also provided additional grey literature related to various projects that would not have otherwise been available through typical (web, library, archives etc) sources. A list of the documents and reports reviewed for this project is compiled in Appendix C.

Interviews

I interviewed a total of 10 persons, including five (at the time of research) current staff members (four of whom were in senior or management roles), three former staff members, one consultant, and one developer. Interviewees were selected based upon their association and experience with development specific to the Lower Lonsdale neighbourhood. Interviews ranged in length from one hour to one hour and 15 minutes.

I also had one 20-minute conversation with a current City of North Vancouver employee which didn't follow the interview guide but provided insight into development activity in the City in general. Lastly, I attended a one-hour walking tour of the Lower Lonsdale neighbourhood which was given by a senior staff member of the City's planning department. This tour was provided as an educational and historical learning opportunity for staff currently working at the City and to which I was invited as I had already interviewed the person offering the tour (this opportunity allowed for considerable triangulation of other research findings).²

The interview guide is contained in Appendix D. The literature review, document analysis and time series analysis (following section) informed the drafting of interview questions. Interviews were semi-structured in nature, generally following the guide but also allowing for the flow of conversation and additional discussion on relevant points that were raised by the interviewees. After discussion with interviewees on the pros and cons of anonymous interviewing and the political sensitivity of their positions in discussing this research, nine elected to remain anonymous. I have chosen to leave the identity of the remaining one person as anonymous as well. Interviewees are described below in Table 1; all 'staff members' are from the City of North Vancouver:

Interviewee	Position
#1	Current Senior Staff Member, Development Planning
#2	Former Staff Member, Policy Planning
#3	Former Staff Member, Development Planning
#4	Current Senior Staff Member, Policy/Development Planning
#5	Current Senior Staff Member, Policy/Development Planning
#6	Consultant, Development and Policy Planning in CNV
#7	Current Staff Member, Development Planning
#8	Current Senior Staff Member, Policy Planning
#9	Developer in CNV
#10	Former Staff Member, Development Planning

Table 1: Interviewee Descriptions

² Subsequent references to this tour are noted as "Interviewee 4, Personal Communication, July 31, 2017"

Additional Secondary Data

To supplement document analysis and further inform the interview process also I utilized secondary case study data from a separate project titled *Meeting the Climate Change Challenge (MC3)*. This data included transcripts from 10 interviews with CNV staff and stakeholders which each lasted approximately 45 minutes.³ Seven of these interviews were conducted in 2012 and three in 2016. That project similarly conducted case study research on the City of North Vancouver to investigate the implementation of innovative sustainability (specifically climate friendly) policies. These interview transcripts provided insight into the current research question, assisted in triangulation, and helped identify the policy and process framework within the City and in the Lower Lonsdale neighbourhood. I was granted access to this data from this project's data steward and had the use of this data (and this research project) approved by SFU Office of Research Ethics.

5.2.2. Time-Series Analysis

To trace the development of Lower Lonsdale and its relationship to policies, priorities and processes, the technique of a chronological time series analysis was used - what Yin (2009, 149) describes as a "valuable descriptive rendition of events". The time series analysis was used to understand the history of Lower Lonsdale, gain familiarity with the policy context of the City, prepare for interviews, and write two case-study 'vignettes'.

5.2.3. LEED-ND Analysis

To address the first sub-question of the research I used an adapted version of the LEED-ND framework and scorecard modelled on a version provided by a LEED accredited professional⁴ (and used once in a pre-existing neighbourhood in South America⁵). The primary difference between the formal LEED-ND scorecard and the

3 Quotes from these interviews are subsequently identified as "Anonymous, Personal Communication, [date of interview]"

4 Allen, E., Personal Communication, January 16, 2017.

5 Allen, E., Jones, J. (2016). "Asa Branca Wins the Gold! Is a Rio Favela Greener Than the LEED-Certified Olympic Village?" RioOnWatch Community Reporting on Rio. Access 16th January, 2017 from <http://www.rioonwatch.org/?p=30968#prettyPhoto>

adapted version is the flexibility in applying 'points' for intent behind a particular policy or outcome rather than a technical evaluation to meet the rigorous LEED-ND criteria.

This purpose of the LEED-ND inventory was to establish a context of existing built-environment sustainable development design elements within the case study area - according to this popularized neighbourhood sustainability assessment tool - and provide a baseline for discussion with interview participants and framing of conversations. To complete this inventory, I utilized web searches for general information on Lower Lonsdale, conducted detailed searches throughout the City's website and available policy documents, and reviewed planning reports for specific buildings in Lower Lonsdale to itemize features that aligned with the categories of the LEED-ND checklist as well as contributing policies. I also conducted two observational site visits in February of 2017 to further catalogue built-environment features and familiarize myself with the neighbourhood. I utilized the City's online mapping software and aerial imagery for measurements and neighbourhood-wide spatial observations.

LEED-ND was chosen for its recognisability in sustainable development policy and research and relative popularity as well as ease of access to reference LEED-ND documents to support the inventory exercise. I used the most recent LEED Reference Guide for Neighbourhood Development V4 along with the companion Neighbourhood Checklist to inform my assessment of the neighbourhood.

5.2.4. Data Analysis

Data analysis was performed on the two principal datasets: 1) documents, web site content and supporting grey literature, and MC3 Interviews; 2) Interviews conducted by myself. Both datasets were reviewed for the time series analysis. Content analysis was undertaken on the latter, using the iterative process of coding and memoing (Babbie and Benaquisto 2002, Miles and Huberman 1994) with NVivo Software. I used the process of open-coding to analyze the interview data. Making three rounds of coding, I initially used descriptive codes to become familiar with the data, and undertook two subsequent rounds of analytic coding to arrive at categories. I also collected short 'in-vivo' quotes from the interviews which exemplified the themes of the analytic coding categories; many of these brief quotes are used in the findings to thematically organize and explain using the raw data itself.

I explored the data for tensions and contradictions, as well as similarities and commonalities. I also explored the data for themes related to the literature review and relied on my own experience (see below) to extrapolate coding categories and make interpretations (Creswell and Miller 2000).

5.2.5. Researcher Background and Topic Interest

Over the course of researching and writing this thesis I have worked as a professional planner in local government in British Columbia in an evolving role that concentrated mostly on the development approvals process with lesser roles in strategic planning and policy development. In this position I am constantly exposed to the challenges of making day-to-day planning-related decisions, undertaking negotiations, having sensitive conversations with the public, and managing the inherently political nature of municipal decision making that cuts across all of these issues - usually at the same time. No decision in this role is simple, with many possible outcomes and competing interests that typically create conflict with demands from now with objectives for the future.

I was inspired to undertake this research based on this experience. My experience led me to question how decision-making in municipalities intersected with appeals for and ideologies of sustainable development and how this pursuit from a policy and procedural aspect could be better integrated into planning practice. My experience in local government has contributed greatly to my ability to conduct this research, understand and interpret the findings, as well as use an insider's language while interviewing participants and reviewing data. While I have exercised precaution to avoid bias in the results, the findings here will reflect this role and my understanding of planning context through the experience of working within a municipality.

Chapter 6. Findings

Context: Lower Lonsdale

The City of North Vancouver defines Lower Lonsdale as the area between the waterfront and 3rd Street with no defined east or west boundaries (City of North Vancouver 2014, 32). For the purpose of this case-study analysis, I limit my discussion and examples to the area bounded by the waterfront, 3rd Street, Chesterfield Avenue, and St. Georges Avenue, excluding the Shipyards site, as shown in Figure 2. This is generally the area bounded by the Lower Lonsdale Planning Study, which provides a temporal and spatial limit to the case study while providing a lens through which to inquire and analyze sustainable neighbourhood development within the City of North Vancouver. The sections of this chapter are organized around the three sub-questions of the research and rely on the results of the LEED-ND inventory, time-series analysis/document review, and interviews, respectively:

1. *What are the features in Lower Lonsdale that contribute to its latent status as a sustainable neighbourhood?*
2. *What policies and key events contributed to the development of the neighbourhood?*
3. *How were decisions reached to incorporate sustainable development in the neighbourhood?*

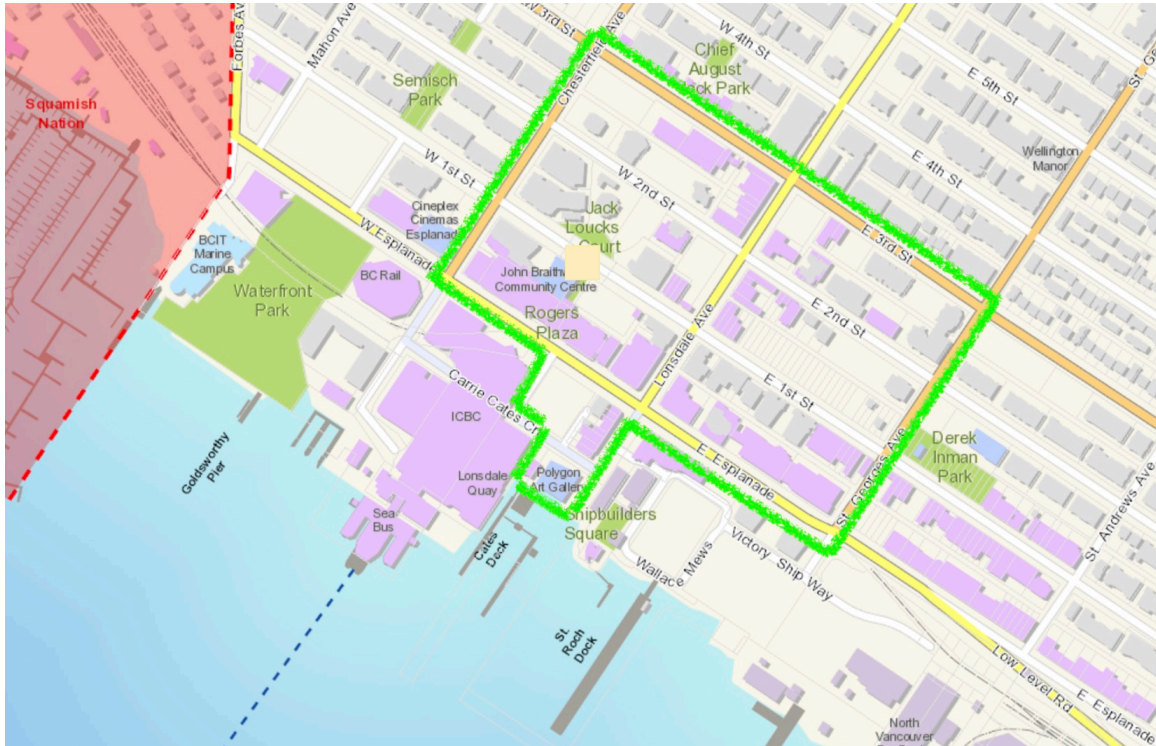


Figure 2: Study Area (solid green outline) with context.⁶

6.1. Sustainable Neighbourhood Features of Lower Lonsdale

Sub-question one asks: “*What are the features in Lower Lonsdale that contribute to its latent status as a sustainable neighbourhood?*”. To address this, the first stage of research was to itemize features and policies from the Lower Lonsdale neighbourhood in the context of the LEED-ND framework as described in Chapter 5.

To manage scope, the detailed LEED-ND assessment was limited to the block bounded by 1st and 3rd Avenues, Lonsdale Avenue, and Chesterfield Avenue as identified in Figure 2. The purpose is not to arrive at a definitive assessment or evaluation of sustainability in this neighbourhood but to test a hypothesis and frame and inform the broader research question with a contextual understanding of the case study neighbourhood. Table 1, below, includes the category point totals based upon the

⁶ Map Data: Google, 2018.

LEED-ND assessment framework. Included are summary comments broadly describing the neighbourhood features. Appendix II contains the detailed inventory based directly on the LEED-ND scorecard with a description of scoring rationale.

Yes	Partial	No	Possible	LEED-ND Category Name	Comments
17	2	9	28	Smart Location & Linkage	The study area of Lower Lonsdale is an infill site utilizing 100% previously developed and already serviced lands. It has re-developed at a residential density of more than 300 units per hectare and also incorporates a mixture of other land uses. It is located on a transit corridor. Some lands were contaminated and subsequently remediated. The neighbourhood has a high degree of pedestrian and vehicle connectivity with an intersection density exceeding 150 intersections/km ² . The study area has access to frequent transit, with more than 300 available transit trips per week day, and designated cycling routes are located in the neighbourhood and leading to other locations within the City. Density bonusing establishes new opportunities for employment spaces and housing types and affordabilities within the neighbourhood that might not otherwise be constructed.
28	2	11	41	Neighborhood Pattern & Design	The neighbourhood incorporates housing diversity, including a variety of apartment and townhouse units types. Single family dwellings are located nearby. Affordable (subsidized) and seniors housing is located within the neighbourhood, and units with improved accessibility features for the disabled are incorporated into all new buildings. More than 15,000m ² of commercial and office space has been incorporated into developments in the past 25 years to ensure employment opportunities (a ratio of approximately 15% of developable land in the study area). Parks and fitness facilities are located both within the neighbourhood and nearby (less than 800m walking). Pedestrian connectivity within the neighbourhood is well established, with numerous mid-block walkways, breezeways, and an elevated pedestrian only walkway connecting to transit facilities and shopping amenities). Streets are oriented towards pedestrians, incorporating reduced building setbacks, at-grade entrances at a regular frequency, few blank walls, consistent placement of street trees, and the urban design of the neighbourhood incorporates a 'closing-in' of the street maintained by a width:height ratio of greater than 1:1.5. An elementary school is located within 800 metres of the boundary of the study area. The neighbourhood contains at least 18 categories of business types. Public consultation from the City of North Vancouver was ongoing during the planning of the neighbourhood as well as high-level planning for the neighbourhood's distant future.

8	0	23	31	Green Infrastructure & Buildings	The study area contains 4 certified green buildings and 4 others within close vicinity. Two of these contain green roofs. The City's energy efficient buildings initiative has resulted in the remaining new buildings having a higher energy efficiency than the building code requirements (at the time). A fossil-fuel based district energy system supplies 8 buildings in the case study area and provides 15% energy use reduction compared to standard heating systems. Numerous heritage buildings have been retained, restored, and refurbished.
5	0	1	6	Innovation & Design Process	The case area has had a strong focus on community engagement and the provision of amenities, public art, and cultural facilities to provide improved quality of life and availability of services, employment, and alternative forms of transportation. The nearby Shipyards project provides an exemplary re-purposed public open space from remediated industrial lands.
58	3	45	106	TOTAL	The neighbourhood resembles a LEED-ND 'silver' achievement.

Table 2: LEED-ND Analysis of Case Study Area and its contributing policy framework.

6.2. Policies and Key Events in the Development of Lower Lonsdale

The second stage of analysis addresses subquestion two: *“What policies and key events contributed to the development of the neighbourhood ?”* Appendix C contains a table of policy documents and development reports that were reviewed for this timeline. Specific policy documents are referenced throughout the timeline and described as appropriate.

To construct a narrative for the history of Lower Lonsdale that fits within the scope of this thesis, I have arranged the history thematically around two major development events that have occurred within the Lower Lonsdale area, along with examples from individual developments, over the course of the last 25 years. These two major development events include the Lower Lonsdale Planning Study and the Foot of Lonsdale redevelopment project. The case study does not specifically include or analyse the Shipyards Development, a very large re-development area adjacent to these aforementioned sites, however it is included in the discussion where appropriate.

6.2.1. The Vision for Lower Lonsdale

The City's 2014 Official Community Plan, adopted as bylaw, is the current de facto policy provenance for land use planning and development activity for the entire City. It describes Lower Lonsdale as "the City's transportation hub and growing cultural and entertainment district" (City of North Vancouver 2014, 32). The document characterizes the purpose of Lower Lonsdale to "present opportunities to create an exciting hub of arts and cultural activities and attractions that will contribute to North Vancouver's attractiveness and vibrancy" and the objectives for this are to "promote Lower Lonsdale as the City's primary cultural precinct, combining heritage, arts practice, arts venues, public art, and complementary businesses to create a vibrant, urban hub unique to Metro Vancouver" (City of North Vancouver 2014, 64-65). There is a particular emphasis on the development of public access to the waterfront in the Lower Lonsdale area that can be found throughout the document. This language is carried over from both the 2002 and 1992 iterations of the OCP. The lands within the case study area are designated within the OCP for 'high density' mid or high-rise mixed-use development, with a maximum floor space ratio of 2.6 (combined) for retail, office, and residential uses. An additional floor space ratio 'bonus density' of 1.0 times the lot area is achievable with the provision of public benefits; this is under certain conditions and at the discretion of the City Council (City of North Vancouver 2014, 35).

6.2.2. "There's only one way we can grow and that's through densification"⁷

The forward looking vision for Lower Lonsdale is rooted in its history as a well-established transportation hub and 'downtown' centre for the broader North Vancouver area. The City's 1907 'Town Plan' and its resulting 'great bones' were influential to a significant degree on what exists in Lower Lonsdale today⁸ and how densification can be readily supported given such long standing land-use and transportation patterns. The original 1907 plan for the City of North Vancouver established the major transportation corridor that is now Lonsdale, which originally supplied street-car service to the foot of

7 Interviewee #7, Personal Communication, August 23, 2017

8 This was consistent across all CNV staff members interviewed for this research.

Lonsdale. This is also where a passenger ferry operated to and from Vancouver, and the Pacific Great Eastern (PGE) Railway provided passenger service to the east (and eventually beyond). At the time, this transportation hub was centred around one of the largest employers on the North Shore, the Wallace Shipyard located immediately at the Foot of Lonsdale (where the 'Shipyards' public area now exists). Until the construction of the first vehicle bridge connecting the Vancouver peninsula to the North Shore (the original 2nd Narrows Bridge in 1925, where the Ironworkers Memorial Bridge is now located) the ferry was the only publicly accessible transportation across Burrard Inlet. Lower Lonsdale's role as a transportation hub is well established with this, the 40 year operating history of the Seabus. Its status as a regional town centre in the Metro Vancouver 2040 Regional Growth Strategy (and previous regional growth strategies) further emphasizes its role as an area for densification and transit connectivity.

In addition to the area's obvious densification potential given the integration of land use and transportation, interviewees suggested that the 1907 plan established the City's roots in environmental stewardship. This original plan included an expansive park network – the 'green necklace' – and boasted of sidewalk installations throughout the City and a focus on walking.⁹ Interviewees strongly recognized the land use pattern established in the 1907 plan as being highly influential towards the ability to integrate transportation and land use and accommodate densification in the current planning and development context.¹⁰

The City's 2002 OCP acknowledges the "full development" of the municipality (City of North Vancouver 2002, 5.3 [sic]), meaning that there are no remaining greenfield lands within the City. The Lower Lonsdale neighbourhood is hemmed by waterfront, First Nation (Capilano) federal reserve land, active industrial lands, and detached single-family oriented parcels of land. Any growth in population or dwelling units must be accommodated through densification. Interviewees acknowledged that the City had an advantage in this sense, in that they do not need to promote densification over greenfield growth. Land-use designations accommodating increased density are well established across iterations of the OCP and transportation and land use are already

9 Interviewee #4, Personal Communication, June 2, 2017, Interviewee #5, Personal Communication, June 2, 2017

10 Interviewee #1, Personal Communication, June 9, 2017

well-integrated within the City as discussed.¹¹ Densification has been directed towards lands with existing transit routes, with low density areas envisioned by and large as remaining existing single family land uses. The Lonsdale corridor has long been established as the densest area of the City, where there is existing frequent bus service, and Lower Lonsdale was identified to accommodate long-term growth in the City's first iteration of an OCP in 1980. During the early stages of land use planning for this neighbourhood, bearing heavily on its proximity to both the frequent seabus service and ready access to Vancouver, densification was further envisioned. Within planning reports on various developments in Lower Lonsdale over the past 25 years, transportation-oriented-development is frequently referenced as a justification for densification, which further acknowledges the claims of integrated transportation and land use.

6.2.3. A period of decline

Lower Lonsdale lost prominence as a transportation and economic hub with mid-century growth of automobile ownership, the construction of a second bridge crossing to North Vancouver, and a focus on suburban development across the broader North Shore. Streetcars were taken out of service in 1947 and the passenger ferry ceased operation in 1958. While the shipyards were still active, their prominence as an economic engine began to subside in the postwar era; lands in the area became underutilized. The City of North Vancouver acquired several properties in Lower Lonsdale through receivership following defaults on tax payments during the post-war intervening decades. Seabus service was introduced in 1977, re-establishing the area's transportation significance, and provincial government interests led to new development surrounding the seabus terminal in the following decade (Francis 2016).

6.2.4. Planning Urban Form to Realize the Vision: 1988 – 1997

In 1988, Lower Lonsdale was very different from today. The neighbourhood contained a high concentration of lower-income purpose-built rental housing, a lack of amenities, and most of the lands between 1st and 2nd Avenues west of Lonsdale were occupied by

¹¹ Interviewee #5, Personal Communication, June 2, 2017

parking lots owned by the City.¹² The Versatile Pacific (formerly Wallace) Shipyards site, south of Esplanade Avenue and east of Lonsdale, was on the brink of bankruptcy and soon to be in receivership. Many single and two-storey buildings lining Lonsdale Avenue between Esplanade and Third Avenue were nearing the end of their serviceable life.¹³ Adjacent to the Lonsdale Quay an 'office precinct' had been constructed, a large project instigated by the provincial government of the time, and had introduced a new economic thrust into the area (City of North Vancouver 1992).¹⁴ The as-then uncertain future of this neighbourhood had been debated as far back as the introduction of Seabus service in 1977 and during the creation of the City's 1980 Official Community Plan, and new development concepts were creating tensions politically and amongst existing residents.

A building in Lower Lonsdale notable for its height, the 29 storey (280 foot tall) 'Observatory', was constructed in 1990 on the site of the former St. Alice Hotel, a single-room occupancy building that was also popular gathering place for neighbourhood locals (Munro, 2016). The tower was taller than any structure in the City of North Vancouver at the time. The event – including its representation of change and drastic physical change - became a harbinger for development fears. Public reaction to the drastic height discrepancy with existing buildings, and political response to fears of blocked views from neighbouring residents led to a quick initiation of a view study for Lower Lonsdale¹⁵ and in turn strongly influenced the future of development in the area.¹⁶ This culminated in the implementation of maximum building heights in the City's OCP and view corridors that were maintained through planning work to the present day.

6.2.5. The Lower Lonsdale Planning Study

A lack of form based regulatory controls led to the initiation of the Lower Lonsdale Planning Study in late 1992 with significant impetus created by construction of the Observatory Building and the Provincially instigated office park near the Seabus

12 Interviewee #4, Personal Communication, June 2, 2017

13 Interviewee #1, Personal Communication, June 9, 2017

14 Interviewee #8, Personal Communication, July 27, 2017

15 City of North Vancouver Staff Report to Council "View Study, Further Analysis, Areas D, E, Lower Lonsdale", May 24, 1989.

16 City of North Vancouver Public Hearing Minutes, March 24 2003

terminal.¹⁷ A secondary objective of this new study was to realize a financial return on the City's vacant land assets in the area^{18,19} The process identified a development program for public and private lands in Lower Lonsdale beginning with stakeholder engagement sessions. The beginning of the LLPS process envisioned a build-out of the neighbourhood using the existing street network and 'evolved' public transportation system, and was to include "site assembly, building heights, detailed site planning, planned open spaces, pedestrian linkages, traffic, and public amenities".²⁰ The boundaries of the planning area were to be St. Georges Avenue to the East and Chesterfield Avenue to the west, 3rd Street to the north, and Esplanade to the South but extending to Carrie Cates Court for a single block.²¹

The overall 'vision' for the Lower Lonsdale study was said to be informed by the City's then current (1992) OCP. An informational document prepared by City Staff described the Lower Lonsdale portion of the Lonsdale Town Centre "as the City's recreational and entertainment district – with restaurants, pedestrian ways, shopping and evening activities and the potential for increased office space and high density housing." Additionally, this document stated "the vision includes a considered relationship of uses fostering a diverse and harmonious community; an emphasis on attractive and secure pedestrian environment; a mix of housing types; adequate community and cultural facilities; a high standard of urban design with the placement and height of buildings responding to the magnificent setting, retention of important public views, and the Lower Lonsdale skyline."²² The 1992 OCP identified lower Lonsdale as an area of densification and stated as a planning objective "that the Lower Lonsdale area be encouraged to continue as a major office, entertainment, retail, and residential focal point for the North Shore" (City of North Vancouver 1992, 10) while also including that public access to the

17 Interviewee #4, Personal Communication, June 2, 2017

18 City of North Vancouver Staff Report to Council "Lower Lonsdale Planning Study – Process", September 21, 1992

19 Interviewee #4, Personal Communication, June 2, 2017

20 City of North Vancouver "Lower Lonsdale Development Guide" 2004, Retrieved December 2, 2016 from <https://www.cnv.org/-/media/city-of-north-vancouver/documents/development-applications/lower-lonsdale-development-guide.pdf>

21 City of North Vancouver Staff Report to Council "Lower Lonsdale Planning Study – Issues and Visions Forum Review & Proposed Next Steps" July 7, 1993

22 "Lower Lonsdale Planning Study Overview" City of North Vancouver - brochure, p2.

waterfront be augmented in this area (City of North Vancouver 1992, 12). Under commercial development objectives, specific to Lower Lonsdale, the 1992 OCP stated “The City hopes to continue to promote the growing office precinct in Lower Lonsdale, and to realize the potential for attractive high density residential developments.” (City of North Vancouver 1992, 22).

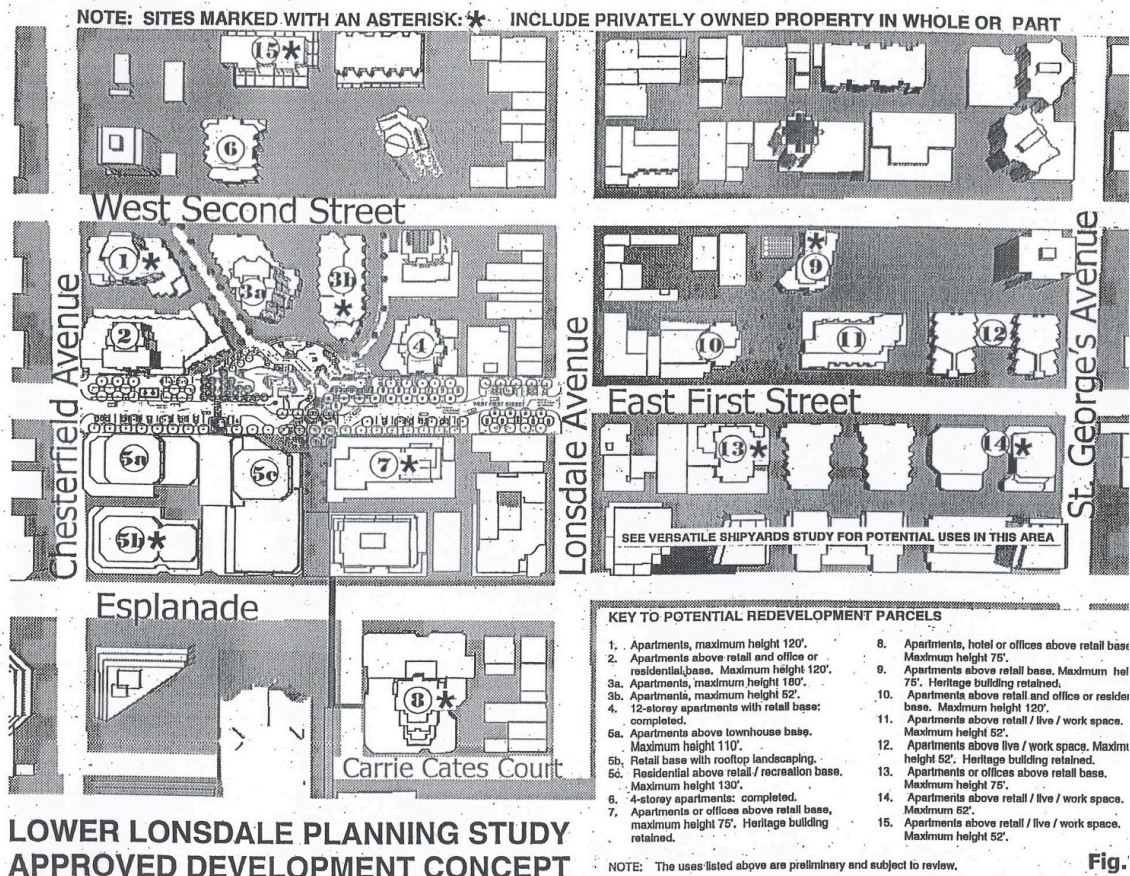
Public consultation was a significant aspect of the LLPS process. Ongoing communications were undertaken over the course of over 4 years from 1993 – 1997. In mid-1993 an ‘Issues and Visions’ forum was held, engaging local business and economic development committees, a citizen advisory committee, arts/cultural organizations, housing organizations, and members of the public to identify priorities moving forward.

Staff reports indicate early consensus from participating stakeholders on priorities of the planning study. Many of the issues that were raised as individual components at that time remain evident as themes for the subsequent developments to the present date. These issues reported as gaining early consensus included: a mixture of uses, tenure type and affordability; concentration of vehicle traffic on existing main roads (Esplanade, Lonsdale, Chesterfield and St. Georges), prioritizing pedestrian movements, retention of views through maximum heights (a longstanding citizen-led issue in Lower Lonsdale dating from the Observatory Tower construction and to the current date), decreased emphasis on the provision of parking, preservation of heritage, and increased open space and recreation opportunities.

The planning processes also included review at the committee level, involving the City’s Advisory Planning Committee, Advisory Design Panel, Policy Committee, and Heritage Committee. Iterative interim reports were presented to Council for feedback and to provide constant progress updates. The detailed land use and building form planning process, combined with the level of public interest in the scope of changes being proposed and the need for distinguishing of amenities to supply the neighbourhood, led the LLPS process to be drawn-out. Staffing resources also led to delays making it a five-year process.

The issue of view retention proved challenging from the outset of the planning process for Lower Lonsdale. Proposed urban design and building form criteria contained in the

draft LLPS building guidelines required increases to maximum building heights - which had been established following the 1989 View Study - in order to achieve the densities laid out in the OCP.²³ Tall skinny buildings allowing view corridors were proposed instead of all sites being occupied by shorter, blocky buildings that did not accommodate any views. This led to challenges in determining an appropriate density bonus policy for



the provision of community amenities as stakeholders felt that height variability would create a leverage point that would lead to further increased height of buildings.²⁴ Indeed this has been the case in following years; two prominent sites in Lower Lonsdale pushed for height increases in return for public amenity space²⁵ and it was a perennial issue in planning reports and public hearing minutes reviewed for this research.

23 City of North Vancouver Staff Report to Council "Lower Lonsdale Planning Studies, March 11, 1997", p3.

24 City of North Vancouver Staff Report to Council "LLPS - Land Use and Urban Design Major Issues" March 5, 1994, p2

25 City of North Vancouver Staff Report to Council "Development Application: 119 - 131 West Esplanade REZ2013-00013/OCP2013-00003", October 28, 2013

Figure 3: Lower Lonsdale Planning Study “Approved Concept”²⁶

The completed development plan for the Lower Lonsdale neighbourhood, shown in Figure 3, identified 15 development sites on the then City-owned (or partially owned) lands between 1st and 3rd Avenues. It retained the land use considerations made in the then current OCP – Town Centre - but supplemented this with an urban design guidelines package which included the provision of new open spaces, public art, streetscape design, specific site planning considerations, specified building heights, pedestrian linkages, traffic management considerations, and the need for five distinct community amenities and cultural facilities (a community art gallery, a community centre facility, a museum, a media arts gallery, and a theatre house) as well as the City’s first package of sustainability principles.²⁷ Amenities were to be funded through land sales and a density bonus strategy that provided the opportunity for additional density beyond the 2.6 F.S.R. (identified in the OCP) on sites where amenities were identified as necessary. A special task force was set up, following completion of the LLPS, named the ‘Lower Lonsdale Community Benefits Public Involvement Team’. Its purpose was to specifically identify which amenities would be provided for from the revenue of sale of lands and density bonus measures.²⁸ Sale of city owned parcels and subsequent developments began almost immediately upon finalization of the development concept. Parcels were pre-zoned prior to sale, for two reasons: to provide certainty to developers purchasing the land and to utilize the rezoning process to establish control over building form. The land use plan, along with the detailed design guidelines, guided development activity. Subsequent individual rezoning applications by developers underwent a detailed application review process in the context of the city’s policies and regulations of the day and were subject to advisory bodies’ and stakeholder input, public hearings, staff discretion, negotiation processes based on policies, and council approval where required. The Advisory Planning Committee was particularly active in the development process by engaging with each application (and in some cases multiple times for a

26 City of North Vancouver Staff Report to Council “Lower Lonsdale Planning Study” March 11, 1997.

27 Interviewee #4, Personal Communication, June 2, 2017

28 City of North Vancouver Staff Report to Council “Lower Lonsdale Community Benefits – Evaluation and Prioritization.” February 11, 1998.

single application). The Lower Lonsdale Design Guidelines were customized by City staff on a very detailed site by site basis. Restrictive covenants were registered against the title of individual properties during the rezoning process which required adherence to the predetermined guidelines (detailed in a subsequent section) when construction commenced post-sale. The implementation of the LLPS plan was development driven, facilitated through the sale of at least one parcel per year and development of other privately owned parcels within the plan area.²⁹ As many of these matters involved the sale of City lands, records are not available and decisions over the sale of individual lands were made by Council of the day in-camera. Marketing packages were prepared for each parcel.³⁰

Given the changing nature of building form in Lower Lonsdale and continued public sensitivity to height increases on formerly empty sites or those with low-rise buildings, as well as the commitment to public consultation as part of the LLPS process, a remote 'site office' was set up in the Lower Lonsdale neighbourhood. It included a scale model of the proposed building forms and their locations for the Lower Lonsdale neighbourhood. The office was staffed with a City planner and two assistants in order to be able to easily converse with the public^{31, 32, 33, 34} while lands in Lower Lonsdale were being pre-zoned and disposed of via market development. Part of the commitment to consultation was communicating with existing residents within Lower Lonsdale. The neighbourhood contained a high proportion of lower-income housing and was anticipated to change dramatically; there was a distinct sensitivity towards residents living within the area and to managing change. The satellite project office was a means to connect with existing residents and obtain feedback on the site-by-site development process that was occurring and in addition there was specific engagement with residents in the area

29 Interviewee #4, Personal Communication, June 2, 2017

30 City of North Vancouver Staff Report to Council "LLPS Work Program Update and Public Involvement Program" June 20, 1995

31 City of North Vancouver Staff Report to Council "LLPS Work Program Update and Public Involvement Program" June 20, 1995

32 Interviewee #4, Personal Communication, June 2, 2017

33 City of North Vancouver Staff Report to Council "170 W. 1st (File: 3400.05 02 W161-179)" July 10, 2002.

34 City of North Vancouver Council Meeting and Public Hearing Minutes July 30, 2002.

through this project office to gather feedback on the type and number of amenities that would be provided.³⁵

The LLPS was, in summary, a process to identify building form and broad goals.³⁶ Its outcome was not to create a reference plan document but to answer ‘big picture’ questions and establish amenities and a built form for Lower Lonsdale³⁷ in response to principles identified through an extensive public consultation process. Staff from the City recall the plan process and resulting guidelines, principles, and development activity as being significantly influential on the current form of the area. As one interviewee put it, “if there is a plan that explains why [Lower Lonsdale] is the way it is, it’s the Lower Lonsdale Planning Study ... I guess I would [attribute the area’s success] to a plan that properly integrated a wide range of community needs, and delivered it through individual [developments]”.³⁸

6.2.6. Lower Lonsdale: 1997 – 2017

Following the Lower Lonsdale Planning Study (LLPS) process the Lower Lonsdale neighbourhood has undergone a dramatic redevelopment. Over 20 individual parcels have been independently redeveloped in addition to the reclamation and redevelopment of the former Versatile Shipyards (also known as the Wallace Shipyards and Burrard Drydock) site in its entirety (an entirely separate process not detailed here), as well as redevelopment of the waterfront lands at the foot of Lonsdale Avenue. This amounts to redevelopment and/or restoration of more than 30 buildings covering nearly 16 hectares in a neighbourhood of approximately 25 hectares. The neighbourhood also contains a complement of sustainability features that were detailed in Section 6.1 (and Appendix B) in the LEED-ND analysis. The policies detailed in the following sections were found to be influential towards the sustainable development outcomes found in Lower Lonsdale.

35 Interviewee #4, Personal Communication, June 2, 2017, Anonymous, Personal Communication, July 31 2017

36 Interviewee #2, Personal Communication, June 2, 2017, Interviewee #4, Personal Communication, June 2, 2017

37 Interviewee #1, Personal Communication, June 9, 2017

38 Interviewee #4, Personal Communication, June 2, 2017

The Lower Lonsdale Design Guidelines

With the arrangement of land use and transportation in Lower Lonsdale well established through high-level OCP plans and existing infrastructure, the focus of the Lower Lonsdale Planning Study became one of urban design and infill treatment on a site-by-site basis as development proceeded after 1997:

.... The Lower Lonsdale Planning Study would have set the initial parameters and it was out of that initial study that we ended up with some of the big form questions being answered – where are the tower sites, how can we create mid-block connections, and [where is] some of the open space, and how do we offset the towers so that the view corridors are preserved. That [study] was sort of intended to answer some of those big picture pieces and to answer what do we do with these lands that we've now acquired [in order to] create some revenue."³⁹

Paramount to the implementation of the Lower Lonsdale Planning Study were the final Design Guidelines that included 10 guiding principles for the development of the area, as follows:⁴⁰

- To have the Lower Lonsdale Neighbourhood become a major residential, retail, entertainment and office focal point for the North Shore.
- To develop an urban environment which maximizes opportunities for social interaction across all ages.
- To preserve and enhance areas and features, natural and man-made, which are of architectural, cultural, heritage or aesthetic significance.
- To ensure the primacy of pedestrian-oriented and resident friendly buildings and landscapes – open spaces, streets, and walking routes.
- To ensure safety, security, and access considerations for all people are addressed and integrated.
- To provide a range and mix of housing types, tenures, and levels of affordability.
- To integrate community amenities and multi-purpose spaces within the redevelopment area.

39 Interviewee #1, Personal Communication, June 9, 2017

40 City of North Vancouver 'Development Services' Report "Lower Lonsdale Design Guidelines and Architectural Controls." March 1998

To encourage and support a variety of businesses and retail establishments which will cater to the needs of existing residents as well as future residents.

To ensure that height and placement of new buildings protect important views and enhance the Lower Lonsdale skyline.

To achieve the same overall density as recent buildings constructed in Lower Lonsdale.

The guidelines also included parcel by parcel architectural requirements for each of the 15 development sites owned by the City at the time of the LLPS completion and which were identified for redevelopment. These guidelines incorporated view protection, building orientation, solar considerations, shadow casting, massing principles (podium towers in particular situations), residential uses (assigned to upper floors for mixed use sites), design criteria for specific public and open space, addition or removal of specific streets, descriptions of pedestrian linkages, Crime Prevention through Environmental Design (CPTED) principles, and lighting criteria. A section is devoted to residential 'livability', concerned largely with avoidance of nuisances (noise, darkness) and the functionality of interior spaces for the entirely apartment/townhouse oriented development area.⁴¹

While the Lower Lonsdale Planning Study was endorsed [through resolution] by the Council of the day in 1997, the Design Guidelines were never officially incorporated into policy or bylaw.⁴² They were however influential in establishing expectations for urban design in Lower Lonsdale, discussed further in Section 6.3.4. The themes underlying these guidelines were indirectly referenced or alluded to consistently throughout interviews and planning reports on developments. The guidelines continue to be included as a component of review of ongoing development applications for Lower Lonsdale as they are received to this current day.⁴³

41 City of North Vancouver Development Services. Lower Lonsdale Design Guidelines and Architectural Controls. March 1998

42 Interviewee #7, Personal Communication, August 23, 2017

43 Ibid

Other Relevant Policies

Several policies that apply across the City and not exclusively to Lower Lonsdale bear influence on the development priorities for Lower Lonsdale; these policies have all been drafted and enacted following the completion of the LLPS. This is not an exhaustive list of policies that may apply, but are those that were uncovered through document reviews and stated to be influential during interviews. They are listed and described below:

2014 Official Community Plan

The most current official community plan (OCP) for the City of North Vancouver was adopted in 2016. The OCP contains the Sustainability Framework, already discussed, establishes land uses and maximum densities, and it carries forward the 'Vision' for Lower Lonsdale that was articulated in previous OCPs and already described in Section 6.2.1. The OCP was generally referred to by interviewees as an enabling and supportive document for developments within Lower Lonsdale that are described herein.

Density Bonus and Community Benefits Policy

This policy applies throughout the Lonsdale corridor and not specifically to the Lower Lonsdale neighbourhood. It was officially adopted by City Council in 2015 and identifies categories of additional density that can be obtained by new developments that provide additional amenities to the City. These include affordable housing units, employment generating floor space, and retention of heritage features. The policy was adopted in response to requests from the development community for increased transparency of the development approvals process and to ensure that the City was maximizing receipt of amenities through the increased value of land instigated by the development process.

High Energy Performance Density Bonus Initiative

The City adopted a density bonus bylaw in 2011 to incentivize increased building energy performance and corresponding energy use reduction. The bylaw effectively limited the amount of buildable floor space for new developments unless those developments exceeded minimum BC Building Code standards for building energy efficiency. 95% of all buildings constructed within the entire City in the first year of the policy incorporated higher energy efficiency design (City of North Vancouver 2007). Following the adoption of this policy, the City has continued to incentivize and require energy efficient buildings above and beyond the provincially administered Building Code.

Central Waterfront Development Plan

This plan was prepared by an external consultant in 2014 in response to City Council driven initiatives primarily oriented at developing the waterfront lands east of the southern terminus of Lonsdale (commonly referred to as the Shipyards) and along the Foot of Lonsdale at the terminus of that street.⁴⁴ It prioritizes the development of the public realm and overall 'people place' priorities for Lower Lonsdale that is articulated by interviewees (described throughout Section 6.3) and in Staff Reports to Council. The document is not a bylaw, but is a reference planning document informing the development of the public realm within Lower Lonsdale and it assisted in identifying goals surrounding large scale public amenities - particularly waterfront access and the Museum at the Foot of Lonsdale (described in detail in Section 6.2.10).

100 Year Sustainability Vision and Community Energy and Emissions Plan

This pair of plans, completed in 2007 and 2010 respectively, outline the City's objectives for energy use and greenhouse gas emissions reductions. The Sustainability Vision was a built form design process to identify an integrated land use and transportation future that would result in the City having a net-zero energy consumption by 2107, its bicentennial anniversary. The Community Energy and Emissions Plan provided an implementation strategy for the 100 Year Vision, outlining land use, transportation, and building technology strategies for energy use reduction. Both of these are strategic documents and not bylaws.

Hydronic Energy Service Bylaw (Lonsdale Energy Corporation)

Lonsdale Energy Corporation is a primarily natural-gas fired hot water heating utility, wholly owned by the City of North Vancouver and initiated in 2003 which supplies hot water heat to 70 buildings.⁴⁵ District Energy systems reduce city-wide greenhouse gas emissions and provide cost savings and maintenance efficiency (Li 2016). As required by the City of North Vancouver's bylaw any new building in excess of 1000 square

⁴⁴ Interviewee #1, Personal Communication, June 9, 2017

⁴⁵ Statistics taken at the time of report writing. Current statistics on the LEC system available at <https://www.cnv.org/city-services/lonsdale-energy/lec-customers>

metres must connect to the utility. The system is intended to be converted to a non-fossil fuel source but this date is undetermined.⁴⁶

Adaptable Design Guidelines

These guidelines require accessible units for people with disabilities to “create liveable residences for a wider range of persons than current [Provincial] building codes require”.⁴⁷ The guidelines are incorporated into the City’s Zoning Bylaw and are enforced across all new developments. 25% of all residential units are required to be Level II, which provide increased mobility options, and density bonus allowances are given for Level III units, which provide additional adaptability options beyond Level II.

6.2.7. Sustainability in Lower Lonsdale

The LLPS was prominent in setting the form and urban design of Lower Lonsdale, but its explicit objective was not one of sustainable development:

... we never really approached Lower Lonsdale with an environmental sustainability focus, there was a focus on placemaking.⁴⁸

Despite this, the City’s control over development in the area, through its land holdings and the corresponding detailed design process through the LLPS, became a vehicle for the City’s early sustainability projects and its focus on urban design of public spaces. Its concurrent timing with the advent of other sustainability-focused City initiatives, particularly those surrounding climate change mitigation, led to it being a unifying process for a number of multi-faceted objectives surrounding densification and energy use reduction:

Well, the Lower Lonsdale Planning Study was the driving thing, [...] we did a lot of neighbourhood consultation, at the same time we had the environment program going on, so if there is a plan that is why that is the way it is, it’s the Lower Lonsdale Planning Study. We had an integrated team with that, it wasn’t just [a person] working on it alone, we had a working group so you’d be getting a lot of collaborative work from the

46 Interviewee #4, Personal Communication, June 2, 2017

47 City of North Vancouver Adaptable Design Guidelines, 2014. Retrieved from <https://www.cnv.org/city-services/planning-and-policies/housing/housing-vulnerable-populations/adaptable-design> August 3rd, 2018

48 Interviewee #1, Personal Communication, June 9, 2017

people that were pursuing the energy corporation, the parks people, trying to pull it all together, it's really hard to get these things done [...].⁴⁹

The difficulty alluded to is what they referred to as City Council's struggle with "spending money on programming open spaces" and that "the whole placemaking thing hadn't advanced in their minds yet".⁵⁰ From this description, it appears that at the early stage in the implementation of the LLPS, there may have been a political disinterest in integrating the development of City-owned lands with the balance of the neighbourhood's function and features alongside a lack of understanding of the potential of the area as a self-sustaining 'neighbourhood'. Compared to the current view of Lower Lonsdale as a 'people oriented' destination, along with the City's other sustainable development initiatives in the area, the quote demonstrates the evolution of sustainable development and placemaking as an overall objective. The quote also shows that objectives in Lower Lonsdale at the early stage of LLPS implementation were purposed to include consideration beyond economic gain, largely focused on a built-form and urban design theme, and that the City's sustainable development priorities have advanced considerably from this time, in part due to their inclusion in the LLPS and the associated development projects that ensued. The above quotes also emphasize the focus that the City had on developing the public realm within the Lower Lonsdale area.

Another interviewee also attributed early sustainability efforts within the City to the LLPS; when discussing broader climate policy initiatives across the entire City that had evolved since then, they attributed the City's early sustainability priorities to the redevelopment of the Lower Lonsdale neighbourhood. The quote also emphasizes the City's early experimentation with sustainability, with political support, in the neighbourhood:

It really had its genesis in the late '90s in Lower Lonsdale. That was an area that was really re-developing, and at that time it was sort of both senior staff and Council that really drove looking at that area re-developing, thinking about these energy policies that were brewing, and thought hey, what if we made this area, if we introduced a district energy system here, and if we encouraged higher density as a means of having more energy efficient spaces and those types of things. It was because they were

49 Interviewee #4, Personal Communication, June 2, 2017

50 Ibid

looking at this area that those thoughts kind of came together in the late '90s, and then surfaced in the 2002 Official Community Plan.⁵¹

When discussing sustainability policies in Lower Lonsdale, interviewees recounted a focus on engagement with existing citizens within the area as development occurred, what they called a 'social focus' to ensure feedback from existing residents while their neighbourhood underwent change. Interviewees viewed this as falling under the 'social' pillar of sustainable development but clarified with me that the City's early sustainability initiatives in Lower Lonsdale were largely environmentally oriented around climate change mitigation and GHG reduction measures (as evidenced the LEC and Green Buildings Bylaws discussed at the beginning of this Chapter).

There were some contradictions in the responses that I received regarding the framing of sustainability within Lower Lonsdale, with some suggesting that the Lower Lonsdale planning process was attempting to balance environmental, economic and social considerations, while other responses suggested only environmentally focused [climate oriented] sustainability priorities. These interviewees may be referring to different points in time, and as Interviewee #4 noted during a conversation on this topic, the 'three pillar' concept of sustainability was not included within the City's OCP until 2002. This inclusion may have been as a result of the evolution of staff and Council's understandings and conceptualization of sustainable development within the City but also demonstrates a very compartmentalized and 'pillared' approach to the concept.

One of the early sustainability initiatives referenced by interviewees and found within Reports to Council for Lower Lonsdale was the inclusion of sustainability principles within the Lower Lonsdale Development Guidelines. While introducing density, they were intended to build on 'pre-existing' sustainability features that already existed within the neighbourhood (a fine-grain street grid conducive to walking and a well-established accessible public transportation system) in the following ways:

Reduction of unnecessary paved streets and lanes.

Building forms are relatively compact with minimal external surface area ratio to internal volume, requiring a reduced heating load.

⁵¹ Anonymous, August 15, 2012, Interview.

The majority of dwelling units are located on the east, south or west sides of buildings where they can benefit from the heat of the sun.

The feasibility of a community energy system is being studied, which if implemented, could result in major energy consumption efficiencies over the long term.

All projects to be built on City owned land will be required to incorporate energy conserving heating systems compatible with future community energy distribution. This implies hydronic systems and well insulated exterior wall construction.

All buildings built on city owned land will be required to maximise the effects of day lighting, natural ventilation and thermal value, with energy efficient lighting and energy management systems to reduce energy consumption.

All large areas of flat roof should be designed to accommodate 'green roof' systems. (displacing tar and gravel etc, with environmentally and aesthetically beneficial plant material).⁵²

Following the completion of the LLPS, development on lands rezoned through this process were required to 'design the project with sustainability in mind' following the guidelines and submit a 'Comprehensive Sustainability Strategy'.⁵³ These sustainability principles discussed above were the first of their kind (outside of broad OCP sustainability policies) within the City.⁵⁴ They eventually evolved from their home within the LLPS guidelines into a separate Sustainable Development Checklist that has since and again evolved into a separate procedural tool that is still used in for projects in Lower Lonsdale (and across the entire City). As stated by Interviewee #3, it is a key piece of the development approvals process:

whenever you have a new meeting with an applicant there would be a folder, [in] there would be all the components they needed to consider in

52 City of North Vancouver 'Development Services' Report "Lower Lonsdale Design Guidelines and Architectural Controls" March 1998

53 Such a comprehensive sustainability strategy was to include:

- Collaboration: A 'systems approach' that required all participants in the development to be included (ie architect, engineer, contractor, etc)
- Tangible Sustainability Goals (site design, materials, waste).
- Means and Methods: How the goals will be achieved.
- Monitoring & Post Evaluation: A method of monitoring during construction, along with a post evaluation.

54 Interviewee #4, Personal Communication, June 2, 2017

terms of social, economic and environmental sustainability, and there would be a checklist, and they had to respond to them all.⁵⁵

The interviewee implies that that the sustainability checklist was an introduction for applicants to the City's expectations for new developments in Lower Lonsdale (and eventually other locations as the checklist became used across the City) as well as a leverage and negotiation tool for planners at the City to use in the rezoning process to improve the outcome of individual projects. The document, now the Sustainable Development Checklist, incorporates the six points of the City's current sustainability framework contained within the current Official Community Plan. The Lower Lonsdale Design Guidelines discussed above, with its component sustainability principles, while neither mandatory nor adopted as bylaw, have become an influential and useful discussion point and education tool for development applications and the associated development approvals process - a point I will draw out more in Section 6.3.4.⁵⁶ The current Sustainable Development Checklist is posted on the City's website and included in the City's development oriented information brochures that are made available to the public and developers.

6.2.8. Vignettes: Development Projects in Lower Lonsdale

The following sections contain two vignettes of particular development projects in Lower Lonsdale that illustrate how policies, events, and decision making for Lower Lonsdale that became evident throughout this case study were manifested through the redevelopment process. They provide insight into the points of debate and the emphasized priorities that occurred during the development of Lower Lonsdale.

Vignette #1: The Wallace & McDowell

This vignette highlights the City's process of development approvals, which focused on negotiations surrounding urban design, economic considerations and amenity provision. It also highlights the level of detail applied to design, the application of the City's

⁵⁵ Interviewee #3, Personal Communication, June 12, 2017

⁵⁶ City of North Vancouver. Community Development Department. Sustainable Development Guidelines. Retrieved 25th August, 2018 from <https://www.cnv.org/-/media/city-of-north-vancouver/documents/development-application-resources/sustainable-development-guidelines.pdf>

bylaws/policies that have been described, and the multiple considerations that were regularly made on a site-by-site basis in Lower Lonsdale.

The Wallace & McDowell Building, named for two former North Vancouver businesses (The 'Wallace Shipyard' and a longstanding drugstore named 'McDowells' at the location of the current building)(Johnson 2014), is a large building constructed over the course of 2015 – 2016 that occupies the west side of Lonsdale between 1st and 2nd Streets. It is a 6 storey structure which steps in height with the slope of Lonsdale Avenue, containing several retail businesses at street level, office space on the second storey, and individual residences on the upper floors. A small commercial heritage building at the south end of the building known as the 'Beasley Block' was retained, restored, and incorporated into the project.⁵⁷ This retained building was considered to have 'significant heritage value' due to its age and historical business association in the City.^{58, 59} The developer of the site did not want to retain the heritage building, but this was a requirement made by the City.⁶⁰ The building took advantage of the "potential for additional bonuses under the Official Community Plan": The total floor space ratio (FSR) of the building was 3.5 times the lot size, which exceeded the City's Official Community Plan maximum of 2.6 but was permitted because of density bonus provisions that were negotiated with the developer and were met, as detailed below.⁶¹

A considerable focus of the planning review process for the building was on the urban design aspects of how it integrated into the Lonsdale Streetscape. Feedback from City staff to the applicant was that to avoid a 'blocky' building it needed to step up at different grades with the slope of Lonsdale rather than maintain a constant height.⁶² Multiple individual storefronts were also encouraged to be at different grades with separate

57 City of North Vancouver Staff Report to Council "Rezoning Application 101 – 149 Lonsdale - 3360-20 REZ2013-00007" December 11, 2013

58 City of North Vancouver Staff Report to Council "Rezoning Application 101 – 149 Lonsdale - 3360-20 REZ2013-00007" December 11, 2013

59 City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>

60 Interviewee #1, Personal Communication, June 9, 2017, Interviewee #5, Personal Communication, June 2, 2017, Interviewee #9, Personal Communication, September 15, 2017

61 City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>

62 Interviewee #9, Personal Communication, September 15, 2017, Interviewee #4, Personal Communication, June 2, 2017, Interviewee #1, Personal Communication, June 9, 2017

awnings to maintain the feel of the independent buildings that pre-existed and to “replicate the small retail character” that also pre-existed.⁶³ These were outcomes that were ‘negotiated’ through the approvals and review process.⁶⁴

A breezeway connecting the Lonsdale sidewalk with the laneway at the rear of the building divided the site in half and now provides a pedestrian connection to the rear of the building and neighbouring properties. The breezeway was a spontaneous inclusion, another function of purposely avoiding a blocky urban design and also as response to concerns of possibly unscrupulous activity in the secluded alley behind the building. While it was also a function of CPTED considerations⁶⁵ and despite having a purely functional purpose it was characterized as an “innovative and collaborative” outcome between the developer and City staff.⁶⁶ At the request of staff, a green roof was incorporated into the building to improve the aesthetics from other tall buildings. The building was stated to be ‘consistent in scale and density’⁶⁷ with those surrounding it and specifically ‘responded’ to the Lower Lonsdale Design Guidelines established by the LLPS.^{68, 69} Interviewees reported that the building was within the maximum height limits of the Official Community Plan noting that it would have been ‘difficult’ for it to be higher⁷⁰ which alluded to the rigidity of bylaw established height limits in the neighbourhood.

Economic viability of businesses was another consideration of this new development. The building displaced 6 individual single storey retail stores located in old buildings that

63 Interviewee #1, Personal Communication, June 9, 2017

64 Ibid

65 City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>, Interviewee 4, Personal Communication, July 31, 2017

66 Interviewee #9, Personal Communication, September 15, 2017

67 City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>

68 Interviewee 4, Personal Communication, July 31, 2017

69 City of North Vancouver Staff Report to Council “Rezoning Application 101 – 149 Lonsdale - 3360-20 REZ2013-00007” December 11, 2013

70 Interviewee #4, Personal Communication, June 2, 2017, Interviewee #5, Personal Communication, June 2, 2017, Interviewee #9, Personal Communication, September 15, 2017

were deemed not worthy of repair prior to the site's redevelopment.⁷¹ A strong focus from staff and from City Council, particularly during the project's public hearing, was on the retention of small businesses and the assurance of employment opportunities at the site⁷²; the size of the commercial units was limited to a maximum size to help facilitate small business rather than larger format retail stores with the hopes this would attract independent businesses.⁷³ Other employment generating uses were also required to be included: a density bonus of additional residential floor area was allowed in exchange for the construction of office space in the building. This was considered to be "commercial space that would not normally be produced without a market incentive" given land market conditions and the return on investment that could be expected to be made from residential uses versus commercial uses.⁷⁴

The staff report to Council for the building stated that it "addressed social, economic and environmental objectives" by including a 'green' building certification (Built Green) and increased energy efficiency, by providing additional office space to "contribute to the goal of creating a complete community where citizens can live, work, and recreate all within the City", and "incorporating a range of unit sizes and below market, adaptable, affordable units." On this latter point, the building included 17 'adaptable' units, per the City's "Adaptable Design Guidelines" in order to accommodate persons with a range of different physical and/or mobility needs, and included a further five units of affordable below-market housing owned and operated by a non-profit society. The combination of these two 'amenities' led to the granting of another additional density bonus of market housing that could be sold on the open market so the developer could offset the cost of the amenity construction.

The Wallace and McDowell building was initially proposed by the developer to be constructed under the 'Built Green' certification system, to respond to the City's

71 Interviewee #1, Personal Communication, June 9, 2017, City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>.

72 Ibid

73 Interviewee #1, Personal Communication, June 9, 2017

74 City of North Vancouver Public Hearing January 20, 2014. Video recording. Accessed August 3, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>

requirements for improved energy performance in new buildings.⁷⁵ While there was no initial requirement from the City for the third party ‘green’ building certification this was seen as a ‘selling point’ to Council and the public. It was secured by staff and thereby made as a requirement once the commitment was made by the developer.⁷⁶ The building was also required to connect to the City’s district energy system as established through the City’s Hydronic Bylaw - although this was costly and undesirable from the developer’s point of view.

The Wallace & McDowell Building was characterized by interviewees as being very ‘popular’⁷⁷ and as integrating well into the neighbourhood in terms of urban design, functionality, and economic contribution. It was also praised for addressing the City’s objectives for sustainability through its mixture of uses and employment and housing types. The planning report for the site stated “The proposed development contributes to the vibrancy of the area, strengthening an important corner while remaining sensitive to the historic character of its surroundings.” Interviewee #7 characterized it as ‘unique’ and a good example of innovation: “In that development you have residential units that achieve many components of livability, and I’m talking affordability, and also accessibility as well, and it also has that mixed use component.” Interviewee #1 characterized the building as an “interesting microcosm in that it has the heritage element, the social element on the housing side, and we’re always pushing for that jobs balance to make sure that there is actually employment. We don’t want this to be fully a condo based or a sleeper community for other parts of the region.”

Vignette #2: The Foot of Lonsdale

The ‘Foot of Lonsdale’, the portion of waterfront land at the southern terminus of Lonsdale Avenue between the Shipyards Site and Lonsdale Quay, has been a focal area for land use planning, site design, and community amenity placement by the City of North Vancouver for approximately 25 years. Its development coincides with events in the surrounding area that occurred following the Lower Lonsdale Planning Study. This

75 Interviewee #9, Personal Communication, September 15, 2017

76 Ibid, Interviewee #5, Personal Communication, June 2, 2017

77 Interviewee #1, Personal Communication, June 9, 2017, Interviewee #2, Personal Communication, June 2, 2017, Interviewee #4, Personal Communication, June 2, 2017, Interviewee #5, Personal Communication, June 2, 2017

vignette illustrates shifting priorities in and evolution of Lower Lonsdale, from the early days of the LLPS where the City questioned how to maximize the value of City-owned lands and fund amenities, to a current focus on maximizing the value of amenity by creating a 'destination' and 'people place'. It further illustrates the City's prioritization of and commitment to such pursuits and outcomes and drawing from in-house resources to do so.

The Foot of Lonsdale area was not otherwise included in any detailed study (such as a detailed land-use plan) and despite intensive planning efforts on neighbouring lands (specifically the LLPS and the Shipyards Land Use Study), had no prior examination of potential. Its indeterminate future was identified only by a designation in the City's OCP (mixed use development) and its role as a geographical and pedestrian connection to the waterfront, an objective of the City's OCP.

This area – comprising a portion of land between the terminus of Lonsdale Avenue and the foreshore - was historically the transportation hub for Lonsdale streetcars, connecting in this location to the Pacific Great Eastern Railroad, and a dock providing passenger ferry service to the City of Vancouver for the early half of the 20th century. The removal of streetcars in 1947 and the ferry service in 1958⁷⁸ led to an underutilization of the space⁷⁹ and its proximity to the former Versatile Shipyards during this period resulted in a strong industrial influence upon it as well as a publicly inaccessible waterfront. During this time it was used as a paid parking lot and housed the location of a former administration building from the Pacific Great Eastern railway. Subsequent to the decline of the Versatile Shipyards site as active industrial land, the underutilization of the site and an indeterminate future, combined with a completion of planning activities on adjacent Lower Lonsdale and Versatile Shipyard sites, led to the initiation of a process to identify future uses and design.

The location was identified by staff in a 2002 report as 'strategic' given its prominence at the 'foot' of Lonsdale – which furthermore emphasized the site's location at the edge of a regional town centre and the waterfront – and was therefore envisioned not only as a

78 City of North Vancouver Heritage Registry 2013, p10

79 City of North Vancouver Staff Report to Council "The Foot of Lonsdale Planning Study - Final Report" September 10, 2002, p3

community focal point but as a potential regional destination.⁸⁰ This direction was consistent with then current OCP policies surrounding connectivity to the waterfront and creation of a cultural hub in the broader Lower Lonsdale area (City of North Vancouver 2002). A detailed planning processes was undertaken.

An in-depth consultant report completed in 2002 resulted from this site planning process - "The Planning Study for the Foot of Lonsdale" - and provided detailed land use concepts and an overall vision for the site. The proposed plan was perceived as being overly ambitious and costly and a political decision not to carry forward was made.⁸¹ The report was received but not endorsed by Council and no direction on the site was resolved at this time.⁸² Opposition or lack of response from key neighbouring stakeholders further contributed to a shelving of this plan.⁸³

A second subsequent attempt by a developer in 2008 to include the Foot of Lonsdale site as a location for public amenities to be provided as part of a development application located at Carrie Cates Court and Rogers Avenue (across from the Lonsdale Quay, Site 8 in the LLPS) however that application was met with strong public resistance over height issues (a proposed 35 stories), objected to by the Advisory Planning Committee, opposed by Council and subsequently withdrawn by the applicant leading to the cessation of any development at the Foot of Lonsdale associated with this project.⁸⁴ The opportunity to develop the site, without an injection of amenity funding, was stalled. 2009 brought a third attempt to bring clarity to future plans for this location. A plan initiated by staff intended to join this development priority to a number of OCP objectives surrounding waterfront access, public amenities, economic development, regional significance, and the creation of a destination. This plan was to be in the form of a preliminary site layout and design guidelines. The location served as a necessary link between the developing shipyards to the east and the Lonsdale quay transportation hub to the west, by way of the City's multipurpose pathway called the 'Spirit Trail'. The

80 Ibid.

81 Ibid.

82 City of North Vancouver Staff Report to Council "Foot Of Lonsdale Site Plan and Open Space Design Terms of Reference and Funding Appropriation" September 14, 2009, p1

83 City of North Vancouver Staff Report to Council "Foot of Lonsdale Waterfront Planning Study Next Steps" November 16, 2009, p1.

84 Ibid, p2

renewed effort to identify a future for the site highlighted the need for pedestrian connectivity and public open space, in line with the City's waterfront development guidelines, but was also undertaken to plan and develop the site in the context of the surrounding area as a cultural and regional destination. The City issued an RFQ in March of 2010 to engage a consultant in a detailed land use plan and open space design.⁸⁵

No satisfactory proposals were received and as such land use planning was conducted by staff over the course of 2010/11 – emphasizing the City's consistency of undertaking planning for Lower Lonsdale as an 'in-house' activity. The design process included two principal stakeholders: the Presentation House Gallery (a cultural and media arts organization located at the time in a small heritage building at Chesterfield and 3rd Street) as well as the Washington Marine Group (owner of Cates Tugs, the long time marine industrial tenant and landowner operating a tugboat repair facility at the foot of Lonsdale immediately adjacent to the Lonsdale Quay). The presentation House Gallery society had been seeking a larger, more modern, and more physically appropriate site than their existing site, a heritage schoolhouse, since 1993.⁸⁶ A new home for the gallery was initially identified in the Lower Lonsdale Planning Study as a desired amenity within the neighbourhood. The goals and objectives of this in-house process, endorsed by Council, generally focused on: transforming the Foot of Lonsdale into a people place for all ages; developing opportunities for revenue generation from retail / restaurant uses; optimizing linkages and Spirit Trail connections; protecting and enhancing the environment; and building partnerships.⁸⁷ This was to be partially realized by locating an art gallery on the site, committed to by Council in 2012, combined with open space and waterfront access. These themes are repeated through subsequent staff reports and reflected in the final site design.

Heritage considerations formed an ongoing consideration, and debate over the retention or removal of the historically associated PGE building challenged the outcomes of the

85 City of North Vancouver Staff Report to Council "Foot of Lonsdale Site Plan and Open Space Design Terms of Reference and Funding Appropriation", September 9, 2014, p.3-4

86 Presentation House Gallery-New-Facility-Business-Plan p.4

87 City of North Vancouver Staff Report to Council "Foot of Lonsdale Open Space Design - Update and Next Steps" September 9, 2013, p.2

design process, with the City's Heritage Advisory Committee not supporting relocation of the delicate and aged building. Staff recommended retention and accommodation of the building on the site, however Council voted to relocate the station, disassociate the heritage designation of the site from that of the building, and relocate the former administration building (while retaining its heritage status) to a temporary site for future consideration of final placement.⁸⁸

Ultimately, the design of the Foot of Lonsdale site was coordinated with a corresponding "Central Waterfront Visioning Process" to link the future open space design of portions of the former Versatile Shipyards site with that of the foot of Lonsdale following an extensive visioning process undertaken by the international consultant firm Roger Brooks. This led to extensive and detailed planning and debate over the arrangement and funding of public amenities through the adjacent Shipyards site.⁸⁹

Structural dock issues at the Foot of Lonsdale and the later relocation of an existing tugboat repair facility to a different site complicated and slowed the process. The final design plans for the site included the Polygon Art Gallery, named because of funding provided partially by developer contributions stemming from density bonusing on the nearby Lower Lonsdale Site 8, (previously discussed), a tidal pool, extensive public open space, a large waterfront seating area (the 'mega bench'), and accommodation of the City's 'Spirit Trail', traversing the waterfront across the City. The gallery itself, a municipally owned building, was constructed to LEED Gold standard, consistent with the City's policy for all new municipal buildings. Public waterfront access is provided and the site plan connects with the City's multi-purpose Spirit Trail.

\$4 million dollars of municipal funding covered the design and construction of the open space at the foot of Lonsdale. An additional \$4 million gift from the developer of Site 8 - Polygon was announced in late 2014, combined with \$6.5 million of Presentation House funding and an additional \$7.5 million of contributions from three levels of government

88 City of North Vancouver Staff Report to Council "Foot of Lonsdale Open Space Design - Update and Next Steps" September 9, 2013, p.1

89 Ibid, p5

announced in mid-2015 funded the approximately \$15 million building on the site, allowing construction of the site to begin in late 2016.

The redesign and redevelopment of the foot of Lonsdale has been, in summary, driven by a desire to incorporate cultural features into a public open space while providing public access to the waterfront and an integration of this amenity space into adjacent land uses at the Quay and former Shipyard site. The role of these facilities' contribution to Lower Lonsdale has proven a matter of debate, evidenced by the decade long process to achieve a solution. This was alluded to by a statement in a staff report regarding the 2010 Cultural Facilities study: "For, while the notion of an "arts precinct" - viewed variously as an agent of social renewal or as a generator of economic benefit - has continued to be part of the City's ambitions for Lower Lonsdale ..."⁹⁰

The inclusion of cultural facilities has strongly influenced the design of this site as an amenity focal point for the Lower Lonsdale neighbourhood, reflecting long standing objectives in high-level policy documents such as the 1992 OCP identifying Lower Lonsdale as a 'recreational and entertainment district' (City of North Vancouver 1992, 22) and repeated in the 2002 OCP and 2008 Economic Development Plan.⁹¹ Heritage considerations have been less of a priority on this particular site, save for the incorporation of thematic elements of the industrial past, and the specific inclusion of sustainable neighbourhood design has minimally influenced specific details of site design while the overarching city-wide policies, such as requirements for green buildings, have driven some aspects of design choice. The City's 2009 'Cultural Facilities Study' does however substantiate the City's commitment to a cultural and arts precinct in the Lower Lonsdale area. Mayor Darrell Mussatto was quoted as saying the following about the waterfront area, including the foot of Lonsdale:

Through creative and strategic planning, the City's Central Waterfront has become a renowned and popular destination that continues its planned transformation into a magnificent people place.⁹²

90 City of North Vancouver Staff Report to Council "Lower Lonsdale Cultural Facilities Study: Consultants' Report" September 15, 2010, p.3

91 Ibid, p.8

92 City of North Vancouver "CityView" Newsletter Edition. Summer 2015

The Foot of Lonsdale vignette illustrates the focus on amenities in Lower Lonsdale. This is also highlighted in the [as of the time of writing] recently approved and under construction building on Site 8 (the block between Esplanade Avenue and the existing Quay Market site), one of the few remaining parcels of undeveloped land included in the original LLPS document. This Site 8 building underwent an OCP amendment process for an increase in height, which resulted in a gift to the City of an entire floor for a museum space and cultural facility on that site. That building was referred to by a City Council member as the ‘final piece of completing the vision of a significant people place.’⁹³

While Lower Lonsdale was not originally identified to be a ‘model’ or ‘sustainable’ neighbourhood,⁹⁴ it has evolved to become a model community for the City⁹⁵ which in turn has coalesced to include many of the features, as shown in Section 6.1, that form a sustainable neighbourhood.

6.3. Decision-Making Processes for Lower Lonsdale

The third stage of data analysis addresses sub-question three: *“How were decisions reached to incorporate sustainable development in the neighbourhood?”*. In this section I discuss the themes that emerged from interviews that were not discussed in the chronological development history above.

The objective with interviews was to establish how the organization of the City of North Vancouver, and individuals involved in development projects, framed sustainable neighbourhood development and incorporated it into development activities within Lower Lonsdale; information that was not available through document review. During interviews I sought to inquire about which influential policies, priorities and institutional practices were active during ongoing development of Lower Lonsdale. I questioned how these components integrated into or contrasted with the City’s existing sustainability framework. I explored the role of institutional understandings of sustainable development and I also inquired as to how success was measured within the Lower

93 City of North Vancouver Council Meeting Minutes, June 27 2016.

94 Interviewee #1, Personal Communication, June 9, 2017

95 Interviewee #5, Personal Communication, June 2, 2017

Lonsdale neighbourhood. The findings presented below are arranged thematically, resulting from the coding process described in Chapter 5. Throughout the remainder of this section I explain and discuss the nuances of interviews. This will explore interviewees' descriptions of how sustainable development objectives manifested through various aspects of practice, priorities and in the Lower Lonsdale neighbourhood.

6.3.1. Institutionalized Framework: “Everyone’s Job is Sustainability”⁹⁶

A ‘culture’ oriented around a pursuit of sustainability has evolved amongst staff within the City of North Vancouver that interviewees described as functioning as the City’s framework for sustainable development. All of the interviewees for this research expressed a resistance or dislike for externally imposed structured sustainability frameworks. This is despite the City of North Vancouver’s policy framework committed to sustainable development outcomes that is evident through policy documents, planning reports, interviews, and the use of sustainability checklists alongside sustainable development outcomes incorporated into development projects. This combination suggests a sophisticated and coordinated sustainable development evolution, as discussed and demonstrated in the previous sections, that has taken shape.

There was a distinct sentiment that an externally imposed framework would not reflect the City’s values or accommodate its processes within this culture of sustainability at City Hall. There was a preference towards what I coded as ‘in-house solutions’ in order to be able follow a practice regime that prioritized flexibility and to be able to achieve development objectives in an incremental fashion that didn’t follow a prescribed method. Interviewees did not always contextualize these comments towards development in Lower Lonsdale, so in lieu of specific development examples I have included extensive quotes throughout the section to capture this topic.

The discussion surrounding frameworks for sustainable development with applicants led to a discussion surrounding the institutionalization of sustainability principles and how sustainability was framed within the organization. I specifically asked my interviewees

96 Interviewee #8, Personal Communication, July 27, 2017

how the City integrated sustainability from a procedural point of view, given that it has no overarching sustainability strategy or department but has achieved notable outcomes (as discussed in Chapter 2 and Section 6.1 of this chapter). There were two broad components to this aspect of conversations: the institutionalization of sustainability and a reliance on the ‘three-legged stool’ or ‘pillars’ concept of sustainability.

Three aspects of the institutional nature of sustainability were prominent in interviews: interdepartmental collaboration, leadership, and a shared understanding of sustainability as a goal. Respecting the former, my review of planning reports for Lower Lonsdale strongly indicated interdepartmental collaboration on development proposals as a component of the planning process. Reports contained a specific section documenting collaborative reviews of proposals, specifying “Interdepartmental Implications”. Beginning in 2002, reports also contained a dedicated section for sustainability. The latter two components of the institutional nature of sustainability in the City of North Vancouver were strongly reflected throughout the interviews.

The City’s 2002 OCP incorporated sustainability as “an important integrating theme”, which was a progressive undertaking for its time (as discussed in Chapter 2)(City of North Vancouver 2002, 3.1 [sic]). Interviewee #4 recalled that there was a conscious choice to embed sustainability into this high-level document as a priority, to make it a broader issue across the organization rather than a single person’s job.⁹⁷ This carried the secondary intent that it would filter down to various departments and individuals: “Our attitude was that everyone is the sustainability officer” the interviewee recalled. This integrative aspect of policy and practice has been well documented in other primary research on the City of North Vancouver (Kristensen 2012, Towns and Evans 2010) and does not require repeating. That 2002 OCP used the three-legged-stool as the base definition for sustainability.

The findings from this interview topic that are relevant to this research relate to the use or understanding of frameworks, and the City’s divergence from using a structured framework and instead relying on an institutionalization of sustainability. One interviewee suggested that sustainability as a ‘corporate practice element’ was ‘sprinkled

⁹⁷ Interviewee #4, Personal Communication, June 2, 2017

around and amongst departments' to encourage a shared responsibility to it as an organizational theme.⁹⁸ Interviewee #8 stated that a "framework is only as good as how much people have bought into it" and while discussing the importance of interdepartmental collaboration stated "maybe that's our framework".⁹⁹ Similarly, Interviewee #5 implied that a structured sustainability framework to guide the development of Lower Lonsdale wasn't necessary with such strong organizational principles. Reflecting on the opposite possibility, they stated: "I would say you need a structure in the absence of an organizational culture that leads you in a common direction".¹⁰⁰ Interviewee #2 alternatively referred to it as a 'practice framework' about 'how you do things'.¹⁰¹ It was emphasized consistently across interviews that this idea of an institutionalized 'practice' framework was more important than an externally imposed variant such as: the outcome focused LEED-ND framework used in this research, or a prescriptive process framework like the Community Capital Framework (Roseland 2012). Interviewee #8 described that an interview question for new employees raised the issue of sustainability, and that it was a common practice to evaluate potential hires based on their understanding of the concept, stating the following:

I think every interview for every staff in each department is about sustainability. We ask that of everybody, from the get go everyone is aware it's what we do.¹⁰²

Overall, the interviewees described and emphasized a sense of a shared understanding of the importance of sustainability across employees at City Hall. This has led to a constructive communication strategy for the various projects that are reviewed across multiple departments which strongly emphasizes a 'balanced' triple-bottom-line approach.

Interview participants also gave strong testament to the strength and consistency of leadership at both the staff and political level at the City of North Vancouver to be able to maintain such a practice. There was an emphasis put on the importance of leadership in

98 Anonymous, August 15, 2012, Interview.

99 Interviewee #8, Personal Communication, July 27, 2017

100 Interviewee #5, Personal Communication, June 2, 2017

101 Interviewee #2, Personal Communication, June 2, 2017

102 Interviewee #8, Personal Communication, July 27, 2017

pursuing sustainable development and the important role that particular personalities or individual champions can play - particularly when in leadership positions. Several senior members within the City, some with roles within the planning department, had tenures in excess of 30 years and were credited with leading the organization through the process to incorporate sustainability objectives while maintaining a consistent vision. City Council was considered to be accommodating and interviewee #5 suggested “we’ve been lucky enough to have relatively progressive politicians for the life of the City.”¹⁰³ The City’s current (at the time of writing) Mayor has been continuously involved in municipal politics for 25 years and in his current position for the past 13 years (four consecutive terms) and considered¹⁰⁴ to be an effective and transformative leader on municipal Council for the City’s sustainable development goals and for his support of the densification of the Lower Lonsdale area (Smith 2018, Saltman 2018)

6.3.2. Perceived Limitations of the City’s Sustainability Framework

The City’s own sustainability framework, shown in Figure 1, was not seen to be able to capture the direction for Lower Lonsdale that was sought. It was articulated that the framework could not be useful for guiding development in Lower Lonsdale through procedural or operational means, as suggested in the quote “how do I act on that in a land use plan”¹⁰⁵ (original emphasis from interviewee). It was also criticized for not evoking a sense of purpose or a set of specific outcomes that could be acted on as alluded to in the response “I don’t think that’s ever captured anyone’s imagination in and of itself.”¹⁰⁶ A framework was seen as a limitation rather than a guide, particularly when embedded in an OCP document and particularly if it was prescriptive with respect to outcomes or practice.

It was suggested by interviewees that the existing framework could be used as a substantiation for what already exists, rather than being forward looking, or used as an evaluative measure to assess progress towards a particular goal using its categorical

103 Interviewee #5, Personal Communication, June 2, 2017

104 Interviewees #2, 4 – 10 all commented on this aspect of the Mayor’s leadership.

105 Interviewee #2, Personal Communication, June 2, 2017

106 Interviewee #5, Personal Communication, June 2, 2017

approach (although no such evaluative system based upon the framework exists). The existing framework is incorporated into the City's own Sustainable Development Guidelines (which apply City-wide and were described in Section 6.2.9) but which are not a comprehensive list of rigid requirements.

I specifically asked interviewees their thoughts about using an externally imposed framework such as the LEED-ND example. The reaction was similarly strong amongst all interviewees and it was expressed that a framework could not allow for flexibility and lacked the necessary context to adapt to localised situations. This is captured by the following two quotes, where it can be seen that there is distinct intention to allow for more flexibility and adaptability rather than adhering to an established decision-making or outcome-based framework:

Our thinking is that things are moving, they are kind of fluid, and especially if we're adopting some kind of a system, from another country, the States for LEED, that may or may not be relevant to us. We just didn't think [these external organizations developing frameworks] knew ... more than we knew about what we wanted to get.¹⁰⁷

But I don't know what the policy provenance was for [the development style in Lower Lonsdale], I think it was just that the staff that were here at the time or the politicians decided that that was the best approach. I don't know if there was a policy or a philosophical commitment to always do things ourselves, or letting the developers drive the boat. We've done both over the years, it's kind of a case by case.¹⁰⁸

The two interviews I conducted with non-City of North Vancouver staff also exposed the desire for flexibility and open-ended possibilities - from the private sector side. What were understood as rigid frameworks were described as removing the ability for creative and collaborative solutions as well as hindering the ability to respond to market demands.¹⁰⁹ An open ended process was thus seen to better accommodate a mutually-beneficial outcome for the City and the developer.

The theme of adapting to shifting demands carried over to discussing the procedural and political limitation of the City's existing seven-point sustainability framework. This

107 Interviewee #4, Personal Communication, June 2, 2017

108 Interviewee #5, Personal Communication, June 2, 2017

109 Interviewee #6, Personal Communication, March 1, 2017, Interviewee #9, Personal Communication, September 15, 2017

framework was identified as an impractical hindrance to day-to-day practice where interviewees suggested the rapid nature of complex-decision making could not realistically be evaluated against all aspects of a theorized sustainable outcome. An interviewee discussed how the existing sustainability framework was intended to become an evaluative benchmark with which 'every' decision made within the City would attempt to align. The interviewee questioned the feasibility of this being executed in an environment where many decisions are made on a day-to-day basis:

I don't know that it's particularly practical in a politicized environment where decisions are made for different reasons, every decision is going to impact all sorts of parameters of the [components of the framework] and how do you always quantify those things, it is impractical to put [the framework] into practice I think was the general consensus.¹¹⁰

Taking these comments in the context of the development history provided in Section 6.2, it can be seen that the development of the Lower Lonsdale neighbourhood followed a coinciding policy evolution and learning process at the City scale. Many of the policies that applied in Lower Lonsdale also apply at the scale of the City, and an evolution of sustainability policy specifically in Lower Lonsdale cannot be attributed to some aspect of isolated incrementalism in that particular neighbourhood. It does, however, strongly indicate resistance to a structured and/or comprehensive approach.

6.3.3. Incremental Adaptations: “Just Keep Your Eye on the Prize”¹¹¹

Discussions surrounding the use of frameworks uncovered themes of a preference for adaptability and flexibility that were evident throughout all of the interviews. Interview participants expressed worry that a sustainability framework would limit the ability for flexibility and adaptation through the redevelopment process in Lower Lonsdale. As outlined in the previous sections there are policies in place to support the inclusion of sustainability-focused elements and particularly amenities into developments in Lower Lonsdale. During interviews, I sought to inquire how these policies influenced the planning process in Lower Lonsdale, whether outcomes in Lower Lonsdale occurred in spite of these policies, and how those outcomes related to the City's Sustainability

110 Interviewee #1, Personal Communication, June 9, 2017

111 Interviewee #5, Personal Communication, June 2, 2017

Framework. There was a strong and consistent response that combinations of policies directed the outcomes of redevelopment, as indicated in the following response to whether development in Lower Lonsdale was policy driven, or occurred in spite of policy:

... definitely not in spite of. I would say that there definitely was not a 20 year road map with specific targets for every social and environmental thing that we wanted to accomplish in the neighbourhood, identifying that we have to get there, and requiring that we implement every single step following a very clear implementation guide. Again, [development of Lower Lonsdale] happened in a bit more of an iterative sense, but there were policy maneuvers and policy pieces that were adopted that had their own life span and ... got implemented. And then we went on and kind of iterated off those pieces.¹¹²

It can however be seen from this above quote that there is a leaning towards a more iterative form of planning, focusing on a broad vision of the future while allowing for adaptive policy maneuvers and decision-making based upon contextual issues. Within this, based on feedback from seven interview participants, there is an interest in risk-taking, experimentation, and learning from doing. Interviewees 4 and 5, both senior staff members, expressed the need to adapt policy to changing conditions rather than trying to adapt projects to out-dated policies, as Interviewee 5 alluded to having experienced in another location. Interviewee #4, referencing the rigidity of bylaws and frameworks as long-standing and irrefutable policies, characterized them as 'presumptuous', 'making compromises', and 'locked in' and expressed that as an inability to adapt and change to circumstances.

Pushing forward with innovative solutions, new policy, and engaging in a process of learning was more important to these interviewees than adhering to the way it has always been done for the sake of consistency or for the sake of existing policy. Interviewee #4 went on further to state "I think you need to think about what is the most critical thing to do and then get on and do it."¹¹³ Underlying this view is also the implication of a sense of urgency in moving ahead when opportunities presented themselves.

112 Interviewee #1, Personal Communication, June 9, 2017

113 Interviewee #4, Personal Communication, June 2, 2017

Interviewee #3, referring to the City's development process, as well as the construction of the Polygon Gallery at the Foot of Lonsdale (described in Section 6.2.10) characterized the City's approach to incremental changes in the frame of a big picture vision in the following way:

I think it is sort of, it was this balance, I think being open enough to grab opportunities when they came, without defining it too rigidly, which could be a mistake too, so being open to opportunities too, and that's how we get the museums there.¹¹⁴

Interviewee #1 characterized their view of the benefit of flexibility by using an example of the evolution towards the City's existing 'Density Bonus and Community Benefits Policy'. As detailed in Section 6.2.8, this policy was introduced to provide clarity and transparency and "more defined parameters"¹¹⁵ to the development approvals negotiation process. Prior to the policy, there existed:

a system wherein there was a very high degree of flexibility and latitude on the part of staff to be able to directly negotiate with developers to do a number of things, and that would result in reconfiguring parcels, land swaps, density transfers, density bonuses. I think to a certain extent that flexibility is what enabled some of the things that have gone on down here, certainly [...] a lot of the individual transactions on the west side of Lonsdale were as a result of having that latitude.¹¹⁶

While acknowledging that this wide latitude had the benefit of flexibility, Interviewee #1 characterized the new density bonus policy as providing certainty and helping to assure the City would receive amenities but in a more defined way:

In the new policy, the developers are purchasing the land with an upfront knowledge of what we're going to ask of them, maybe not [knowing the] exact amenity, but they at least know the exact value so they cannot over pay for the land and that ensures that we know what we're getting and we're going to be able to get that amount from them.¹¹⁷

Interviewee #1 characterized the evolution of this negotiation as still allowing for flexibility in determining what those amenities might be on a case by case basis, but

114 Interviewee #3, Personal Communication, June 12, 2017

115 Interviewee #1, Personal Communication, June 9, 2017

116 Ibid

117 Ibid

ensuring that the monetary value of the amenity was protected. The negotiation and provision of public amenities in Lower Lonsdale, and how to achieve these amenities, has driven the development in Lower Lonsdale described in previous sections.

Interviewee #2 characterized development in Lower Lonsdale as 'careful' and 'responsive' to shifting demands, but fitting within a 'big picture' approach:

They had a really big picture approach which I think was happening more incrementally rather than a big 'how do we do Lower Lonsdale', and because of this in many ways it was happening stealthily. It was consistent, I don't think anything was breaking rules, just went at it one by one.¹¹⁸

Interviewee #1 emphasizes the 'big picture' combined with an incremental approach that allows for a light-footedness in adapting to shifting political demands and changing context, while still achieving previously set goals:

I would say that in general there is a planning style that is part of the culture of the City of North Vancouver that is different. I mean we very much don't have a rational comprehensive model, even if you look at our OCP there is not a very strong implementation chapter. The idea is that we're going to set a high level vision and then we've got some kind of incrementalism happening that's hopefully bringing you towards your vision, and that you're able to adjust and you're able to change the vision depending on where Council is and where their priorities are.¹¹⁹

6.3.4. Collaboration with Expectations: “Redevelopment has to be dual”¹²⁰

The City of North Vancouver has established expectations for new development that perpetuates and builds on successes already achieved, which combined with the city's policy framework and enabling political leadership has created a strong leverage point within the development approvals process.¹²¹ It was articulated by interviewees that developers are 'expected' to address the City's sustainability guidelines, amongst other policies that are applicable, and this was emphasized by two interviewees who had

118 Interviewee #2, Personal Communication, June 2, 2017

119 Interviewee #1, Personal Communication, June 9, 2017

120 Anonymous, August 15, 2012, Interview.

121 Interviewee #6, Personal Communication, March 1, 2017, Interviewee #7, Personal Communication, August 23, 2017, Interviewee #9, Personal Communication, September 15, 2017

worked with the City as developers or consultants (for other developers). Interviewee #9, a developer, described that they ‘came prepared’ with their proposal to meet and respond to the City’s expectations knowing that they were entering into a negotiation. Interviewee #7, a former city planning staffer, described situations where if developers weren’t prepared with development proposal submissions, they were aware of the City’s high expectations and would seek to understand how those needed to be met in order to become more prepared.

Questions with interviewees regarding the outcomes of the built environment in Lower Lonsdale invariably led to a discussion surrounding the development approvals process, where City staff negotiate with developers on a site by site basis for new development projects. In the Lower Lonsdale case study area, for the past 20 years, this development has been exclusively multi-storey high-rise residential buildings which in some cases incorporate a commercial component. Interviewees recounted this process in Lower Lonsdale as ‘quid pro quo’, a process of commerce and negotiation on the built form and amenities that circles around the issues raised in Section 6.2: housing type, height, views, heritage elements, employment space, and the inclusion of on-site amenities in accordance with those identified in the LLPS. The expectations surrounding these are presented to developers during this communication process; Interviewee #2 described it as “you want to do more, you need to perform more.”, and Interviewee #9 phrased it as “You could build more and provide more amenities”. ‘More’ generally referred to increased height or density as is typical with densifying urban areas. It was suggested that the expectations of developers has continually increased, in Lower Lonsdale in particular, as policy has evolved, public expectations have increased, and the City learned the degree to which it could demand amenities and performance in terms of sustainable development.¹²²

This negotiation process for new development in Lower Lonsdale was seen to be collaborative. Interviewees from the development side offered praise for the City’s ‘collaborative’ approach¹²³. The title to this section – “redevelopment has to be dual” - is part of a quote from a senior staff member who articulated this in response to a question

122 Interviewee #1, Personal Communication, June 9, 2017

123 Interviewee #6, Personal Communication, March 1, 2017, Interviewee #9, Personal Communication, September 15, 2017

surrounding the City's general approach to sustainable development. Another interviewee similarly articulated that the City would approach development negotiations with a 'win – win' scenario as the end goal.¹²⁴ There was a general theme of striving towards a 'mutual benefit' through the development process, which was seen as necessary in order to achieve successes. This typically involved an exchange of some aspect of building form or arrangement within the building for amenities, such as the examples provided for the Wallace and McDowell Building. It was also referenced in relation to the City's mandatory district energy connection and requirements for building energy performance, as part of their greenhouse gas reduction strategies. Interviewee #9, a developer referring to the City's mandatory district energy connection, characterized it as a challenge and not beneficial to their project from an operational and profitability point of view, but indicated that they were able to offset the additional cost through increased density that was offered and further didn't bother opposing the requirement because they knew it was non-negotiable. The same interviewee offered that the contribution to sustainable development that they made was tokenistic and not substantial but was again willing to incorporate them for the sake of perception to buyers and suggested that it offered an increase to the marketability of their project.¹²⁵

Communication between the City and developers was indicated as an important part of the collaborative process in developing Lower Lonsdale. Interviewee #7 characterised the Lower Lonsdale Design Guidelines as a 'communication tool' which could be used to establish leverage and 'value add' components to projects that could be an improvement amenity within the Lower Lonsdale neighbourhood, and improve the saleability of projects. Referring to the use of the Lower Lonsdale Design Guidelines as a communication and leverage tool for new developments in Lower Lonsdale, it was stated:

It can be putting leverage in based on policies, identifying elements that really could enhance it, and come to a sensible agreement as to how we can achieve both our needs. Cause there are design elements out there that are of benefit to a developer, and they're seeing that, they really are.¹²⁶

124 Anonymous, Personal Communication, July 31 2017

125 Interviewee #9, Personal Communication, September 15, 2017

126 Interviewee #3, Personal Communication, June 12, 2017

Again, referring to the use of policies and the Design Guidelines as a leverage tool, this interviewee went on to say:

If you find [possible] elements that aren't part of or established in the Lower Lonsdale guidelines, take the elements that you can and say [to the developer] that they are value added to [their] proposal and that it could be of additional value to their project and also achieve direction from the City, then absolutely, developers are actually quite keen to see how that can fit in.¹²⁷

These quotes emphasize the approach to work with rather than against, within the recurring theme of establishing a 'win-win' situation as already described, in order for the City to be able to pursue the features of Lower Lonsdale that were desired and exercise leverage to be able to achieve improved outcomes. A discussion of those expected outcomes is contained in the following sections.

6.3.5. “We injected everything into this neighbourhood that we could.”¹²⁸

Lower Lonsdale was a focus for intensive infill development and began as the City's experimentation ground for sustainable development initiatives following the LLPS, as evidenced by the quoted heading of this section. The quote demonstrates that the economic viability of development and growth in Lower Lonsdale had not been a concern to the City of North Vancouver.¹²⁹ Consistent growth in this neighbourhood, combined with its accommodation of mixed land uses, has facilitated the inclusion of features that may not be able to be accommodated in less dense or singular land use areas. The quote also alludes to the City's three-pillar but vague conceptualization of sustainable development. Responding to these growth pressures in the context of sustainable development priorities was articulated by interviewees as ensuring a balancing of the 'three legs of the stool' or taking a 'triple bottom line' approach to development planning.

127 Ibid

128 Interviewee #4, Personal Communication, June 2, 2017

129 Interviewee #8, Personal Communication, July 27, 2017

Accordingly, interviewees stressed to me that that the City’s sustainability priorities were not strictly environmental, and that there was a strong push to ‘balance’ the neighbourhood. Interviewee #1 stated “we’re always pushing for that jobs balance to make sure that there is actually employment, we don’t want this to be fully a condo based or a sleeper community for other parts of the region”¹³⁰ This quote was referencing examples of the City’s push for social housing and a jobs balance of 1:1 (jobs to residents) in Lower Lonsdale, along with the pursuit and development of a cultural district oriented as a ‘people place’. Similarly, an interviewee recounted to me “that triple bottom line approach of the social aspects, the environmental aspects, has been something that the city has emphasized over the last 20 years.”¹³¹ This can be triangulated through policy developments, beginning with the City’s early involvement in sustainability related initiatives in the mid to late 1990s (ICLEI Partners for Climate Protection and LA21 Committees)¹³², through to the most current iteration of the OCP and its included sustainability initiatives, as already discussed. The City is no longer actively involved with ICLEI, but early involvement was instrumental in informing and establishing the City’s early sustainability priorities.¹³³

Interviewees also related the triple-bottom-line definition of sustainability back to the City’s institutional embedding of sustainability. It was described to me that the role of the planning department had been to advocate for a balancing of the three legs of the stool:

So if anything I think the planning function of the city of North Vancouver has been ... to remind of the other legs of the stool and saying that we’re not going to be a sustainable community if we can’t grow in the ways that we need to grow.¹³⁴

As can be taken from the above quote, the triple-bottom-line definition results in a very broad interpretation of what is sustainable. Both the City’s 2002 and 2014 OCPs, as discussed earlier, incorporated the integrating theme of sustainability. Recounting the broad approach of the OCP, Interviewee #2 stated:

130 Interviewee #1, Personal Communication, June 9, 2017

131 Interviewee #8, Personal Communication, July 27, 2017

132 Interviewee #4, Personal Communication, June 2, 2017

133 Interviewee #4, Personal Communication, June 2, 2017, Anonymous, August 15, 2012, Interview.

134 Interviewee #5, Personal Communication, June 2, 2017

It's sort of the nature of OCPs, in the end I felt that the plan was such that you could implement anything you wanted from that from a sustainable communities perspective, there was language in there that would support almost anything you wanted to do.¹³⁵

The discussions surrounding triple-bottom-line decision making also related to the incorporation of a framework as a guiding policy, and how sustainability could be interpreted by those participating in the planning and development process. Interviewee #4, a senior staff member, was involved with the writing of the 2002 OCP when sustainability concepts were first incorporated into policy as an integrating theme. It was recounted that it was more important to focus on the end product of planning efforts, rather than the terminology surrounding sustainable development that might be most popular at the time, and further to ensure that the framing of sustainability priorities would resonate with the public, staff, and politicians. Referring to the simplicity of the three-pillar concept of sustainability, originally in the City's 2002 OCP, Interviewee #4 recounted that "People get the three, and the instability of three, to me is perfect, and that model works."¹³⁶ To further justify this conceptualization of sustainability within the City, the interviewee stated "we were taking a broad approach to sustainability", which was a means to be able to integrate it into the minds of staff and encourage 'every' opportunity to incorporate it into the work of staff. Interviewee #4 didn't see a need to 'reinvent' the definition, when the triple-bottom-line definition was viewed as adequate for capturing the City's intent of sustainability. A recurring and implied theme in all interviews was that the triple bottom line approach also allowed for flexibility in determining outcomes.

A quote succinctly summarizes the key points I have made in the preceding sections, related to triple-bottom-line accounting, flexibility in determining the end product, and adopting an incremental process. Interviewee #5, while referencing how still undeveloped lands in Lower Lonsdale would be approached, stated:

I think we would have to do something similar, you still set your sights on minimum requirements and in terms of social, economic and environmental benefits and amenities, and you specify those need to be included, but you don't try to figure out the entire form and function of the entire site. It's more

135 Interviewee #2, Personal Communication, June 2, 2017

136 Interviewee #4, Personal Communication, June 2, 2017

a process of negotiation and sculpting together with the public and a developer, rather than ahead of involving the developer.¹³⁷

6.3.6. Articulating Goals to “Maximize Sustainability and Performance”¹³⁸

Interview participants did not clearly articulate a set of measurable goals or specific targets for Lower Lonsdale that were coupled to policies surrounding sustainable development. The heading to this section is used to illustrate the vague nature of sustainable development goals as they were articulated for Lower Lonsdale, emphasized by the indeterminate phrase ‘maximize sustainability’. Interview participants did emphasize that there was a strong vision for Lower Lonsdale, however that the pathway to reach that vision may vary, as has been discussed, and what the end result would look like was at times uncertain. Interviewee #5, reflecting on the development history of Lower Lonsdale, offered that “people understood what they wanted to create was an exceptional model community that brought everything together.”¹³⁹ Interviewee #3, describing the negotiation process of development approvals, suggested that “with the absence of real targets, unless it was a LEED building, it was push as much as you could”¹⁴⁰ which was referencing the negotiation process that occurs between City staff and developers during the review and approval process for development applications; a process that was described by interviewees in general terms as politically charged while also dependent on both policy and particular individuals.

It was unequivocal from participants and document review that the vision – the policy prescribed goals and outcomes - for the Lower Lonsdale neighbourhood were, broadly, to create a ‘people place’, a mixed-use cultural district with a focus on amenities, inclusion of historic elements, accommodation of residential density, and to include a variety of building and housing types (as evidenced by the strong focus on form-based planning, as discussed). Specific and/or measurable targets were not, however, provided. While it was clear from interviewees that there was an intention to encourage

137 Interviewee #5, Personal Communication, June 2, 2017

138 Interviewee #3, Personal Communication, June 12, 2017

139 Interviewee #5, Personal Communication, June 2, 2017

140 Interviewee #3, Personal Communication, June 12, 2017

growth in Lower Lonsdale, with a specific focus on it evolving as a regional destination amenity in its own right, there was a lack of clear indication of how that might align with the City's sustainability priorities.

My research did not uncover defined outcomes outside of the broad objectives contained within the OCP (which are applied city-wide), the broad principles as discussed and contained within the original Lower Lonsdale Planning Study documents, and the amenities 'wish list' discussed in Section 6.2.5. A quote from a senior staff member emphasizes this finding of an unspecific vision, along with a characterization of incremental changes towards such visions:

I'm not aware of some central organizing vision, maybe you've heard completely differently, but I think it was just that people learned from experience of what worked and what didn't work, and intuitively or through learning and passion they knew where we needed to go and ways to go there.¹⁴¹

This idea of an uncertain outcome was bolstered by another describing the broad applicability of the City's OCP:

in the end I felt that the OCP was such that you could implement anything you wanted from that from a sustainable communities perspective, there was language in there that would support almost anything you wanted to do, you could reference an OCP goal but in and of itself it was not going to get you there.¹⁴²

This ambiguity of outcomes was present at the individual site scale as well. I spoke with a developer, who offered that their contribution to the City's sustainable development was to pay "lip service"¹⁴³ to it, suggesting that there were no established criteria for what 'good enough' might be. Similarly, when I asked one interviewee, who had worked for the City approximately 15 years ago, what the expectations for sustainability in a project were, they recalled: "Well that's a good question. I don't think, I don't know that there is a definitive answer for that. It was on a project by project basis. The yardstick was extensive."¹⁴⁴ These particular answers cannot be generalized across all interview

141 Interviewee #5, Personal Communication, June 2, 2017

142 Interviewee #2, Personal Communication, June 2, 2017

143 Interviewee #9, Personal Communication, September 15, 2017

144 Interviewee #3, Personal Communication, June 12, 2017

participants and across all development in Lower Lonsdale, however I use this to illustrate that there was a level of ambiguity and uncertainty in terms of expected and/or defined outcomes that was present across the interviews, as I have described in this section.

6.3.7. Evaluating Outcomes: “I guess people measure success differently.”¹⁴⁵

The most prominent and consistent finding from interviews was that there is no structured monitoring of results or progress in Lower Lonsdale. I specifically asked interview participants how success in Lower Lonsdale was measured to understand what role sustainability assessment might play in terms of evaluating or monitoring outcomes. This response, that no structured monitoring was undertaken, was provided by seven current or former employees of the City, all of whom were directly involved in development within Lower Lonsdale. No interviewees indicated the existence of a structured monitoring system that would reflect the integrative nature of sustainable development, whether using the three pillar approach that was articulated by interviewees for itemizing sustainability priorities, or the 6 categories of principles contained in the Sustainability Framework of the Official Community Plan.

A particular example that illustrates the lack of clear or specific measurement of outcomes in Lower Lonsdale, alongside the ambiguity of what defines success was my discussion with Interviewee #5. When asked how success in Lower Lonsdale was measured, they raised the issue that sustainability as an end goal was problematic for its conceptual obscurity when defining outcomes. The interviewee used the concept of ‘smart growth’ to place the City’s sustainability goals within a conceptual frame stating that “if we can get there for smart growth I’m happiest.”¹⁴⁶ They expressed that they were using the ‘smart growth’ phrase in their answer because they had recently read that it resonates with the general public. While smart growth, as discussed in the literature review, is a widely accepted movement that aligns with aspects of sustainable development, my research did not uncover it as a policy objective or guiding framework

145 Ibid

146 Interviewee #5, Personal Communication, June 2, 2017

for the City. While the interviewee quoted above was clearly drawing from experience and not making up answers on the spot, and we were trying to discuss the challenges of sustainable development and of measuring sustainable development, the discussion highlighted both the unspecific nature of the City's sustainable development objectives for Lower Lonsdale (and broadly), as well as the lack of a structured measurement or assessment framework. It also demonstrated that the City is aware of the challenges of instituting a measurement and/or assessment system within a politicized development process.

With a total area of slightly less than 12 km² and a population of approximately 52,000, indicators have been used on a City-wide scale rather than neighbourhood by neighbourhood as might be done in larger municipalities.¹⁴⁷ At this scale, the City utilizes indicators to monitor demographic metrics, transportation mode-share, and greenhouse-gas emissions, both per capita and corporate.¹⁴⁸ Indicator monitoring has shown that through a combination of densification and more energy efficient buildings, alongside improvements in corporate operations, the City has been able to demonstrate a decline in overall per capita energy consumption from 2006 through to 2016.¹⁴⁹ Monitoring these indicators is also used to publish a Community Profile following each census on a neighbourhood by neighbourhood basis.¹⁵⁰ A profile following the 2016 census has not yet been completed at the time of this writing.

A structured indicator system was used and reported on for a brief period of time following the 2002 OCP, as part of a project that was labelled TIMS: Targets, Indicators and Monitoring System. TIMS was intended to be an annual reporting system on progress towards OCP objectives, tied in with the City's Annual Municipal Report.¹⁵¹ A singular report was put forward on this TIMS initiative in 2010, which covered a broad set of indicators that were intended to cover all chapters and objectives of the 2002 OCP

147 Interviewee #1, Personal Communication, June 9, 2017, Interviewee #8, Personal Communication, July 27, 2017

148 Interviewee #5, Personal Communication, June 2, 2017, Interviewee #8, Personal Communication, July 27, 2017, Anonymous, August 15, 2012, Interview.

149 Anonymous, August 15, 2012, Interview., also shown in graphic format on the City's website at , <http://www.cnv.org/your-government/living-city/climate-action> (accessed 5th August, 2018)

150 Interviewee #1, Personal Communication, June 9, 2017

151 City of North Vancouver Staff Report to Council: "The Official Community Plan – Targets, Indicators and Monitoring Strategy." July 4, 2010

(which was current at the time of the initiative) for the period of 2002 – 2009. According to the City’s website, The TIMS initiative was to be reinstated in 2015, following adoption of the now current 2014 OCP.¹⁵² It was suggested in interviews that a revised TIMS project could be undertaken in 2017, but as of the writing of this report in 2018, no further information on this initiative had been made available through the City’s website.

Measuring and/or monitoring in Lower Lonsdale has not been a priority partly because the neighbourhood has been, based on anecdotal observations from interview participants, a ‘success’. Significant development interest in the area, and corresponding political priorities directing staff to respond to these development priorities, alongside limited staff resourcing for other tasks, have all also contributed to this allocation of time towards responding to growth rather than assessing the nature, pace, or progress of that growth. Additionally, there has not been a push for any changes that would require either policy update or monitoring:

Also, a sign of success is when there is no public consensus that policy needs to be updated. No one is saying fix Lower Lonsdale. Cause you’re doing a big OCP, the biggest public engagement ever, and no one is saying fix lower Lonsdale. [...]¹⁵³

Similarly, the following characterization of the City’s evaluation, or perhaps more appropriately, feedback mechanism for development within Lower Lonsdale:

Your question though, I mean the Lower Lonsdale Planning Study was the integrating thing, the things that we judge its success by I guess in part is what kind of satisfaction we’re seeing and hearing from people.¹⁵⁴

The quote also demonstrates the lack of a structured measurement system and what appears to be an anecdotal evaluation process. To follow up on this answer, Interviewee #4 explained the importance of recognition for achievements and awards as a means to acknowledge or identify successes from Lower Lonsdale that could also be celebrated politically. Having political interest in evaluating progress towards sustainable development objectives was a limiting factor for other measurement methods, such as

152 As indicated on the City’s TIMS webpage, at <http://www.cnv.org/your-government/official-community-plan/targets-indicators-and-monitoring-strategy>

153 Interviewee #2, Personal Communication, June 2, 2017

154 Interviewee #4, Personal Communication, June 2, 2017

the TIMS process described previously. As stated by another, "... the politicians don't even necessarily want it, and that's your boss, you need to find the right level to do it."¹⁵⁵ It's clear from these quotes that there is a political resistance to having a structured assessment system in place generally, and for development in Lower Lonsdale specifically. A more blunt assessment of how the City would measure success was provided by another, stating that local politicians were happy to assess the success of projects themselves, and didn't necessarily need the staff to do it for them.¹⁵⁶

Interview participants were intrigued by the use of the LEED NSA as an evaluative measure, and were attracted to the idea of being able to qualify success in terms of a rating system that is widely recognized, similar to Interviewee #4's suggestion that awards and recognition were a politically acceptable form of measurement. Given the political challenge present in CNV surrounding measuring success, and presumably the risk that monitoring and evaluation could indicate that success was not being achieved, NSA like-tools were seen by two interviewees as having potential for a politically palatable measurement solution. The question arose as to what framework was appropriate to measure success. Another suggested that an inappropriate measurement system could be 'co-opted' as a 'check box' for sustainability that may have no relevance to localised conditions.¹⁵⁷ Using the example of Smart Growth as a measurement framework, it was suggested that if an appropriate measurement system could be found measuring achievement towards an agreed upon set of outcomes could be desirable. It was implied that it was not otherwise a useful allocation of resources at the current time. In similar sentiment, Interviewee #4, referring back to the experience with the in-house developed TIMS process and its perpetually stalled fate, stated:

People don't want to spend the time to do it. Everyone thinks we should do it, but nobody wants to spend the time to do it, and when you do it, it's hard to get data that is meaningful enough to actually mean anything to you that is going to change your course.¹⁵⁸

155 Ibid

156 Interviewee #1, Personal Communication, June 9, 2017

157 Interviewee #5, Personal Communication, June 2, 2017

158 Interviewee #4, Personal Communication, June 2, 2017

It was clear across all interviews with current or former City staff that the challenge lay with finding the balance of a measurement system that captured metrics and or evaluations that measure actual sustainability, and to also find a system that accomplishes this and is politically acceptable and/or administratively feasible. Those that I spoke with on this issue knew that my question was asking, indirectly, what indicator or measuring system was in place. Responses were imbued with guilt, whether through facial expressions, long pauses in responses, or outright admission – it was clear that they understood or believed that this should be a component of their sustainable development program but were unable to put it in practice because of governance limitations of political interest and resourcing.

Chapter 7. Discussion: Risks and Opportunities for Sustainable Development

There are strong findings pointing toward the evolution of a sophisticated and complex policy framework alongside a supportive institutional decision-making context for sustainable development outcomes. Complex multicausality does however limit the analysis of what may be considered successful sustainable development outcomes in Lower Lonsdale which may or may not have resulted from specific plans, policies, or priorities (Talen 1997). Reviewing the development history in the neighbourhood and the themes prevalent from interviews, it has become evident that many of the 'successes' of the neighbourhood, discussed in interviewees and revealed in the LEED-ND analysis, can in part be attributed to a number of precipitating and interacting factors. Some of these are external to this research and some reflect the findings already presented:

- The area south of 3rd Street in North Vancouver has long been designated for growth and densification in municipal and regional plans. This, combined with the municipality's small size, its lack of available greenfield, its pre-existing fine-grained street network, the pre-existing location of a significant transportation hub, and that there are no other areas identified for more intense densification in the City, has led to focused growth in the Lower Lonsdale area. This is in contrast with more sprawling or multi-nodal municipalities or greenfield areas within the Metro Vancouver region or otherwise, that may or may not include developed public transit infrastructure;
- A series of events that could not necessarily be replicated led to the City attaining ownership and control over several significantly sized land holdings within a small area of the Lower Lonsdale area;
- Enabling leadership at the political and senior management level within the City, combined with long-term 20+ year tenures from both, fostered and supported an environment of progressive policy development;
- Favourable growth conditions, particularly rapidly rising property values and externally imposed growth pressures, have contributed to the ability to set and constantly increase expectations to create policy leverage while maintaining political support;
- Rapid growth in this neighbourhood has facilitated the similarly rapid uptake of new policies and modification of those policies in a small area in a short amount of time;
- These events have all coincided surrounding the preparation and execution of the Lower Lonsdale Planning Study.

It cannot however be simply stated that the success, in terms of the sustainable development outcomes of Lower Lonsdale that were identified in Chapter 6, were entirely because of the above contributing factors. The Council of the early 1990s could have simply sold the vacant lands in Lower Lonsdale with no design controls; the cultural amenities that provide the neighbourhood's social and entrepreneurial base may never have materialized without the pursuit of a unifying vision identified through the Lower Lonsdale Planning Study; the culture of 'sustainability' that was encouraged at City Hall through leadership and supportive governance discussed in Chapter 6 was a significant contributing factor (Joss 2015). The importance of the sustainable development guidelines that were later used to inform developments throughout Lower Lonsdale and which contributed to a Sustainability Checklist (as a method of sustainability assessment in itself) cannot be overlooked (Devuyt 2000, 72), nor can the institutionalized component of sustainability practice with the organization that led to a consistent push for improvement through the development application process. This, combined with the policy and priority focus on the provision of amenities, cultural and social development, and livability in Lower Lonsdale, contribute to the theory that the City of North Vancouver actively pursues progressive and integrative sustainable development objectives, and 'takes it seriously' (Portney 2013).

The achievement of these objectives has not been fully realized at the neighbourhood scale (in terms of an integrative assessment framework), and the opportunities associated with this realization, alongside the risk that a lack of awareness of progress presents, are the outcomes upon which this discussion focuses. Despite this, there is an emerging (Robinson 2004) policy framework towards various components of sustainable development that are consistent throughout the development history of Lower Lonsdale, and have resulted in successful outcomes. The emergent process stands in contrast to what may be considered 'best practice' in literature. There isn't an established or agreed upon 'right way' to pursue sustainable development, whether it be through choice of indicator design or assessment system or policy or governance framework. This research however seeks to observe what can be learned from this particular case, and how theory can be both applied and questioned against the findings, to contribute towards improved understandings of the pursuit of sustainable development within local government at the neighbourhood scale.

7.1. Institutionalized Sustainability

This research supports the work of others in their respective cases (Town and Evans 2010, Kristensen 2012) in finding that the City of North Vancouver had ‘embedded’ sustainability into their practices as an institutional governance mechanism to support sustainable development. It has built upon this past research by evolving a more nuanced look at how this is understood by staff working at the City and how it is carried out through development as a general guiding principle. In doing so, this research has also highlighted the political nature of governing for sustainable development in the City of North Vancouver and confirmed that this aspect cannot be overlooked when developing a policy framework for sustainable development that necessitates political buy-in and accountability (Joss 2015).

The findings revealed discrepancies between theories which suggest what should be a comprehensive municipal sustainability governance arrangement and what exists within the City of North Vancouver. This discrepancy exists particularly with respect to the City’s conceptualizations of sustainable development and lack of overall structured assessment program. In light of this and of the relative sustainability ‘success’ of the Lower Lonsdale neighbourhood (in terms of LEED-ND type criteria identified in Chapter 6 and Appendix B), further questions and insights arise. Throughout the following section, I argue that vaguely defined sustainable development objectives within the City’s agenda for Lower Lonsdale, combined with an absence of an assessment framework, could potentially compromise the City’s otherwise veritable sustainability pursuits. I also suggest that research might consider alternative conceptualizations of sustainable development that may better resonate with the public, politicians, and planners while achieving similar outputs.

Conceptualization of Sustainable Development

Development priorities in Lower Lonsdale have clearly sought outcomes that align with sustainable development. Considering interviewees’ assertions of sustainable development oriented negotiations for individual projects, the Lower Lonsdale Design Guidelines and Sustainability Principles included as early as the 1997 Lower Lonsdale Planning Study, the evolution of these early principles into current-day policies, the features outlined in the LEED-ND inventory in Section 6.1, and lastly the fundamental orientation of the City’s OCP within a Sustainability Framework all point toward this

conclusion. Additionally, at a scale specific to Lower Lonsdale, the Design Guidelines for the Lower Lonsdale Planning Study, and its accompanying sustainability principles (detailed in Section 6.2.9, which eventually evolved into the City's Sustainability Checklist for new developments) themselves carry commonly held aspects of sustainability: environmental protection, reduced energy usage, inclusivity, a range of housing types, integration of land use and transportation, localised economic development, and improved social benefits (often referred to by interviewees as livability and placemaking). The prescribed outcomes for Lower Lonsdale, in the OCP and more detailed in the LLPS guidelines, describes a densely populated, mixed use and culturally rich 'place'. These examples all provide evidence of principles established in policy and process to assist guiding the City towards sustainable outcomes.

Establishing Outcomes for Sustainable Development

The literature review suggested that to achieve sustainable outcomes and to fully realize their interconnectivity, an agreement upon the outcomes of sustainable development goals needs to be established (Pope et al 2004, 2017; Bond et al 2012) and coupled with an explicit policy agenda (Conroy 2006). Ideally this would align perspectives amongst departments within a local government and with the public and politicians to make the sustainable development agenda clear (Innes and Booher 2000, Devuyst 2000). In other words, to guide decision-making towards sustainable outcomes, a definition of sustainability must be established that is accepted within the community and the governing body with an agreed upon set of outcomes and methods to achieve them. This research has suggested that there is an alignment of perspectives within City Hall towards sustainable development as a triple-bottom-line integrative concept. The City certainly has various definitions of sustainable development, as just described and also contained more broadly in the Sustainability Framework within the Official Community Plan, that offers qualitative prescriptions for sustainability outcomes. These outcomes however are not explicit, either within these policy documents or in the shared understanding of sustainable development of staff members at City Hall.

Interviewees did not provide a set of clearly identified goals for sustainable development within Lower Lonsdale. Despite the prevalence of sustainability as a recurring theme in various planning reports and policy documents directed at this area it remains unclear from the data and interviews collected how these sustainability objectives might be

clearly connected to the practice of implementation and development approvals. Below I discuss how this disconnect can be seen as a reflection of a poorly conceptualized and/or contextualized definition of sustainable development outcomes for Lower Lonsdale. This is despite the City's institutionalized understanding and marked pursuit of sustainability objectives.

Reliance on Pillars and Institutional Understanding

During interviews, it was suggested that the triple-bottom-line approach was preferred for simplicity and relatability by those who may not be intimately familiar with sustainable development. The continuous use of the three-pillar definition of sustainable development in policy documents, planning reports, and as it was used by interviewees is indicative of this vaguely conceptualized definition of sustainable development and of a disconnect in terms of how it could lead to outcomes in Lower Lonsdale. However, interviewee responses provided in Section 6.3, such as “with the absence of real targets, unless it was a LEED building, it was push as much as you could”¹⁵⁹ and repeatedly vague descriptions of the vision and/or outcome for Lower Lonsdale conflate this murky objective with actual outcomes. This compartmentalized and open ended approach to sustainable development, despite the LLPS guiding principles, suggests that the interconnectivity of these triple bottom line pursuits, or how they contribute to an integrated sustainable development goal, is not identified in clearly conceptualized targets or outcomes (Smith and Wiek 2012, Pope et al 2004). This potentially sacrifices an acknowledgement of the complexity of sustainable development outcomes (Bond et al 2012) for quick wins and the presence of immediate political support.

The literature review made the case for the use of principles in order to contextualize the desired outcomes for sustainable development (Cohen 2017, Gibson 2006) specifically to avoid the risk of reductionist decision-making that may stem from the use of the three pillar definition. The ‘sustainability principles’ contained within the Lower Lonsdale Guidelines are examples of such principles that are performance oriented and measurable (Wong 2003), as are the City's pursuit of employment space and GHG reduction, for example. With such a broad focus on triple-bottom-line sustainability, it is easy to fit ideas within a frame of sustainability and quickly turn reasoning into

159 Interviewee #3, Personal Communication, June 12, 2017

rationalization for the support of any particular proposal as a sustainable feature, trading off the unknown for unknown consequences (Flyvbjerg 2001, Bond, Morrison-Saunders and Pope 2012, Gibson 2006, 2010) without an actualization of the potential that exists in Lower Lonsdale.

As described in Section 6.3.1, while discussing the institutional 'embedding' of sustainability, Interviewee #8 stated that "maybe that's our framework." In the absence of any other operationalization of a structured assessment or decision-making regime, the quote demonstrates a reliance on a fragile system of implementing sustainable development within also vaguely defined practice of development approvals which is often considered simply 'land use' planning. Interviewees further extolled the strong leadership in the organization, and this was used as a scapegoat for more structured policy frameworks, again pointing to this weakness. Leadership can however be vanquished with a single election or slowly through attrition; if the latter occurs without underlying assessment policy in place the resulting scenario could be less sustainable than the original state. The combination of a reliance on leadership and institutional knowledge, combined with flexibility, and lack of accountable targets sets the stage for an unsustainability that the frameworks discussed in Chapter 4 are intended to avoid.

At the time of writing, the departure of four senior staffers within the organization had recently occurred. At the same time, long-term City of North Vancouver mayor Darrell Mussatto announced he would not seek re-election, amounting to five influential and long-serving staff with consistent and strong influence into the outcomes that are seen in these findings. Leadership, capacity, and momentum can quickly shift and alter a governance situation. Nevertheless, the strong institutional presence of sustainability priorities within the organization described in these findings is not to be understated as a key contributor to the organization's sustainable development success (Cohen 2017).

7.2. Risk: Flexibility in lieu of a Framework

Existing research has made a point of assigning labels and frameworks in an attempt to find ways to replicate, guide, or propose sustainable development outcomes. The City of North Vancouver has, based upon this research, refuted this ideological thinking and chosen to approach development in Lower Lonsdale without a structured assessment system. The degree of experimentation, adjustment, adaptation and a reluctance to

adopt a structured framework, which interviewees stated were all desired practices, indicates notions of a plea for flexibility. This stands at odds with the research identified in the literature review which suggested that a considerably more structured and measured approach should be taken for sustainable development process and outcomes.

Described throughout Chapter 6 is this decidedly purposeful approach towards maintaining flexibility and adaptation through the planning practice for Lower Lonsdale. The timeline of events in Lower Lonsdale shows a clear evolution of policy sophistication coupled with this flexibility, beginning with a set of principles in the LLPS, evolving into the inclusion of a ‘three legged stool’ into the City’s 2002 Official Community Plan, and eventually becoming a series of bylaws, policies and practices aimed at various aspects of sustainable development within the broader City and some specific to Lower Lonsdale. This evolution has stopped short of implementing a rigorous assessment framework, as interviewees described as having been unsuccessful in terms of both the TIMS project and the intended purpose of the Sustainability Framework within the OCP. There is a distinct awareness from interviewees that measuring and monitoring is not an active pursuit at this time, and not prioritized within the sustainability governance within the City of North Vancouver. It is clear from discussions with interviewees and from policy reports that staff are very responsive to Council direction, but also use Council's supportive and progressive nature to get as much done as possible where the opportunity presents itself.

Within this policy and practice evolution and from interviewee feedback, the findings suggest that flexibility is prioritized over specific objective measures. Given the political interest in achieving award recognition (identified in Section 6.3.7) coupled with a political disinterest in incorporating measurements, and multiple statements referring to an ‘incremental’ approach, a rather free-wheeling process is reflected in the overall governance structure of sustainable development for Lower Lonsdale - regardless of strict policies aimed at GHG emission reductions and other progressive policy tools at hand. The quote below, already used to describe the City’s flexible and iterative approach in a previous section, can be used to again suggest how this flexible process plays out in operations at the City:

I would say that in general there is a planning style that is part of the culture of this organization that is different, I mean we very much don't have a rational comprehensive model, even if you look at our OCP there's not very strong implementation chapter to the official community plan, the idea is that we're going to set a high level vision and then we've got some kind of incrementalism happening that's hopefully bringing you towards your vision and that you're able to adjust and you're able to change the vision depending on where council is at and where their priorities are ...¹⁶⁰

The interviewee, a relatively senior staffer familiar with political direction and staff operations, lands on a number of points: no specific implementation plan, a high-level [read: vague] vision, continuous adjustment dependent on political support, and lastly, the use of the word 'hopefully' reinforcing the 'push as much as you can' concept. The interviewee specifically dispenses with the concept of a rational – in other words measured and calculated – approach to decision-making in favour of incremental and continually adjusted process. Bond et al (2012) suggest that flexibility and precaution (which could be interpreted as political intelligence) are acceptable within a sustainability assessment decision-framework, however this allowance is made on the basis of a connection to clear and implementable goals that have been established; something which is missing from the CNV case. Gibson (2006, 179) makes a case for this aforementioned policy evolution leading of sustainable development practice towards the City's current state, together with the danger of the flexibility concept, by suggesting that

... few jurisdictions are likely to be bold enough to introduce a best practice sustainability assessment regime in a single comprehensive step. Most will rely on incremental steps, perhaps through progressive adjustment of existing planning and/or assessment processes. This can work well. However, it is not entirely risk free.

The risk in this case is that these steps do not lead in a direction of improvement; rather it could end up being a process of continual adjustment with no net gain. Aspects of an incremental approach can be used to support notions of flexibility and adaptability and lead to positive outcomes, but when they are combined with other structured systems (Bendor 2015) such as decision-making rules and clearly envisioned outcomes (Gibson 2006). What were strong sustainability principles in the LLPS have potentially devolved into a piecemeal attack at the 'best' that can be achieved in the given moment; a scrambling to achieve immediate results in the face of immediate political support.

160 Interviewee #1, Personal Communication, June 9, 2017

Interviewees even refuted their own policy document, the OCP framework, which is intended to be the public buy-in for an overarching policy framework (Innes and Booher 2000) and which would establish the overall process, interconnectivity of objectives, and end-goal. If the end point is not clearly identified, this continual adjustment may lead in an undesired direction and whittle away at what are, or what were, strong sustainable development perspectives through a series of negative trade-offs and compromises. Another quote by Gibson (2010, p408) illustrates this point:

It is important to see the core sustainability assessment design features as a package of interdependent components, each of which is crucial. While transition to integrated sustainability assessment may have to be gradual, ill-considered piecemeal moves - especially ones that claim to introduce a sustainability agenda but fail to ensure effectively integrated attention to traditionally neglected concerns - will darken the path to a better future.

The use of indicators and assessment can be seen as a policy justification in a given situation, whereas the absence of such a system in the City of North Vancouver could be seen as an outlet for an alternative rationalization strategy for decision-making or decisions made. As Wong (2003, 257) states, “moving from abstract concepts to more specific and concrete measures to yield policy intelligence” reinforces the importance of a link between set objectives and everyday decision-making. Without a set of established outcomes (for sustainable development) in the City of North Vancouver, the policies in place reflect a fractured system as opposed to what Wong (2003) refers to as ‘policy intelligence’. One could question whether this lack of assessment, particularly following the breakdown of the TIMS system, is a fear of political fallout, a yet to evolve component of the City’s sustainability agenda, or a continuing failure to incorporate an effective indicator system into decision-making and governance structures. The limits of ‘policy intelligence’ without a framework of assessment may not be immediately apparent but in time, coupled with shifting political priorities or institutional change, may rear to form a newly formed and undesirable [un]sustainable governance scenario. Interviewees might suggest that the flexible structure is politically intelligent, however the above discussed risk may suggest otherwise.

Disconnected Outcomes

The exploratory nature of this research does not allow investigation of the individual limitations of CNV’s attempts at indicator use through the TIMS project identified in the findings. The failure of the TIMS project to take hold isn’t unprecedented (Wong 2003)

however this finding is unexpected in this scenario of otherwise relative success that is reflected in the City's multiple awards and recognition (See Chapter 3) and findings at hand (LEED-ND assessment). CNV's failure to successfully incorporate an indicator program into its sustainable development program evinces the challenges associated with institutionalizing sustainable development into both practice (policy) and governance and the challenges in responsibly incorporating flexibility as an adaptive and precautionary technique within such an assessment framework. While successful projects in Lower Lonsdale have reflected individual outcomes that move towards more sustainable solutions (the two vignette examples in Chapter 6 for example), the communicative link that indicators and a broader sustainability assessment system might offer have been missed.

What is clear, given their indicator program failure combined with the lack of any structured assessment regime, contrasted against the relative success of Lower Lonsdale as this research demonstrates, is that there is a disconnect between the intended outcomes and the meaning of the intended outcomes as they might contribute towards a more sustainable City. This becomes particularly significant when accounting for the fact that CNV had not apparently realized their success in achieving sustainable development outcomes in Lower Lonsdale. Holman (2009, 372) reflects that sustainability indicators "act as a door to opening communication between actors and creating new linkages and networks between them." This door was opened, but slammed shut despite success in implementing policies. In this case of CNV, the link of understanding between intent, outcome, policy purpose, and framings of 'sustainable development' and their indicators are not apparent and particularly so, when considering CNV's desire to acknowledge their success and seek recognition within their own sphere of governing and amongst the broader network of actors. The question to ask now is what common understanding is required in order to resolve this tension.

Contrary to Holman's (2009) discussion that indicators can help facilitate improvements in embedding sustainability into institutions and correspondingly support improved governance arrangements surrounding sustainable development goals, CNV has followed the opposite path. In this scenario an institutional embeddedness has preceded a successful indicator program, and integrated sustainable development outcomes – that transcend more than simply environmental improvements - exist in the absence of explicit goals.

One interviewee stated “nobody wants to do it” when referencing assessment, but, perhaps, there is a willingness to engage in this pursuit that begs for a better understanding of how the successful outcomes may be professed and the unsuccessful endeavors – attempts at structured assessment and monitoring - learned from. In addition, in consideration of the above brief quote, the opportunities associated with indicator use may not be appropriately understood across the political – institutional (staff) divide. Another quote provided in Section 6.3.7 - “... the politicians don’t even necessarily want it, and that’s your boss, you need to find the right level to do it.”¹⁶¹ (emphasis added) – seems to suggest that indicators should be undertaken discretely at the staff level, whereas other research suggests that indicator use should be transparent and across governance networks (Innes and Booher 2000) which again suggests a disconnect in operation and understanding of the role and potential of indicators.

In section 6.3.7 I discussed a rather unspecific set of targets that were articulated for Lower Lonsdale, which combined with an attempt at an indicator (assessment program) could break open a lack of clarity of governance direction. Further research into the specifics of a failed indicator program in the City of North Vancouver would be required in order to provide informed insight specifically on the governance challenges that presented themselves in this particular situation, however the scenario presents an interesting opportunity to question how such a strong and reliable institutionalization of sustainability has failed to deliver a similarly outwardly strong indicator program or any identifiable lasting effect on indicator development. As Holman (2009, 371, referencing Jordan 2008) states with respect to the combination of theories of sustainable development and governance: “it is impossible to avoid this partnership of terms if we are to seek a better understanding of how sustainable development is being operationalized.” This research has done exactly that, and uncovered an unexpected finding which does not align with the research in this field: an organization that prides itself on institutionalized governance operations for sustainable development, but has done so at the expense of assessment and yet still managed to achieve relatively considerable results. Maintaining political nimbleness contributed to this outcome.

161 Interviewee #4, Personal Communication, June 2, 2017

7.3. Opportunities: Leveraging Amenities for the Neighbourhood

This research was conceptualized, theorized, and undertaken at the scale of the neighbourhood. The findings however uncovered very little consideration for the neighbourhood unit as an administrative or conceptual basis for planning, assessment or implementation of the City's sustainable development goals. This is despite the clear distinction of Lower Lonsdale as a destination, a neighbourhood-scale regional centre, and as a 'place' for its residents and visitors as opposed to other portions of the City. The neighbourhood's inherent and latent potential through its existing integration of land use and transportation, its 'good bones' as interviewees characterized it, has offered an opportunity for the City of North Vancouver to take risks and move towards sustainable outcomes, even though no municipal assessment framework was put in place.

Missed Opportunities at the Neighbourhood Scale

The research indicates that Lower Lonsdale has achieved success in attaining aspects of neighbourhood sustainable development, as well as a governance arrangement, both of which are sought after outcomes in many other locations. Despite this success, the research has also illuminated the challenges associated with adopting a structured assessment strategy to embrace the success in an accountable way. Given the challenge of the TIMS project as it was described, as well as the apparent inability of the City's own sustainability framework contained within the OCP to take hold in a meaningful way, the contrast between the city-scale and neighbourhood scale may offer some insight into this challenge. Scaling down to the neighbourhood level for the mainstreaming purposes of assessment may offer the opportunity to later scale up to a city-wide scale and integrated assessment into city-wide governance. An example is the Lower Lonsdale project office that was established during the piecemeal development of properties in the Lower Lonsdale Planning Study area, shortly after the planning process completion. This innovative approach demonstrated success in making connections at the neighbourhood scale, which was unique and in line with the calls for transparency in the literature review on sustainability assessment.

Coupled with discussions surrounding frameworks with interviewees, the criticisms of neighbourhood systems discussed in the literature review were apparent in the current research findings both directly and thematically: neighbourhood systems are too rigid

and fail to take local conditions into account (whether political or physical) and lack the contextual sensitivity for localised application. Yet the apparent surprise to interviewees of the potential success of a neighbourhood rating system in Lower Lonsdale indicates a disconnect with an understanding of how this physical scale, and the use of a measuring system at this scale, could be of benefit to the City. Clearly there is political intelligence amongst interviewees, if they see the use of a LEED-ND accreditation system as being an opportunity to support their sustainable development objectives and align this with political interest in doing the same. This suggests a missed opportunity that, despite shortcomings of neighbourhood systems in terms of their universal applicability, offers an opportunity to codify and legitimize what has been achieved in Lower Lonsdale (Wangel 2016).

Integration through Placemaking

Numerous references to placemaking, in place of sustainable development, were unexpected findings from the case study. While the City's OCP attempts to integrate development priorities around a sustainable development framework, it fails to capture resonance with staff and/or politicians. Based on the findings, placemaking and related form based urban design tools focusing on the function of spaces, design of buildings, and the amenity of Lower Lonsdale as an destination and place to live, has embodied the aspirations for improvement and development in Lower Lonsdale. Together these components of placemaking have acted as an integrative theme for development in Lower Lonsdale. As a development ideology, placemaking is not considered to incorporate the full breadth of principles that sustainable development might (or should) include, and as such risks leaving out what might be considered key aspects of a sustainable outcome (Freidman 2010). In this case study the concept represents insight into how sustainable development could be approached in a terminological and ideological sense. It also offers a contradiction with research that suggests how sustainable development should be considered as a goal or understood and idealized as a potential outcome.

There is a distinct breakdown in the City of North Vancouver between the integrative characteristics of sustainability, how the City arranges its development objectives, and the outcomes achieved in Lower Lonsdale: staff and politicians didn't entirely realize what they were accomplishing in terms of integrative outcomes and sustainable

development. In this case study scenario, placemaking can be viewed as an integrating theme. As discussed in Section 6.2.9, it was suggested that "... we never really approached Lower Lonsdale with an environmental sustainability focus, there was a focus on placemaking".¹⁶² Similarly, during the public hearing for a 2015 approved project, a City Councillor voicing support for the proposal with its generous public amenity – a dedicated museum space - stated there is an "uncalculated benefit from the synergy of cultural facilities no single component will carry the success of the waterfront, it is all the pieces together."¹⁶³ Interviewee 7 focused strongly on the links between 'live, work and play.'¹⁶⁴ Amongst these three examples it can be seen that there is a clear realization of the potential of synergistic outcomes of development in Lower Lonsdale. This is further supported by the purposefully institutionalized criss-crossing nature of sustainability as ideology within the City's administrative units. Yet, the integration of sustainable development outcomes in Lower Lonsdale in light of the LEED-ND considerations points towards a missed opportunity to fully realize such integration. It furthermore illustrates a disconnect between placemaking and sustainable neighbourhood development as goals where a synergy of these ideologies exists in Lower Lonsdale. The ideological thrust behind the various components of development priorities for Lower Lonsdale discussed during interviews was outwardly focused at placemaking. The public amenities that intended to contribute to placemaking still contributed to components aligned with sustainable development. A full realization of these outcomes in a measured form was not apparent.

Explore Emergent Processes: Leverage for Amenities and Institutional Culture

Without offering proof that 'success' toward sustainable development was achieved in Lower Lonsdale through an assessment and monitoring regime, or establishing a benchmark against other locations within the City and/or the City's own progress towards sustainable development over time, it becomes questionable as to how far the City can move towards sustainable outcomes. This is whether it is considered within a sustainable development or placemaking framework of understanding - or otherwise.

162 Interviewee #1, Personal Communication, June 9, 2017

163 City of North Vancouver Council Meeting and Public Hearing, June 27, 2016, Accessed August 5, 2018 from <https://www.cnv.org/your-government/council-meetings/2014-meetings/council-videos>

164 Interviewee #7, Personal Communication, August 23, 2017

Placemaking as it is currently pursued in development (in a general sense) will likely not offer this solution of success or realization (Markusen 2013). It does however offer a contradiction against existing research that puts sustainable development ahead of placemaking in terms of utility of outcomes and measurable outputs. Given that this municipality has pursued placemaking as an organizing theme for the better part of 25 years and successfully integrated form, function, and sustainable development components into a compact neighbourhood with widely accepted sustainable development features, sustainable development can be viewed and pursued under alternative understandings that direct towards similar if not potentially the same goals. This could fall within the 'emergent' processes that Robinson (2004) proposed and be considered a contribution to this field of research.

Taking an amenity-first approach to sustainable development could be seen as a politically intelligent pursuit of sustainable development. Sustainable development as described in the literature review may not resonate with residents; however placemaking could. By communicating to residents that their City's embrace of sustainable development – under the banner of placemaking - will improve their experience of living in Lower Lonsdale and their day-to-day lives, political support for such initiatives could be easier or more broadly achieved. Residents may not find resonance with the long term benefits of sustainable development as described in the literature review, but the daily improvement that a placemaking ideology may offer – improved public spaces, beautiful cities – lends credence to the City's pursuit. Putting forward ambitious goals of greenhouse gas reductions and holistic principles of integration and mutual benefit will not have the same effect as proposing immediate and tangible improvements to residents. A sustainable development framework aligned with the literature reviewed in Chapter 4 may win the City accolades and recognition from other like-minded organizations and leave it in a position where they are better able to justify the full picture of what they have done by establishing accountability in the theoretically prescribed fashion discussed previously – that is if they make it there. It is, however, less appealing to the average citizen. Offering a placemaking outcome, coupled with sustainable development objectives, may unify the purpose and objectives of both ideologies into a 'win-win' situation for all and maintain the political nimbleness that is sought.

The focus on form and amenities rather than sustainability within Lower Lonsdale demonstrates the challenge of responding to the amorphous nature of sustainable development and reconciling this with the constantly changing demands of development within a municipality. Official Community Plans, typically twenty-year horizon documents, speak to broad objectives and long term visions. Their timelines are sometimes at odds with political-cycles and urgent items of day-to-day decision making and market driven development. The risks of not utilizing a placemaking and urban design approach are that there will be actions the City cannot take because they will never be appealing to residents from a quality of life perspective; and that there is no yardstick against which to measure progress or regress over time. Yet a positive aspect of this choice is it can be place-authentic and it can accommodate shifting priorities and actions as the political opportunity landscape shifts. The City's organizational and cultural arrangement surrounding the theory of sustainability offers a potential to propel this forward through innovation and new methods to pursue sustainable development that may emerge as a result.

7.4. Questions for Future Research

The exact nature of this disconnect between the objectives of sustainable development to which the City's policies orient, and the conceptualization of what those outcomes might be in the Lower Lonsdale neighbourhood (ie a destination full of public amenities and 'ease' of livability) suggests competing priorities or a contradiction amongst policy and governance understandings of what those desired outcomes for Lower Lonsdale might be. Political dynamics in the City of North Vancouver pushed against assessment frameworks that other research suggests, but at the same time accommodated a risk taking culture that successfully integrated sustainability into outcomes of development. Outcomes of planning for sustainability and placemaking were either conflated or completely separate processes. This isn't a matter of exchanging terminologies, such as placemaking in lieu of sustainable development. It is, rather, exploring through new research how the social value of development objectives is posited politically and within broader processes of governing for sustainability while establishing measurement criteria that respond to political necessity (ie quality of life) and still encompass contemporary sustainable development principles (equity, inclusion, precaution, etc).

What is clear is that the City of North Vancouver has evolved a sustainability governance arrangement that achieved sustainable outcomes in the absence of any assessment framework. Future research could seek to understand whether established governance arrangements that satisfy political interests of “success” and do deliver sustainable development outcomes handicap an evolution into what the literature review described as a ‘robust’ assessment regime that incorporates measurement systems. The role of ‘flexibility’ in such a scenario needs to be better understood: it can be considered an immediately desirable policy and process solution with unintended or unexpected results but could also function as a driver for emerging processes that may yield innovative governance and policy frameworks and new models of pursuing sustainable development.

7.5. Conclusion: Lessons Learned to Take it Seriously

Against the premise of the City of North Vancouver taking sustainability seriously, evidenced by accolades from others and outwardly visible sustainable development features in Lower Lonsdale, this research has asked the question:

How have the City of North Vancouver’s policies, development priorities, and planning processes contributed to outcomes resembling sustainable neighbourhood development in Lower Lonsdale, following the Lower Lonsdale Planning Study?

Following case study methodology, a LEED-ND based inventory was used to filter the built form within the Lower Lonsdale neighbourhood for sustainability criteria and identify latent sustainable development outcomes. A timeline of key events, beginning with the Lower Lonsdale Planning Study, was outlined to understand and trace policies that contributed to sustainable development within Lower Lonsdale. This was coupled with interviews and a review of development reports for the neighbourhood where key decisions and institutional practices were used to identify themes that emerged.

The findings uncovered a rigorous planning process in Lower Lonsdale, comprised of priorities of form-based planning and a systematic pursuit of costly and complex public amenities. This was complemented with policies requiring particular pre-determined sustainable development oriented components that, together, have led to the development of a neighbourhood that meets a number of criteria and intentions of

neighbourhood-scale planning tools. The latent sustainability of the pre-existing integration of land-use and transportation in Lower Lonsdale accommodated further evolutions of sustainable development outcomes in the neighbourhood and highlights the importance of this physical aspect of planning for sustainable development.

The outcomes of Lower Lonsdale were achieved in the absence of the use or guidance of assessment tools or frameworks. The research uncovered a purposively flexible and opportunistic planning practice that avoided such structure or assessment regimes. The opportunity to capitalize on the 'success' of Lower Lonsdale as a neighbourhood through evaluation and monitoring was missed. The findings support the use of the neighbourhood scale as being a 'piece' of the City that can accommodate new or experimental methods of pursuing sustainable development.

The planning system in Lower Lonsdale, and City of North Vancouver broadly, relied for support on an institutionalized governance and sustainability culture prevalent amongst City staff. This was facilitated by aspects of a supportive political regime and strong corporate leadership which aligned the agenda for Lower Lonsdale generally with sustainability principles. This governance model of innovation and corporate sustainability culture helped aspire and embed sustainable development principles into developments within Lower Lonsdale. This interaction further enabled staff and Council to push the boundaries of sustainable development outcomes.

While it's clear the City of North Vancouver 'takes sustainability seriously' (Portney 2003, 2013) through its marked governance culture and policy framework, under the surface of this seriousness there is some contradiction in the City's sustainable development agenda. The City prides itself on an institutional and corporate integration of the concept and in turn attempts to make it a practice within all development activity undertaken. However the very definition of what sustainable development outcomes should or will be, particularly in Lower Lonsdale, suffered from a lack of conceptual and outcome-oriented clarity. Despite the alignment of 'sustainability' amongst staff and politicians, the research highlighted the challenging process of instituting an assessment framework that aligns political interest and effective monitoring within the development process.

Arguably, despite the outward success of the City of North Vancouver found by this research and by others, the City of North Vancouver has landed at the same position that Conroy (2006) found in other cities more than 12 years ago: the findings support notions of disconnected governance regimes, disconnected purposes and compartmentalized components of sustainability. If sustainable development is to be realized, it requires context-based conceptualization and a linking between process and product (Oliver and Pearl 2017). North Vancouver appears to have these ingredients, they just need to be melded together into a preferably irrefutable policy (and practice) framework before the dangerously short fuse on institutional and political support runs out. The 'placemaking' outcomes desired for Lower Lonsdale were clear, the alignment of these within the City's broader pursuit of sustainable development was not. This research suggests that these priorities could potentially better align with an improved contextual understanding of desired sustainable development outcomes.

The theme within the findings that a municipality can try to build towards a desired outcome in a piecemeal way using unsophisticated triple-bottom-line accounting and big picture vision is risky. While it allows for much more flexibility than rigid frameworks such as LEED-ND that may reject the possibility for innovation and experimentation, it leaves the process open to political or internal co-optation and misguided outcomes which, by the very nature of incremental changes, can slowly evolve to undesired outcomes or movement in the wrong direction.

The research does offer new insight into how a flexible arrangement and varied conceptions of sustainable outcomes contributes to the process to reach sustainable development. The research underscores the importance of an institutional municipal governance culture that aligns sustainability principles with development outcomes. It also highlights the potential for building key leverage points into the development approvals process where political priorities align with governing for sustainability. The findings suggest that allowing for processes that support and evolve from governance structures for sustainable development can yield unknown possibilities and warrant further research on this concept.

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Appendix A: The Essentials of Sustainability

Written by Robert Gibson. Taken from Sustainability Assessment: Criteria and Process (2005).

The concept of sustainability is:

1. a challenge to conventional thinking and practice.
2. in all its formations concerned about long term as well as short-term being.
3. covers the core issues of decision-making (the pursuit and maintenance of necessities and satisfactions, health and security, diversity and equity, ecology and community, preservation and development, etc).
4. demands recognition of links and interdependencies, especially between humans and the biophysical foundations for life.
5. must be pursued in a world of complexity and surprise, in which precautionary approaches are necessary.
6. a recognition of both inviolable limits and endless opportunities for creative innovation.
7. about an open-ended process, not a state.
8. about intertwined means and ends - culture and governance as well as ecology, society and economy.
9. both universal and context dependent.

Appendix B: Detailed LEED-ND Analysis

Yes	Part	No	Possible	Category Name	Comments
17	2	9	28	Smart Location & Linkage	
		Required		Smart Location	The site is an infill site (the surrounding lands are redeveloped) and straddles a major transit corridor. Existing water and wastewater facilities exist (is not greenfield development). 60+ bus/ferry trips per day. <400 metres from 7+ uses. >35 intersections/km2.
		Required		Imperiled Species and Ecological Communities	There are no environmentally sensitive areas identified in the OCP within the boundaries of Lower Lonsdale. No creeks.
		Required		Wetlands and Water Body Conservation	No new development has occurred on water bodies, >30 metres from any waterbody. All land is previously developed. Brownfield on adjacent Shipyards site, some requires remediation, existing structures protruding into water bodies are repurposed.
		Required		Agricultural Land Conservation	Site is an infill site.
		Required		Floodplain Avoidance	Not in a provincial floodplain area.
7		3	10	Preferred Locations	Site is an infill site that is also previously developed (5 pts). Approximately 115 intersections per square kilometre (2 pts). Housing Diversity (1 pt). Affordable Housing (1 pt)
1	1		2	Brownfield Remediation	3rd/Chesterfield is former gas station and was remediated for mixed use project. Some remediation occurred at Foot of Lonsdale. Entire Shipyards Site was contaminated. 1 point applied for study area.
7			7	Access to Quality Transit	390 weekday trips including bus and seabus. (7 pts)
1	1		2	Bicycle Facilities	Separated Bike Lanes on Chesterfield and Esplanade (1 pt). Zoning Bylaw requires short and long term bicycle facilities in all residential developments (1 pt.)
1		2	3	Housing and Jobs Proximity	Density Bonus Policy is established for employment spaces within buildings; land use planning policies promoting densification with employment space provided and within proximity of existing employment space, these policies enforced through recent developments. (1 pt.)
		1	1	Steep Slope Protection	Not applicable.
		1	1	Site Design for Habitat or Wetland and Water Body Conservation	Not applicable.
		1	1	Restoration of Habitat or Wetlands and Water Bodies	Not applicable.
		1	1	Long-Term Conservation Management of Habitat or Wetlands and Water Bodies	Not applicable.

28	2	11	41	Neighborhood Pattern & Design	
Required				Walkable Streets	Sidewalks encircle development and pedestrian connections are within. All buildings have pedestrian entrances to the street. Buildings exceed 1:1.5 street width:building height ratio to support the pedestrian realm.
Required				Compact Development	Study area is approximately 300 units per hectare density; exceeds LEED-ND minimum of 17.5 u/p/h
Required				Connected and Open Community	Pedestrian connectivity established through internal connections, pedestrian-only walkways, laneway accesses, breezeways through buildings, park connections.
9			9	Walkable Streets	Commercial uses at zero setback (1 pt.), Residential buildings setback less than 7.5 metres (1pt.), all ground level commercial has glazing (1 pt.), blank building faces minimized, (1 pt), on-street parking provided on every street (1 pt), building:street ratio exceeds 1:1.5 (1 pt), mixed use buildings contain ground-floor retail (1 pt), continuous sidewalks exist (1 pt), windows are unshuttered (1 pt) (Total 9 pts)
6			6	Compact Development	300 units per hectare density (5 pts), 15,000 square metres of commercial/office space developed (1 pt).
4			4	Mixed-Use Neighborhoods	>18 categories of businesses, with multiple in each category. (4 pts)
2		5	7	Housing Types and Affordability	Dwelling units range from bachelor to 3 bedroom townhouses (1 pt.). Affordable housing provided in Wallace & McDowell project, Quayside Housing, Kiwanis Tower (1 pt.)
		1	1	Reduced Parking Footprint	No surface parking created with new developments - all underground. Shared and Carpool parking not found within study area.
1		1	2	Connected and Open Community	Approximately 150 intersections/square kilometer. (1 pt.)
		1	1	Transit Facilities	Bus Bay installed on Chesterfield between 1st and 2nd. Covered Transit Shelters on Lonsdale. Point not awarded as this is a separate agency's responsibility.
1		1	2	Transportation Demand Management	Four designated car-share parking areas in Lower Lonsdale (1 pt.)
1			1	Access to Civic & Public Space	Within 400 metres of Waterfront, Semisch, Chief August Jack, Jack Loucks Court Derek Inman, and Shipbuilder's square public areas/parks (1 pt.)
1			1	Access to Recreation Facilities	John Braithwaite Community Centre has fitness facilities. Park/playground located at Waterfront Park (1 pt.)
1			1	Visitability and Universal Design	Section 423 of Zoning Bylaw requires 25% of new multi-family units to be adaptable. Level II and III Adaptable Units incorporated voluntarily for amenity bonuses (Wallace & McDowell Building). 1 point awarded for Accessible Design Guidelines Policy.

1		1	2	Community Outreach and Involvement	Extensive consultation with OCP (City Shaping), Lower Lonsdale Project Office, LLPSA Engagement Process, Public Meetings for Development Projects. (1 pt).
	1		1	Local Food Production	Farmer's Market operates May - October at nearby Lonsdale Quay. No local food production, but local food sales are supported.
	1	1	2	Tree-Lined and Shaded Streetscapes	Crown Cover not calculated. Street trees planted with each new development. 1 possible point.
1			1	Neighborhood Schools	Elementary School (Queen Mary) located <800 metres from case study area (1 pt.).
8	0	23	31	Green Infrastructure & Buildings	
Required				Certified Green Building	LEED certifications achieved for TIME (155 West First) and ENVY (177 West 3rd), and 123 West First buildings within study areas. New Polygon Gallery Building, Versatile Building are also LEED certified. Wallace and McDowell (101 Lonsdale) is Built Green certified.
Required				Minimum Building Energy Performance	Energy Efficient Buildings Initiative requires new buildings to exceed BC Building Code minimum energy performance standards.
Required				Indoor Water Use Reduction	Not calculated.
Required				Construction Activity Pollution Prevention	Erosion and Sedimentation Control is required in City of North Vancouver Servicing Bylaw.
1		4	5	Certified Green Buildings	Minimum FAR ratio specified by LEED-ND Guidelines not met. One point given for Municipal buildings requiring LEED Gold certification and encouragement of other certified buildings.
1		1	2	Optimize Building Energy Performance	Not calculated/Not available. One point awarded for Energy Efficient Buildings Initiative.
		1	1	Indoor Water Use Reduction	Not calculated/Not available
		2	2	Outdoor Water Use Reduction	Not calculated/Not available
		1	1	Building Reuse	Most buildings, if not heritage, are demolished.
2			2	Historic Resource Preservation and Adaptive Reuse	Extensive Heritage restoration and rehabilitation at 100 Lonsdale, 113 West 1st, 201 Lonsdale and other buildings within nearby vicinity (2 pts).
1			1	Minimized Site Disturbance	100% redeveloped land
		4	4	Rainwater Management	Not calculated/Not available
		1	1	Heat Island Reduction	Green Roof on Wallace & McDowell (101 Lonsdale) and 135 West First Buildings.
1			1	Solar Orientation	Streets of CNV are 30 degrees off east-west axis (1 pt.)
		3	3	Renewable Energy Production	Renewable Energy sources not found.
2			2	District Heating and Cooling	8 Buildings Connected to District Energy System (2 pts).
		1	1	Infrastructure Energy Efficiency	Information unavailable.
		2	2	Wastewater Management	Information unavailable.

		1	1	Recycled and Reused Infrastructure	Information unavailable.
		1	1	Solid Waste Management	Waste Transfer Station located within District
		1	1	Light Pollution Reduction	Evidence not found
5	0	1	6	Innovation & Design Process	
4		1	5	Innovation	Re-use of Shipyards area, Lower Lonsdale Cultural Study, Amenity provision, Public Art facilities are all exemplary projects (4 pts).
1			1	LEED® Accredited Professional	Volunteer Researcher (1 pt.)
53				TOTAL	(LEED-ND Certified: 40-49 points, Silver: 50-59 points, Gold: 60-79 points, Platinum: 80+ points)

Appendix C: City of North Vancouver Documents and Reports Reviewed

Report Title	Planning Report Date	Council Meeting Date	CNV Assigned File Number (if available)
Rezoning Application: 121-137 West 3rd Street	1996-01-30	1996-02-05	3400-05 03W 121-137
First Capital Holdings Trust / Mallen Architecture Cd-549	1996-02-28	1996-03-11	3358-03 3E 137-155
Rezoning Application: Lots 20,21,22,23,24,25, Portions Of Lots 26,27,28 As Shown On Schedule "A", Block 156, D.L. 274, Plan 879 (CCNV)	1998-01-08	1998-01-26	3400.05 1W 124
201-205 Lonsdale Avenue (Barraclough Block) Development Proposal	1999-01-27	02-01-1999	3400.05 Lons201
201-205 Lonsdale Avenue (Barraclough Block Fdg Management Ltd./M.Katz Architect)	1999-03-24	1999-03-29	3400-05 LONS 201
Development Application: Former Versatile Shipyard Site – 109 & 116 East Esplanade (Coriolis Consulting Corp./Hotson Bakker Architects)	1999-09-29	1999-10-04	3400-05 ESPL E 109 & 116
Development Application: Former Versatile Shipyard Site – 109 & 116 East Esplanade (Coriolis Consulting Corp./Hotson Bakker Architects) - Site Adjustment	1999-10-13	1999-10-18	3400-05 ESPL E 109 & 116
Official Community Plan And Zoning Amendment Application – Site 5 (Grosvenor/Fairmont)	2001-09-26	2001-10-01	3400-05 01 W 100 Block
Official Community Plan And Zoning Amendment Application - Site 5 (Grosvenor Fairmont)	2001-11-01	2001-11-05	3400.05 01 W 100 BLOCK
Rezoning Application Site 5 - 144 To 170 West Esplanade And 161 West 1st Street (Grosvenor/Fairmont/Buttjes Architecture Inc./Paul Merrick Architects)	2002-04-17	2002-04-22	3400-05 ESPL. 144-170 W
Rezoning Application: Sites 1 And 2 - Lower Lonsdale Planning Area (City Of North Vancouver)	2002-06-17	2002-06-24	3400-05 02 W 161-179
Updated Rezoning Application: Site 1 (175 West 2nd Street) And Site 2 (170 West 1st Street) - Lower Lonsdale Planning Area (City Of North Vancouver)	2002-07-10	2002-07-16	3400.05 02 W 161-179
Rezoning Application: Lower Lonsdale Site 3A (City Lands - 151 West 2nd Street)	2003-02-13	2003-02-24	3400.05 151 2W
Design Guidelines: Lower Lonsdale Site 3a (City Lands - 151 West 2nd Street)	2003-03-19	2003-03-24	3400.05 151 2W
Rezoning Application - Preentation House Site (333 Chesterfield Avenue) And Site 1 (175 West 2nd Street) Heritage And Amenity Density Transfer	2003-06-17	2003-06-23	3400-05 SITE 1 02W 175 / PRESENTATION HOUSE CHES.333
Rezoning Application: Lower Lonsdale Site 3A (City Lands - 151 West 2nd Street) Density Reduction	2003-07-23	2003-07-28	3400.05 151 2W
Rezoning Application - Preentation House Site (333 Chesterfield Avenue) And Site 1 (161 - 179 West 2nd Street) Heritage Density Transfer	2003-09-09	2003-09-15	3400.05 Site 1 02.161-179.w\3400.05 CHES.333 Presentation House
Pier Development: Parcel 1 Rezoning Application (Pinnacle International / Howard Bingham Hill Architects)	2005-05-04	2005-05-09	3400.05 ESPLANADE 100 E (PIER PARCEL 1)

Pier Development: Parcel 1 Rezoning Application (Pinnacle International / Howard Bingham Hill Architects)	2005-06-22	2005-06-27	3345-02 ESPLANADE 100 E (PIER PARCEL 1)
Pier Development Ocp Amendment / Rezoning Application: Bylaw Consideration (Pinnacle International/National Maritime Centre / City Of North Vancouver	2006-09-20	2006-09-25	3345-02 LONS 100/ESPL. E 109 / 3380-02-N3-01
Rezoning Application: 180 West Esplanade (First Capital Holdings Trust / Mallen Architecture Cd-549)	2008-01-30	2008-02-04	3345-02 Esplanade W 180
Fairborne Homes Ltd Residential Development: 129-141 West 2nd Street (Rezoning, Cd-613)	2011-07-13	2011-07-18	3360-20 Rez2011-000012 – 129-141 W 2nd
Rezoning Application: 222-238 Lonsdale Avenue (Maurice Pez, Intracorp Lonsdale Project Limited Partnership/Doug Ramsay, Ramsay Worden Architects, Cd-599)	2010-12-07	2010-12-13	3345-02 Lonsdale 222-238
Zoning Amendment Application, 127 - 133 East 3rd Street (Kamkon Construction, F. Adab Architects Inc.)	2012-04-11	2012-04-16	3360-20 REZ2012-00003 – 127 East 3rd St
Zoning Amendment Application, 127 - 133 East 3rd Street (Kamkon Construction, F. Adab Architects Inc.)	2012-09-04	2012-09-10	3360-20 REZ2012-00003 - 127 EAST 3RD ST
Development Application: 117-129 West 1st Street (Shift Architecture Inc / Fairborne) Rezoning From Cs-3 To A Comprehensive Development Zone	2013-02-13	2013-02-18	3360-20 REZ2013-00001 - 117-129 West 1st
Rezoning Application: 117-135 West First (Fairborne Properties /Shift Architecture, Cd-648)	2014-01-08	2014-01-13	3360-20 REZ2013-00001
Update - Community Amenity Space With Rezoning Application: 117-135 West First (Fairborne Properties/Shift Architecture, Cd-648)	2014-02-05	2014-02-17	3360-20 REZ2013-00001
Community Amenity Space: 117-135 West First (Fairborne Properties/Shift Architecture, Cd-648)	2014-09-05	2014-09-15	3360-20 REZ2013-00001 - 117-129 West 1st
Development Application: 119 - 131 West Esplanade (Polygon / Nigel Baldwin Architects) Rez2013-00013/Ocp2013-00003	2013-10-28	2013-11-04	3360-20 REZ2013-00013/OCP2013-00003 119-131 W Esplanade
Rezoning Application: 101 - 149 Lonsdale (Staburn Lower Lonsdale West Gp/Rositch Hemphill Archietcts, Cd-647)	2013-12-11	2013-12-16	3360-20 REZ2013-00007
101 - 109 Lonsdale Heritage Protection	2014-05-28	2014-06-09	3360-20 REZ2013-00007 - 101-109 LONSDALE
Ocp Amendment And Rezoning Application: 119-131 West Esplanade, 120 Carrie Cates Court And Part Of The Surrounding Rogers Lane (Polygon Promenade At The Quay/Dys Architecture / Nigel Baldwin Architects)	2016-06-08	06-13-2016	08-3360-20-0335/1
Rezoning Application: 177 West 3rd Street (Anthem Chesterfield Developments Ltd. / Rositch Hemphill Architects)	2016-11-09	2016-11-14	08-3360-20-0388/1
View Study - Further Analysis	1989-05-24	-	
Lower Lonsdale Planning Study - Process	1992-09-21	1992-09-21	3380.02 L2
Lower Lonsdale Planning Study - Issues And Visions Forum Review And Proposed Next Steps	1993-07-14	-	3380.02.L4.02
Lower Lonsdale Planning Study - Interim Report - Land Use And Urban Design Vision And Policy Considerations	1994-02-21	-	3380.02.L4.03
Lower Lonsdale Planning Study - Ladh Use And Urban Design Major Issues - Policy Committee And Public Review	1994-05-03	-	3380.02.L4.03
Lower Lonsdale Planning Study Update	1994-11-21	-	3380.02.L4.03

Lower Lonsdale Planning Study - Work Program Update And Public Involvement Program	1995-06-20	-	3380.02.L4.03
Letter To North Vancouver Museum And Archives	1996-03-29	-	3380.02.L4.03
Letter To North Vancouver Museum And Archives	1996-08-26	-	3380.02.L4.03
Lower Lonsdale Planning Study	1997-03-11	-	
Lower Lonsdale Planning Study Results Of The Public Involvement Process And Next Steps	1997-10-21	1997-12-01	
Lower Lonsdale Community Benefits: Evaluation And Prioritization	1998-02-11	-	3380.02.L4.05.01
Lowr Lonsdale Planning Study Overview	-	-	
Foot of Lonsdale Avenue Civic Improvements: Phase One and Two (Confirmation of Funding) and Site Rezoning	1996-07-15	1996-07-22	511524
Foot Of Lonsdale Planning Study Final Report (P. Busby & Associates)	2002-09-10	2002-09-16	3380-02 F4
Planning Study For The Foot Of Lonsdale	2002-08-22	-	
Foot Of Lonsdale Site Plan And Open Space Design Terms Of Reference And Funding Appropriation	2009-09-08	2009-09-14	1645-17
Foot Of Lonsdale waterfront Planning Study Next Steps	2009-11-09	2009-11-16	1645-17
Foot Of Lonsdale Waterfront Planning Study Terms Of Reference And Funding Appropriation	2009-11-24	2009-12-07	1645-17
Request For Qualifications Foot Of Lonsdale Land Use Plan And Public Open Space Design	2010-03-01	-	
Foot Of Lonsdale Open Space Design - Update And Next Steps	2013-09-03	2013-09-09	6740-20-FL-01
Foot Of Lonsdale Design Update And PGE Station Options	2014-04-22	2014-04-28	6740-20-FL-01
Rezoning Application Foot Of Lonsdale	2014-05-13	2014-05-26	3360-20 REZ2013-00014
Presentation House Gallery-New-Facility-Business-Plan	-	2013-10-01	
Lower Lonsdale Cultural Facilities Study: Consultants' Report	2010-09-15	2010-09-20	
Lower Lonsdale Cultural Facilities Study	2010-07-01		
Versatile Shipyard Heritage Report	-	-	
Versatile Shipyard Land Use Study: Start-Up	1996-02-20	1996-03-11	3380-02-V2-01
Versatile Shipyard Land Use Study: Steering Group Terms Of Reference	1996-04-20	1996-05-06	3380-02-V2-01
Versatile Shipyard Land Use Study: Next Steps	1997-01-29	1997-02-03	3360-03 VERS
Versatile Shipyard Land Use Study: Final Report	1997-11-26	1997-12-01	3380-02-V2
Statutory Review - Ocp Amendment - Pier Development Parcel 3 158 East Esplanade	2004-07-07	2004-07-12	
Pier Development: Parcel 3 - OCP Amendment Application	2004-06-23	2004-07-05	
Pier Development Site Feature Naming	2004-11-26	2004-12-06	3400.05
Pier Development: Parcel 3 - Zoning Amendment/ Development Permit Application	2004-12-08	2004-12-20	3345-02 Esplanade 158 E
Pier Development: Parcel 1 Rezoning Application	2005-05-04	2005-05-09	3345-02 - Esplanade 100 E (PierParcel1)
Pier Development: Parcel 1 Rezoning Application	2005-06-22	2005-06-27	3345-02 - Esplanade 100 E (PierParcel1)

Pier Development/Proposed National Maritime Centre OCP Amendment rezoning Application (Pinnacle International Architects 1100 Lonsdale Avenue & 109 East Esplanade)	2006-03-15	2006-03-20	3345-02 Lonsdale 101 Esplanade E 109 & 3380-02-N3-01
Pier Development Phase II/III Public Realm Concept Plans	2006-06-22	2006-06-26	3380-02-V2-01
Pier Development OCP Amendment/Rezoning Application: Public Input Update And Next Steps	2006-07-26	2006-07-31	3345-02 Lonsdale 101 Esplanade E 109 & 3380-02-N3-01
Pier Development Official Community Plan Amendment Rezoning Application: Bylaw Consideration	2006-09-20	2006-09-25	3345-02 Lons 100 Espl. E 109 / 3380-02-N3-01
Shipyards Historic Precinct - Expansion Opportunity - Next Steps	2006-12-13	2006-12-13	3330-02 W1 02
Shipyards Historic Precinct And National Maritime Centre Vision And Objectives	2006-12-18	2007-07-11	3380.02S2.01
Rescinding Of Three Heritage Building Designations For Wallace Burrard I Versatile Shipyards Heritage Precinct At The Pier	2007-12-12	2007-12-17	3360.06.02
Shipyards Precinct Funding Appropriation	2009-10-28	2009-11-02	3380-02-S2-01
Request For Expression Of Interest - The Shipyards Lot 5	2015-06-01	n/a	
The Shipyards Lot 5 - Vision, Site Planning Principles And Next Steps	2015-04-07	2015-04-13	
The Shipyards - Lot 5 Appropriation	2015-09-09	2015-09-15	13-6740-20-0007/1
1992 Official Community Plan	-	-	
2002 Official Community Plan	-	-	
2014 Official Community Plan	-	-	
2002 Official Community Plan Review: Discussion Paper	2010-09-01		
The Official Community Plan - Targets, Indicators And Monitoring Strategy (OCP-TIMS) Results	2010-07-14	2010-07-19	3330-04-01
Our Vision Of A Complete Community	2011-03-01	-	
Official Community Plan Bylaw Next Steps Discussion Paper	2015-01-06	2015-01-12	
100 Year Sustainability Vision	-	-	
2008 Economic Development Strategy	-	-	
2015 Annual Municipal Report	-	-	
Community Energy and Emissions Plan	2010-04-06	-	
Sustainable Development Guidelines Checklist		-	
Lonsdale Corridor Master Plan	2000-08-01	-	
Adaptable Design Guidelines	2014-08-01	-	
Central Waterfront Development Plan	2014-07-01	-	
2013 Heritage Register	-	-	
Lower Lonsdale Development Guide (Brochure)	-	-	
Development Application Process (Brochure)	-	-	

Appendix D: Interview Guide

1. What is the planning vision for Lower Lonsdale that has guided development over the past 20 years?
⇒ Where do you take this from?
2. Please tell me about one specific event from the past few years that you consider pivotal or emblematic in the context of planning and development of Lower Lonsdale as it exists now? Why?
3. Please tell me about what you see as the top priorities for the redevelopment in Lower Lonsdale.
4. What are some examples of initiatives or completed projects that exist now that represent these particular priorities you described?
5. 4-part question:
 - a) Would you call what has happened in Lower Lonsdale over the past 20 years more policy-driven or more something that has happened “in spite of” or “in the absence of” policy? Why?
 - b) What is or are the key policies that have supported what you have described?
 - c) Are there any particular practices or processes within CNV’s unique approach as a local government that have been instrumental or essential in realizing the vision for Lower Lonsdale so far?
 - d) What about some of the particular plans that guided this area: The Lower Lonsdale Planning Study, the Versatile Shipyard Land Use Plan. Are you familiar with these plans? Can you tell me about the role these played?
6. Can you think of any examples of how the City’s sustainability priorities and policies have been incorporated into any individual developments in Lower Lonsdale?
⇒ What does this mean in terms of planning process?
7. How were these sustainability priorities incorporated into the planning process for the neighbourhood?
8. Who were the key stakeholders that were critical during the planning process?
9. How has success been measured in the LoLo neighbourhood, based on the expectations you described?
10. Typically, it takes some work in order to integrate objectives and priorities across different departments of a City. Sometimes this is done in a “Sustainability Strategy”, other times in an ICSP or similar strategic document. The City has

neither, nor a dedicated sustainability department. How has the multi-faceted nature of sustainability priorities been coordinated for Lower Lonsdale?

11. It is suggested in research that a framework – such as LEED ND - will give you more credibility in efforts made toward sustainable development. They provide guidelines, techniques, ideas of deliverables, a suggested process, that has been used elsewhere with results; an assurance of replicability to fall back on. (There are a number of them for sustainable neighbourhood development that are used around the world: LEED-ND is the defacto North American standard, but others exist such as EcoDistricts, STAR Communities, Living Community Challenge.) The use of such a structured system hasn't occurred here, can you comment on this or explain why not?

(To clarify 11): Have there been challenges or a point during the development of the area where the process has lacked direction, where something like a framework or a more defined process would have been helpful to address challenges?

12. How have policies and procedures responded to challenges for Lower Lonsdale?
(Or how have the challenges been overcome?)
⇒ Do you have an example?
13. Does what has now been passed as the Sustainability Framework in the OCP do a good job of encapsulating what is great about Lower Lonsdale?
⇒ Where does and doesn't it apply well?
14. What do you consider to be a particularly innovative outcome of the planning and development process in the Lower Lonsdale neighbourhood?
15. Is there anything else you would like to tell me that you think might be relevant to this research about the process of sustainable neighbourhood development?