MIXING IN MID-RISE:
AN ANALYSIS OF THE KEY FACTORS IN THE REDEVELOPMENT OF VANCOUVER’S NEIGHBOURHOOD SHOPPING STREETS

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*All photographs were taken by the author unless sourced otherwise*
EXECUTIVE SUMMARY

BACKGROUND

The challenge of housing a growing population on limited land has forced the City of Vancouver (CoV) to densify its low-rise residential neighbourhoods outside the downtown. One strategy involves encouraging the development of intensification corridors by redeveloping all transit accessible arterials with mid-rise buildings. Large stretches on many of Vancouver’s arterials, including W. 10th Ave., Dunbar St., W. Broadway and Main St., have long functioned as neighbourhood shopping streets with a fine-grain fabric of older one and two-storey commercial buildings. According to development consultant Michael Geller (2012), “many point to [these C-2 zones] as Vancouver’s ‘unused zoned capacity’ since it is close to transit and other services.” However, Geller claims that “many sites are likely to remain under-developed” due to challenges such as fragmented ownership and the difficulty of building on small sites that are uneconomical to develop.

The purpose of this report is to analyze the key variables that encourage or discourage redevelopment along these neighbourhood shopping streets or C-2 zones. While there have been a number of projects built recently that have overcome these challenges, not all completed projects contribute equally to the public realm. Therefore, this report’s outcome is a set of recommendations to improve the viability of redevelopment projects in the C-2 zones while also improving their quality. There are many benefits of redevelopment that stand to not be fully realized if there is not a greater understanding of these crucial development factors.

METHODOLOGY

The report is structured to answer the following primary and secondary research questions:

PRIMARY RESEARCH QUESTION
- What factors either encourage or discourage the redevelopment of Vancouver’s established neighbourhood shopping streets with mid-rise, mixed-use buildings?

SECONDARY RESEARCH QUESTIONS
- Why is the redevelopment of these streets desirable?
- What are the existing land use conditions on these streets? (i.e. Where is successful redevelopment occurring? What streets are mostly underdeveloped?)
- What steps can planners take to facilitate the development of further and more successful redevelopment projects?
The research employed a mixed-methods approach utilizing a literature review, land use survey, examination of building precedents, and key-informant interviews. The majority of the 15 interview participants were residential developers, but the participants also included architects, planners and other development professionals in Vancouver. Content from the interviews was then analyzed and organized into five categories of factors.

**FINDINGS**

**MARKET FACTORS**

There is plenty of lively discussion in Vancouver about development costs and how they affect the viability of new housing projects. Although there are a host of factors that can make or break a new housing project, the market is invariably the biggest determinant of housing prices. There is high demand and limited supply of housing options in Vancouver’s high-amenity low-rise neighbourhoods. Developers often market the neighbourhood in mid-rise projects, which attract a wide variety of buyers particularly young people entering the market and aging empty nesters or retirees.

**FINANCIAL FACTORS**

While not as profitable as high-rise buildings, there is nothing inherently unviable about mid-rise, mixed-use projects in Vancouver’s C-2 zones. Wood-frame construction makes them generally economical to build. However, some developers are opting for concrete construction, which is more expensive but sells for a premium price. Regardless of construction material, the inbuilt complexity of mixed-use buildings makes them better suited to firms with experience doing similar projects. Securing long-term commercial tenants is a priority for some developers. After many years with very few new purpose-built rental projects, developers are beginning to take advantage of CoV policies incentivising purpose-built rental units in the C-2 zones.

**SITE FACTORS**

Due to fragmented ownership and small lot sizes, at least some lot assembly is usually required to acquire enough frontage for a four-storey building. Developers prefer corner lots, which allow for more flexible unit designs, and lots with sufficient depth to build a functioning underground parking garage. Some lots are simply not deep enough for redevelopment with the current parking requirements. Site contamination from previous uses, gas stations and drycleaners predominantly, also inhibits redevelopment.
LAND USE & URBAN DESIGN FACTORS

The CoV has fairly stringent regulations regarding building form and design. The rear of new mid-rise buildings should effectively relate to the abutting residential and the front should foster a dynamic pedestrian environment. Large building step-backs can help create a more neighbourly relationship with the abutting ground-oriented homes while also providing amenity space for residents of the arterial building. Significant measures need to address the real negative externalities that arise when placing residential units on busy arterials. Unfortunately, inadequate attention is often given to the design of CRUs leading to bland and uninteresting storefronts in new mixed-use buildings.

REGULATORY & PROCESS FACTORS

The provision of the required residential and commercial parking spaces can severely inhibit the viability of redevelopment on size-constrained lots. As a charter city, the CoV has the most demanding building code in Canada in terms of energy utilization. With such high standards in place, developers refuted the costly requirement for LEED Gold accreditation in rezonings. Inconsistent application of regulations and some review processes, including the Urban Design Panel (UDP), lead to costly delays. Proactive and innovative public engagement strategies can also benefit the approvals process.

RECOMMENDATIONS

#1 REDUCE PARKING REQUIREMENTS AND MAKE THEM MORE FLEXIBLE
The CoV should drop parking minimums and adopt a more flexible market-based approach to parking standards.

#2 MODIFY EXISTING HEIGHT AND FSR REGULATIONS IN C-2 ZONES
Five or six storey buildings are likely suitable in many areas with appropriately scaled step-backs to limit the impact of shadowing, especially on north-south heading streets. Total permitted height in four-storey buildings should be increased to allow for taller CRUs at grade.

#3 CONTINUE EXPLORATION OF ‘TRANSITION ZONES’ BEHIND ARTERIALS
In addition to providing a greater variety of housing types at higher densities in low-rise neighbourhoods, townhouses and rowhouses behind arterials create a greater transition from mid-rise, mixed-use projects. The CoV should continue exploring the creation of transition zones.
#4 ENCOURAGE INNOVATIVE DESIGN SOLUTIONS THROUGH PERFORMANCE-BASED ZONING
While not all projects need to reflect excellence in design, there needs to be more examples that properly acknowledge the public role of these streets. The CoV should encourage innovative solutions by implementing performance-based zoning regulations.

#5 ENCOURAGE BETTER DESIGN OF CRUs
The CoV should review how the UDP evaluates CRUs and should push for greater unit depths and heights, which are important factors for commercial tenants. Opportunity to express individuality in storefronts should also be emphasized.

#6 ALLOW FOR GREATER FLEXIBILITY OF USES AT GRADE
Although redevelopment increases the amount of nearby potential patrons, new CRUs in replacing mixed-use buildings on the edges of C-2 zones are often similarly unsuccessful as those they replace. The CoV should consider allowing greater flexibility of uses at grade at the edges of C-2 zones, where there are other uses that may contribute more to the neighbourhood.

#7 ALLOW FOR SMALLER UNITS TO IMPROVE AFFORDABILITY
Smaller suite sizes may be the simplest way to provide more affordable rental and entry-level units in Vancouver. The CoV should consider lowering the current minimum suite sizes in mid-rise, mixed-use projects, where tenants are more likely to spend time in nearby ‘third spaces’.

#8 EXPLORE ALTERNATIVES TO LEED ACCREDITATION
The CoV should consider waving the LEED Gold requirement for rezonings in wood frame mid-rise buildings on arterials, which are already very energy efficient. There are other ways to ensure buildings meet green performance standards without the added costs of LEED.

#9 IMPROVE SITE APPROVALS PROCESSING EFFICIENCY
Resolving conflicting requirements from different CoV departments and improving the clarity surrounding development regulations and approval processes would limit costly and unexpected delays.

#10 UPDATE NEIGHBOURHOOD PLANS AND IMPROVE COMMUNICATION PROCESSES
Updating long out-dated neighbourhood plans would provide opportunity for the public and developers to engage in a discussion about the future of neighbourhood shopping streets. Developers that initiate proactive engagement strategies often benefit from greater public support of their projects.
1.0 INTRODUCTION

Many cities in North America have long been adopting ‘Smart Growth’ principles in their land use plans and policies. In contrast to the low-density suburban sprawl that characterized post-war urban form, Smart Growth promotes the protection of environmental land; the intensification of residential densities; the reduction of automobile dependency; and the creation of liveable and ‘walkable’ mixed-use neighbourhoods (Downs, 2001; Duany et al. 2010). Despite Smart Growth’s broad support from policymakers, the actual implementation of alternatives to the dispersed urban form faces many obstacles (Berke, 2002; Filion, 2003; Filion & McSpurren, 2007; Downs, 2007). Compared to their American counterparts, major cities in Canada have experienced relative success in implementing Smart Growth objectives (Tomalty & Alexander, 2005). Vancouver in particular is celebrated as an early adopter of densification policies, principally for its dense and liveable downtown of narrow high-rise towers that sit above street-friendly podiums, a model of development known around the world as ‘Vancouverism’ (Punter, 2005). In the past decade however, the overcrowding of towers in the downtown peninsula and the dwindling supply of large brownfield sites has forced development pressure upon Vancouver’s low-rise established neighbourhoods, where compatibility issues and neighbourhood opposition arise (Hutton, 2004; Quastel et al., 2012).

One commonly adopted strategy for increasing residential density in established neighbourhoods involves targeting transit accessible arterials as intensification corridors by encouraging the development of mid-rise buildings along them (Filion & Kramer, 2012). Like many North American cities laid out in the traditional grid pattern, Vancouver was at first a streetcar city with single storey commercial uses along portions of many main thoroughfares (Punter, 2005). This general pattern remains and these neighbourhood shopping streets
now hold great potential for absorbing population growth while capturing the value of public transit with increased residential densities. The argument for intensification corridors is wide-ranging (Condon, 2010). Not only do they place people close to existing public transit and services, but they also avoid disrupting surrounding single-family neighbourhoods. In addition, mid-rise, mixed-use buildings can create human scaled, pedestrian-friendly streets that support finer grain commercial activity.

In recognition of these benefits, the City of Vancouver (CoV) has zoned these neighbourhood shopping streets to encourage mid-rise, mixed-use buildings of at least four storeys high (Fig. 1). However, the difficulty with intensification corridors lies with their implementation (Mejias & Deakin, 2005; Filion & Kramer, 2012). Developers can be hesitant to build mid-rise, mixed-use projects making “encouraging mid-rises a tall order” (Flaxman, 2010). Intensification corridors can also demand substantial planning coordination, as evidenced by the CoV’s Cambie Corridor Plan (2011). These and other challenges need to be overcome if Vancouver’s neighbourhood shopping streets are to continue to be redeveloped making the mid-rise intensification corridor the rightful evolution of Vancouver’s urban form (Condon, 2010; Ransford, 2011). However, there are other fundamental variables that need to be considered. As Jane Jacobs states, these pedestrian friendly streets are “the main public places of a city” (1961). Any redevelopment should therefore be done in a context sensitive manner.
1.0.1 WHAT ARE MID-RISE, MIXED-USE BUILDINGS?

There is no real set definition for a mid-rise building, which makes the distinction between low, mid and high-rise unclear. Generally, mid-rise buildings obtain more of their mass from width than height, but this is not always the case. The range of building heights that are considered mid-rise usually varies depending on the surrounding context. In Vancouver’s downtown peninsula, mid-rise buildings are defined as those between seven and 12 storeys high. However, the focus of this study is on shopping streets in Vancouver’s low-rise neighbourhoods outside the downtown, where high-rise towers are limited to a few
select locations. Therefore, for the purposes of this report, mid-rise buildings are identified as anything between four and six storeys high.

In *The Death and Life of Great American Cities* (1961), Jane Jacobs famously argued that a fine-grain mix of diverse uses leads to vibrant neighbourhoods by enabling people to live nearby to where they shop, work, and play. Mixed-use has been broadly accepted by contemporary planners campaigning sustainable development. However, it too lacks a common definition (Grant, 2002). There are many ways to mix two or more uses in the same building, but the most common vision of a mixed-use project includes commercial or retail on the ground floor and residential or office above. Mixed-use is becoming an increasingly broad concept as different types of uses that were traditionally segregated, light industrial primarily, are gradually being integrated with office and residential components. Since the focus of this report is on Vancouver’s neighbourhood shopping streets, where intensifying the residential component is encouraged and maintaining the commercial component is required, redevelopment projects tend to portray the common vision of a mixed-use building. However, a more diverse mix and intensity of uses in redevelopment projects on these streets is also a possibility.

1.1 PURPOSE OF THE REPORT

In a report for the Mayor’s Affordable Housing Taskforce (2012), planner, architect and development consultant Michael Geller acknowledged that Vancouver’s neighbourhood shopping streets contain considerable capacity under the existing zoning to increase the supply of housing:

“Many point to the [C-2 zones] as Vancouver’s ‘unused zoned capacity’ since it is close to transit and other services. While successful developments have been built in recent years, many sites are likely to remain underdeveloped with older one and two storey buildings for decades to come.”
The greatest challenges confronting the redevelopment of these streets include fragmented ownership, small lots that are uneconomical to develop, city-imposed parking requirements and restrictive design guidelines. Despite these challenges, there appears to be an increasing amount of successful redevelopment projects sporadically appearing along these streets.

The purpose of this report is to analyze the key variables in the development process that enable these projects to succeed. Through discussion with developers and planners in Vancouver, the goal is to better understand how developers respond to the regulations affecting redevelopment opportunities in the C-2 zones. The outcome is a set of recommendations to improve the development process resulting in further and more successful projects on these streets. Of course, every site and development product must realistically compete with all others in the region, including larger sites that hold greater potential to offer developers higher returns. Although many Canadian cities are planning intensification corridors of their own, this competition with larger sites and an insufficient understanding of the development economics of mid-rise, mixed-use redevelopment often results in a lack of implementation. Therefore the benefits of this urban form are never realized. In Vancouver where the population is growing, housing prices are unaffordable, and land is constrained, successful implementation of intensification corridors is arguably more imperative than elsewhere.

1.2 RESEARCH QUESTIONS

This report’s findings will answer the primary research question below, while the structure of the report will be guided by the supplementary questions that follow.

1.2.1 PRIMARY RESEARCH QUESTION

- What factors either encourage or discourage the redevelopment of Vancouver’s established neighbourhood shopping streets with mid-rise, mixed-use buildings?
1.2.2 SECONDARY RESEARCH QUESTIONS

- Why is the redevelopment of Vancouver’s neighbourhood shopping streets desirable?
- What are the existing land use conditions on these streets? (i.e. Where is successful redevelopment occurring? What streets are mostly underdeveloped?)
- What steps can planners take to facilitate further and more successful redevelopment projects on these streets?

1.3 STRUCTURE OF THE REPORT

Following this introduction, Chapter Two outlines the methodology employed to answer the report’s research questions, including a discussion of its limitations. Chapter Three provides a brief history of Vancouver’s neighbourhood shopping streets and an overview of their present conditions. Chapter Three also builds an argument supporting further redevelopment and contains a summary of the relevant policy. Chapter Four summarizes and analyzes the primary research findings. Chapter Five presents the recommendations for the CoV and development industry professionals. The report ends with a brief conclusion and identifies areas for future research.

Even with dramatically different styles, mid-rise, mixed-use buildings like these on W. 10th Ave. create a consistent, yet interesting streetwall that places additional density on a major transit line.
2.0 METHODOLOGY

This chapter begins with a discussion that frames the perspective of the report. This is followed by a review of the methods for which the relevant data was collected and analyzed to produce the report’s recommendations. Choosing and sticking to a proven research method improves the reliability of the report by clearly identifying how data was collected and analyzed during the research process (Yin, 2009). Finally, this chapter recognizes the limitations of the report’s perspective and methods.

2.1 ANALYTICAL FRAMEWORK

Although there are other residential intensification strategies to consider, the benefits of redeveloping the available capacity in the C-2 zones make it an especially attractive strategy to pursue. Successful redevelopment of this kind invariably involves a variety of actors with different perspectives. For example, developers will be primarily concerned with their project’s return on investment. Planners will want to increase housing options close to transit while maximizing public benefits. Meanwhile, an architect may be more concerned with the design of the building and how it fits with its surrounding context. While potential owners and tenants may wish for well-designed units that maximize daylight and mitigate street noise, existing neighbourhood residents may not want the building at all.

Consideration was given to all these important perspectives in attempting to define successful redevelopment. However, success in this report is most determined by whether the project was built or not. From this perspective, it is possible to determine what factors influence the developer’s decision to pursue one of these redevelopment opportunities and what strategies lead to more desirable projects. The goal of this report was to find a common interest between two of the major groups of actors listed above: public sector planners that want to increase density in established neighbourhoods and private sector
developers seeking to profit from developing these infill opportunities. A better understanding of these factors and strategies can improve conversations planners have with developers, leading to solutions that better balance the interests of all actors listed above.

Gathering information from these two groups through key-informant interviews was the primary research task of the report and contributed most to answering the research questions. The information gathered from interviews was supported with an in-depth literature review, a survey of existing land uses, and a presentation of successful case study projects recently developed in Vancouver’s C-2 zones. Collecting and triangulating data from a variety of sources can improve the validity of the research being conducted (Yin, 2009).

2.2 DATA COLLECTION AND ANALYSIS

2.2.1 LITERATURE REVIEW

As mentioned previously, the inspiration for this research began with Michael Geller’s report to the Mayor’s Affordable Housing Task Force (2012), which summarized the findings from a roundtable on building form and design in Vancouver. The report confirmed what many already know: that Vancouver’s arterials, and C-2 zones in particular, hold great potential for increasing the supply of housing close to transit. Geller made a few recommendations to facilitate further redevelopment but ultimately concluded that this capacity will likely remained relatively unfulfilled due to the many challenges confronting redevelopment.

What followed was a thorough scan of literature related to Smart Growth implementation, densification in Vancouver and the challenges of mid-rise development. Academic literature on the implementation of Smart Growth principles in Canada revealed...
that major Canadian cities, Vancouver in particular, have fared relatively well in achieving their Smart Growth objectives but that intensification corridors are more difficult to plan for than nodal development (Tomalty & Alexander, 2005; Filion & Kramer, 2012). Other literary sources including books, academic articles, newspaper articles and policy documents provided further context supporting the redevelopment of Vancouver’s neighbourhood shopping streets.

Much of the literature review on the challenges of mid-rise development came from papers, presentations, and workshop summaries from two symposiums on the topic: the City of Toronto’s 2005 *Urbanizing the Avenues* and the Canadian Urban Institute’s 2009 *Breaking barriers, building confidence: Making midrise work in Ontario*. The desire to redevelop Toronto’s avenues has long been stated in official policy, but implementation has proven difficult and the plan to ‘urbanize the avenues’ has only recently met some success. Resources from both symposiums outlined some of the policy, economic, and design challenges inhibiting redevelopment in Toronto and other municipalities. These resources provided substantial direction for formulating the interview questions for Vancouver planners and developers facing similar challenges.

### 2.2.2 LAND USE SURVEY

In order to get a better idea about which shopping streets are being redeveloped, a simple land use survey of building heights and uses was undertaken on select streets in the C-2 zones. The streets that were included in the survey served a variety of neighbourhoods outside the downtown peninsula. Each street is also flanked by either single or two family dwelling districts. The explanation for this condition was simply that these neighbourhoods could arguably benefit most from the addition of a greater variety of housing options.
However, the presence of abutting low-density development can also make these streets more challenging to redevelop.

Parcel borders and zoning information was gathered from the CoV’s Open Data catalogue to make maps of these streets using GIS software. Google Streetview was then used to determine building heights and whether they contained residential units above the first storey of commercial. After returning to Vancouver in April 2013, a ‘windshield survey’ of the selected streets was undertaken to verify if further redevelopment had taken place since Google Streetview was last updated. The results of this land use survey are in the following chapter and the building heights maps of selected streets are in APPENDIX B.

2.2.3 BUILDING PRECEDENTS

APPENDIX A contains a selection of five successful building precedents that have recently or will soon be built in the C-2 zones. Despite the report’s simplified perspective that any built project is a successful project, not all projects are created equal. It was tempting to focus only on those most innovative projects, however those also tended to be the most expensive. Therefore this approach would ignore the City’s intention to use arterials to provide more mixed income housing options (City of Vancouver, 2012). It was also tempting to focus on projects built on smaller sites since they are less intrusive and retain greater diversity in the built form than larger projects. However, this approach would ignore how larger projects are more financially feasible for developers. For these reasons, the building precedents that were selected are intended to represent projects that were developed under a variety of circumstances: on small lots, on large lots, within the existing zoning, or with a rezoning, for rent, condominiums, etc. They also span a large geographical range of the city, including sites near and far from major employment areas. The only requirement was that the project was built on one of Vancouver’s neighbourhood shopping
streets and that they were approved within the last ten years. Precedents were selected with the assistance of an appointed member of the CoV’s Urban Design Panel.

2.2.4 INTERVIEWS

The purpose of this research was to document the challenges and success factors related to redeveloping Vancouver’s neighbourhood shopping streets. Therefore, the majority of the interviews were with residential developers in Vancouver with experience doing mid-rise, mixed-use project. To provide further perspective, some private sector architects and planners were also interviewed. Since interview participants were targeted based on their experience with mid-rise, mixed-use buildings in Vancouver, developers involved in the building precedents were the first to be contacted for an interview. In some cases, contact information for other potential interview participants was passed on from these developers to the researcher. Other interview participants included personal contacts involved in Vancouver’s building industry.

In addition to the interviews with professionals in the private sector, this research also included interviews with current and former CoV planners. The purpose of these interviews was to gain further insight into the CoV’s vision for these streets as well as provide an opportunity to address the developer’s opinions from a public planner’s perspective. For this reason, the public sector interviews took place after having analyzed the interviews with developers. Amongst the 15 interview participants, seven were either developers or planners working for development firms, three were architects, and five were current or former public sector planners.

The preferred setting was for the interviews to take place in person. However, some had to take place over the phone or over email due to time and budget constraints. The questions were different for interviews with private and public sector professionals (See
 However, they followed a similar format and covered some of the same themes from financial barriers, to optimal site conditions, to design strategies, and so on until finishing with questions about regulations and the CoV permitting process. With developers, the interviews began with open-ended questions about redevelopment opportunities in general along Vancouver’s neighbourhood shopping streets. As more lines of inquiry were opened up, developers were then asked to elaborate more specifically on the challenges that were faced in their own projects and the critical success factors that enabled them to succeed. Interviews with planners were slightly less structured, beginning with a discussion on the future of these streets, the potential benefits of redevelopment and important neighbourhood issues associated with redevelopment. These interviews finished with questions about being opposite developers during the permitting process and associated negotiations.

Following the interview questions, developers were asked if they were willing to participate in a modified version of Linda Kone’s site selection matrix (2000: 121). In this Hypothetical Site Selection exercise, the five developers that agreed to participate were first asked to weight a list of criteria of site characteristics by level of importance. Additional space was provided at the bottom of the table if there was other important criteria the developers felt was missing. The developers were then given handouts on four hypothetical redevelopment sites containing images and location information on each site. Developers then ranked each site according to the criteria. The purpose of the exercise was to quantify what factors developers found to be most important when considering the redevelopment of a site on Vancouver’s neighbourhood shopping streets. The handouts and results of the Hypothetical Site Selection exercise are in APPENDIX D.

Once all the data from the developer interviews was collected and transcribed, latent
content analysis was utilized to identify key factors in the responses from each interviewee. Upon identifying these key factors, they were organized into five broad categories:

1. Market Factors
2. Financial Factors
3. Site Factors
4. Land Use & Urban Design Factors
5. Regulatory & Permit Processing Factors

There is considerable overlap between the categories since the success of each project is determined by a holistic analysis of all factors. However, these five categories best covered the range of discussion topics that were raised in the developer interviews. The results of the latent content analysis from the developer interviews formed the foundation of the Findings Chapter. Content from the interviews with planners was also included in the Findings as a way to counterbalance some of the developers’ comments. However, content from the interviews with CoV planners had a greater role in formulating the report’s recommendations.

2.3 LIMITATIONS

The need to increase residential density in Vancouver’s low-rise neighbourhoods is firmly established. The many reasons to pursue a strategy of implementing intensification corridors are outlined in the following chapter. Despite the benefits of directing more dwelling units on Vancouver’s relatively underdeveloped neighbourhood shopping streets, the replacement of vacant lots and one or two storey buildings with mid-rise buildings still represents significant neighbourhood change. Though less offensive to density-opposed residents than the introduction of high-rise towers, mid-rise buildings are still frequently met with opposition from existing residents. This report does include some discussion of how opposition can cause delays in the development process, but the complicated role of the
general public in development is not addressed further. There are other important
neighbourhood issues involved in the redevelopment of these streets that warrants further
consideration and research.

First is the issue of the changing character and type of commercial that tends to
follow when old single-use buildings are replaced with stratified mixed-use buildings. This
issue was discussed with developers and is included in the Findings chapter. However,
further investigation into the changes in type of commercial tenant and rents charged after a
site is redeveloped would be beneficial. Second, there is considerable evidence that
suggests that redevelopment marketed to urban elites in less affluent neighbourhoods
facilitates gentrification (Quastel et al. 2012). This report argues that mid-rise buildings on
arterials can add more rental units and relatively more affordable housing ownership options
in Vancouver’s low-rise neighbourhoods. However, this argument becomes more complex
when you consider the effects of new condominium developments being built in
Vancouver’s less affluent neighbourhoods, the downtown eastside in particular, where
gentrification has until recently been relatively impeded (Ley & Dobson, 2008). Commercial
and neighbourhood change that occurs as a result of the redevelopment of Vancouver’s
shopping streets are multi-dimensional matters that could not be adequately addressed in
this report. Future research that addresses the perspectives of commercial tenants and
existing residents would be of great value to the planning profession.

This report analyzes the factors affecting redevelopment along Vancouver’s
neighbourhood shopping streets. Many, if not all, of these factors play a key role in
developer pro formas and market analysis studies, the key decision-making tools that are
used to determine the feasibility of a mid-rise, mixed-use project. Pro formas ultimately
determine what is either included or left out of the final product. Unfortunately, the
developers interviewed with projects in the C-2 zones were not willing to share their pro
formas with the researcher. Therefore in order to understand how these factors inform developer pro formas, it is recommended that planners become familiar with basic development feasibility analysis. Developers were also not easily accessible and therefore the interviews only represent a small sample size of Vancouver’s development community. Content from primarily commercial developers that is absent from this report would have also contributed significantly to its findings.

Nonetheless, intensification corridors are commonly encouraged by Canadian cities looking to increase residential densities, reduce greenhouse gas emissions, and conserve agricultural land. Although many of the factors discussed in this report are unique to the context of Vancouver, there may still be lessons that can be applied to other Canadian cities. Therefore, the findings of this research may also be useful for planners and developers in other communities that are looking to provide more housing options on shopping streets in low-rise neighbourhoods.

Main Street on Car Free Day in Vancouver: These shopping streets frequently hold special events and gatherings but are still beloved by residents for their everyday functionality.
3.0 CONTEXT

Vancouver is frequently referred to as the City of Glass, a nickname bestowed on the city for its downtown peninsula full of narrow glass towers. Despite this close association with its downtown, the vast majority of Vancouver’s land mass is devoted to low-rise neighbourhoods. Over 50% of Vancouver’s land is still covered with single-family homes (BTA Works, 2013). A system of arterial roads spaced a half mile apart, including 10th Avenue, Dunbar Street, Broadway, 41st Avenue, Main Street, among others, passes through and connects these neighbourhoods, in some cases leading to the downtown and other major employment centres. According to former CoV Director of Planning Brent Toderian, the city’s “fine grain system of arterials is one of the resilient strengths of Vancouver.” This chapter tells a brief history of the Vancouver arterials that became the city’s neighbourhood shopping streets, which is followed by an overview of the existing conditions on selected streets. It builds a case for why they should continue to be redeveloped with mid-rise, mixed-use buildings. Finally, a critical review of the policy supporting redevelopment is provided.

3.1 HISTORY OF VANCOUVER’S ARTERIALS

Vancouver’s neighbourhoods are oriented around its arterials, which once formed the city’s streetcar network (Fig. 2). When a streetcar line was extended, neighbourhoods grew laterally from the tracks (Condon, 2012b). Therefore, the area roughly within a five-minute walk from either side of 10th Avenue became Point Grey, from Dunbar Street became Dunbar, from 41st Avenue became Kerrisdale, from Broadway became Kitsilano, Fairview and Mt. Pleasant, and so on. Long stretches on some of these arterials functioned as neighbourhood commercial districts lined with grocery stores, restaurants, clothing stores, barbershops and pubs.
Fig. 2. The evolution of Vancouver’s streetcar network

The streetcar started to fall out of favour after the private automobile became readily available in the 1920s. No longer able to move smoothly along their tracks, the streetcar was gradually replaced with free-moving trolley coaches and motorized buses until the last one was removed in the 1950s (Condon, 2012b). Land uses on these shopping streets are still present from the different transportation eras, including mostly neighbourhood retail, some office, but also automobile-oriented development such as strip malls, service shops, gas stations, drive-thru restaurants and surface parking lots. These commercial areas are relatively dispersed throughout Vancouver’s low-rise neighbourhoods. As a result, virtually every house in every neighbourhood is not far from one of these shopping streets.
The C-2 zones were introduced in the 1956 zoning by-law complete with discretionary uses. Initially, the C-2 zoning district primarily encouraged commercial uses only. Occasionally, you would see a second storey with a few dwelling units, perhaps for the shopkeepers themselves. Some shopping streets and the areas along them are zoned slightly differently than others, though most are only small variations on the C-2 zoning category (see 3.4 POLICY FRAMEWORK). In 1989, the CoV removed the disincentives to providing residential in the C-2 zones, creating a potential 5500 additional dwelling units in the process (Punter, 2005). However, the developments that followed were not well received by the community, the development permit board and urban design panel (UDP). Due to rising concerns over the scale, quality of design and impacts on adjacent residential, all projects after 1998 were required to go to council and many were rejected (Punter, 2005). A review of the zoning was undertaken to address these issues and the zoning was officially revised in 2003, once again increasing the number of potential dwelling units through further redevelopment.

The first mid-rise, mixed-use developments built in the C-2 zones following changes to the zoning bylaw in 1989 drew opposition from existing residents and criticism from the Urban Design Panel.
3.2 OVERVIEW OF EXISTING CONDITIONS

Development in the C-2 zones appears to be accelerating, but only on some streets, and not all along them. A major factor facilitating development appears to be transit accessibility and proximity to downtown and other employment centres. On West Broadway, West 4th Ave., and West 10th Ave., development is likely occurring in anticipation of the expected rapid transit line to UBC. As one online article announcing a new project on Fourth Avenue states, “Kitsilano mid-rise keeps rising.” Main Street, probably due in part to its proximity to the Canada Line, is also experiencing significant development. On many other streets however, the pattern of single storey commercial buildings remains. On Commercial Drive for example, there has been virtually no redevelopment as the shop owners have so far shown no interest in selling or developing their properties. Of course, this could all change in the future. The building height maps provided in APPENDIX B demonstrate a cross-sectional display of which streets have been redeveloped the most and which remain ‘underdeveloped’ relative to the existing zoning.

3.3 WHY ENCOURAGE SHOPPING STREET REDEVELOPMENT?

3.3.1 VANCOUVER’S CORRIDORS CONTAIN THE CAPACITY TO ACCOMMODATE GROWTH

According to numerous population projections, Metro Vancouver’s population is expected to rise to 3.5 million people by the year 2050. Depending on how population is distributed between the region’s 21 municipalities, it is not out of reach to project the CoV’s 2050 population to reach one million by 2050, when all BC municipalities are aiming to cut greenhouse gas (GhG) emissions by 80%. Bordered by the Pacific Ocean and its neighbouring municipalities, Vancouver has no other choice but to accommodate its population growth through intensification. The city’s more than 200 km of corridors, defined as the first half block on either side of arterials, contain considerable capacity to absorb this...
population growth. In a residential capacity study by Condon and Belausteguigoitia (2006), it was found that Vancouver’s corridors could accommodate over 360,000 total dwelling units, 223,358 on all corridors assuming a built form of four storey buildings and 137,760 in high-rise towers at designated nodes. Further assumptions were that 60% of the corridor buildings were mixed-use with ground floor commercial and that industrial lands were kept available for that purpose.

It should be noted that there are some issues with considering the housing capacity on arterials, especially in the mixed-use shopping street areas. Many commercial property owners may be uninterested in locating in mixed-use buildings. Despite the widespread acceptance of mixed-use as a desirable planning principle, mixing some uses still does not necessarily lead to the best results (Grant, 2002). Therefore, these capacity figures are likely inflated. Nonetheless, the take away is that significant additional capacity lies in Vancouver’s neighbourhood shopping streets, where four storeys is allowed as-of-right under the existing zoning. As the building height maps in APPENDIX B demonstrate, much of this capacity is currently unfulfilled.

3.3.2 INTENSIFICATION CORRIDORS ALIGN DENSITY WITH TRANSIT AND CONTRIBUTE TO A SUSTAINABLE URBAN FORM

Intensification of the existing built form is widely accepted as a more environmentally sustainable form of development than dispersed suburban expansion (Jabareen, 2006). By minimizing the distance of trips to encourage walking and cycling and by increasing the viability of public transit systems, compact, high-density, mixed-use urban environments can reduce GhG emissions (Godschalk, 2004). They also make more efficient use of land and infrastructure services. In addition, there is growing support behind the idea that denser urban environments are linked to heightened levels of productivity, innovation and creativity by enabling greater human interaction (Florida, 2002; Glaeser; 2011).
Sustainable cities can take many forms. However, integrating land use planning with public transit contributes most to creating an environmentally sustainable city that also balances the needs for housing, mobility, access, equity, productivity, and liveability. In Vancouver, the gradual intensification of transit corridors with mid-rise buildings of four storeys high can achieve a density of 137 dwelling units per hectare (Condon & Belausteguigoitia, 2006), a level that creates favourable conditions for transit use (Condon, 2012c). It also spreads density along transit lines rather than around single stations, both connecting existing and creating new destinations.

Compact structures of four to six storeys are more resilient over time and are more efficient from a passive energy perspective (Fig. 5). Four storey mid-rise buildings are also usually made of wood, which is the best principal material available for building structures with respect to embodied energy use, carbon emissions, and water usage (Green, 2012). Concrete is ten times more GhG intensive than wood. High-rise buildings clad substantially in glass are also much less energy efficient, using twice as much energy per square metre according to BC Hydro data (Condon, 2012c).

Fig. 5. The effect of building envelope to volume ratio on energy efficiency

Source: City of Vancouver Passive Design Toolkit, 2009
3.3.3 VANCOUVER’S AGING POPULATION AND RISING UNAFFORDABILITY DEMANDS MORE DIVERSE HOUSING OPTIONS

Vancouver’s form has, to some extent, been historically shaped by demographics. The city’s low-rise neighbourhoods were built for incoming workers and families who could afford the newly available cheap land. In the 1970s, the ‘Vancouver Special’ provided relatively affordable housing for small families and working class immigrants. Much of the demand for condominiums in the City’s downtown high rises is attributed to the influx of wealthy newcomers, particularly ‘investor class’ immigrants and speculators, that started arriving following Expo 86 (Olds, 1995; Moos & Skaburskis, 2010).

Fig. 3. Projected demographic change in Metro Vancouver from 2001 to 2056

The population of Metro Vancouver aged 65 and over is expected to double by the year 2056 (Condon, 2006a). Vancouver also frequently appears on lists of Canada’s, and even the world’s most expensive housing markets. Unfortunately, many frequently referenced studies fail to include important factors such as transportation costs or even neglect to consider affordability for renters. Nonetheless, Vancouver is increasingly becoming an unattainable place to live, especially for young people. Gone are the days when young families can afford a single-family house (Fig. 4). In 2013, 54% of the single-family properties in Vancouver were valued at higher than $1,000,000, up from 34% in 2009 (BTA Works, 2013). It is almost a certainty that no new single-family lots will be built in
Vancouver. Therefore, the next wave of housing will need to meet the dual challenge of a rapidly aging population and an affordability crisis that is driving young adults to leave the city (Condon, 2012a). Mid-rise, mixed-use buildings on arterials can accommodate both people looking to downsize and those just entering the housing market. Many projects with private enclosed courtyards are also quite suitable for young families. These projects provide relatively more affordable housing options close to existing neighbourhood schools. The location close to shopping, health clinics and other support services also benefit elderly people looking to downsize but remain in their neighbourhoods.

Fig. 4. 2013 property values for Single Family Home (RS) districts in the CoV

Source: BTA Works, 2013
3.3.4 MId-RISE BUILDINGS CAN CREATE HuMAN-SCALED URBAN ENVIRONMENTS

Jane Jacobs (1961) clearly expressed an affinity for human-scaled buildings. For Jacobs, the three to four storey apartment buildings in Greenwich Village, NY, provided “eyes on the street” while contributing enough density to create diverse, vibrant, walkable neighbourhoods. Warning against Le Corbusier style towers, she stated that too much density can “begin to repress diversity instead of stimulate it... [which] is the main point in considering how high is too high.” Vancouver has done well by its downtown towers. However, the recent controversy and community uproar over proposed high-rise developments in the otherwise low-rise Mount Pleasant neighbourhood suggest they are not welcome everywhere (Ditmars, 2012). In contrast, mid-rise buildings provoke much less community opposition. They “frame and tame” the street, allow more daylight in an area, and foster a greater sense of community (A Convenience Truth, 2011). In Allan Jacobs’ review of the requirements for Great Streets (1995), he advocates for street width to building height ratios that create physical comfort. Although there is a tendency for Vancouver developers to attempt to assemble adjacent arterial properties to accommodate larger projects, A. Jacobs also believes that “more buildings along a given street length contribute more than do fewer buildings” (1995: 292). Smaller-scale, fine-grain redevelopment of Vancouver’s neighbourhood shopping streets retains greater diversity and allows more developers and architects to participate in the construction of the city.

3.3.5 SUMMARY

Vancouver’s existing urban structure of arterials “is a gift that provides opportunities for connectivity, proximity and immediacy” (A Convenience Truth, 2011). Though still troubling from an affordability perspective, Vancouver’s housing market does make mid-rise buildings of only four storeys more feasible than elsewhere. Replacing rudimentary one
storey commercial buildings on Vancouver’s shopping streets with mid-rise wood frame buildings along Vancouver’s arterials can both decrease transportation and building related energy consumption while creating connected, complete neighbourhoods that do better to meet the housing needs of Vancouver’s changing population.

### 3.4 POLICY FRAMEWORK

Unlike other municipalities in BC, the CoV is not required to have an Official Community Plan. In fact, the CoV has not had a comprehensive physical plan since Bartholomew’s 1929 Plan. It is fair to say that much has changed since then, when a full 20.9% out of the 22% of land zoned residential was for single-family use (Price, 2012). In the absence of a citywide plan, growth and development is guided predominantly by the CoV’s Zoning Bylaw. This is not to say there haven’t been policies aimed at developing a cohesive vision for Vancouver. In the 1980s (Living First Strategy) and early 1990s (Central Area Plan), policy primarily focused on increasing residential densities in the downtown area (Punter, 2005; Hutton, 2004). The 1995 CityPlan identified neighbourhood centres but was less about physical planning and more about consensus building and public engagement (Punter, 2005). Although development in the downtown core and central area continues, the CoV has since adopted policy to densify its established primarily low-rise neighbourhoods outside the downtown.

#### 3.4.1 CITY OF VANCOUVER ZONING AND DEVELOPMENT BYLAW

The general intent of the C-2 zoning category is to:

“Provide for a wide range of commercial uses serving both local and city-wide needs, as well as residential uses, along arterial streets. Emphasis is on building design that furthers compatibility among uses, ensures livability, limits impact on adjacent residential sites, and contributes to pedestrian interest and amenity.”

The maximum FSR in the C-2 zone is 2.5 including all combined uses. The relationship with abutting single-family homes is strictly managed by the required set backs and height
restrictions in the Zoning Bylaw (Fig. 6). As stated previously, there are some variations worth noting. The C-2B zone has the same max FSR but is intended to serve bigger neighbourhoods in central locations. Streets zoned C-2B are usually flanked by higher density residential development, such as apartments and townhouses. The C-2C and C-2C1 zones are also intended to serve central locations but explicitly encourage the “creation of a pedestrian oriented district shopping area by increasing the residential component and limiting the amount of office use.” To achieve this, a higher FSR of 3.0 is permitted.

**Fig. 6. The building envelope in the C-2 zone**

![Diagram](source: City of Vancouver Zoning & Development Bylaw 3575 – C-2 District Schedule)

### 3.4.2 CITY OF VANCOUVER ECODENSITY CHARTER

Adopted under NPA mayor Sam Sullivan in 2008, the EcoDensity Charter was a policy document aimed at extending densification from the central core to the city’s established neighbourhoods. The Charter commits to meeting the dual challenges of climate change and rising costs of living with “strategic, well-managed density, design and
Greater densities are specifically encouraged close to existing transit, walkable shopping and amenity areas. Affordability is encouraged through increasing supply and variety of housing options, while facilitating rental and non-market projects. There was some concern from residents and critics of the majority leading NPA political party that EcoDensity would simply mean more pricey condominiums (Quastel et al., 2012). Indeed, affordability is inversely related to higher densities in Vancouver (Alexander & Tomalty, 2002). However, this pattern is not unique to Vancouver, where the effects may be exacerbated due to the fact that supply has not as of yet kept up with demand. EcoDensity was quietly dropped in 2009 when Vision Vancouver candidate Gregor Robertson took over as mayor. However, many EcoDensity initiatives, laneway housing for example, remain in place and the term is still frequently associated with Vancouver’s model of city building.

### 3.4.3 CITY OF VANCOUVER GREENEST CITY ACTION PLAN

EcoDensity was replaced in 2012 by the Greenest City Action Plan (GCAP), which has the objective of making Vancouver the ‘greenest city in the world’ by 2020. The GCAP takes a more holistic approach to sustainability, emphasizing the importance of a green economy and deferring density as a means to achieve one of its ten goals: “to make walking, cycling, and public transit preferred transportation options.” Providing new housing options in existing walkable neighbourhoods that support transit infrastructure is encouraged under this goal. The GCAP also focuses on green building design and construction through interrelated regulatory mechanisms, incentives, and education initiatives.

### 3.4.4 CITY OF VANCOUVER HOUSING AND HOMELESSNESS STRATEGY 2012-2021

In the continued absence of major provincial and federal funding of housing, the new majority leader Vision Vancouver has focused extensively on housing policy. The Housing
and Homelessness Strategy (HHS) outlines the strategic directions the CoV is taking to ameliorate its affordability challenges. Though much of the document is dedicated to social housing strategies, there is also significant emphasis on protecting and building the rental housing stock and providing a greater mix of market housing options in all Vancouver neighbourhoods. Specific policies that offer relaxed height and density requirements to developers in exchange for rental units are discussed in further detail in the findings chapter.

3.4.5 CITY OF VANCOUVER TRANSPORTATION PLAN 2040

The CoV’s Transportation Plan sets an ambition mode share target that by 2040 at least two-thirds of all trips will be by foot, bike, or transit. Land use planning is the document’s first policy direction, a reflection of its significance to achieving this goal. Like EcoDensity and the GCAP, the Transportation Plan prioritizes “a dense and diverse mix of services, amenities, jobs and housing types in areas well-served by transit.” It also emphasizes the need for well-designed buildings that contribute positively to a pedestrian-friendly public realm.

3.4.6 METRO VANCOUVER 2040 REGIONAL GROWTH STRATEGY

The latest RGS for Metro Vancouver adopts more of nodal strategy encouraging development in designated Urban Centres, including the Metropolitan Core and other Regional City and Municipal Town centres. However, it also encourages corridor development that aligns with TransLink’s Frequent Transit Network. Though criticized by some for being too weak, Metro Vancouver has successfully raised its authority through the adoption of its regional plans and growth strategies (Sancton, 2001). All Metro Vancouver municipalities must make land use decisions that comply with the RGS.
4.0 FINDINGS: FACTORS THAT ENCOURAGE OR DISCOURAGE REDEVELOPMENT

This chapter summarizes and analyzes the main findings from the interviews with developers. Though organized into five overarching factors, all sections contain variables that impact the feasibility and quality of redevelopment projects along Vancouver’s established neighbourhood shopping streets. These include potential barriers to redevelopment and the success factors that ultimately allow them to be overcome. When appropriate, information gathered from the interviews with planners is also found throughout the chapter. However, the primary purpose is to understand some of the thought processes developers must go through when contemplating a redevelopment project in Vancouver’s C-2 zones.

4.1 MARKET FACTORS

“The market is very directive. You really can’t go outside the market and expect to have a successful project... Product is not flying off the shelves but our mid-rise projects are doing particularly well.”

- Interview Participant (Developer)

4.1.1 HOUSING MARKET

Although there are a host of factors that can make or break a new housing project, the developers that were interviewed agreed that the market is the driving force behind residential development in Vancouver. Developers did talk at lengths about all the variables that increase the costs of providing new housing in Vancouver including construction costs, development fees, processing delays, etc. However, there are many people who believe the market sets prices and a reduction in costs will only increase developers’ profits. According to Anne McMullin, president and CEO of the Urban Development Institute, “increased costs will inevitably be passed on to homebuyers or the viability of building new market housing will be suppressed. She adds: “Costs affect supply – if it’s too expensive to build, you’re
going to limit the supply” (qtd in Sherlock, 2013). According to one planner at the CoV that was interviewed, these costs are not directly passed onto homeowners but rather impact the value of land being sold to developers.

The primary drivers of high land values in Vancouver are the constraints to its land supply and the high demand for housing. Vancouver is an incredibly attractive place to live, which is confirmed by the constant placing of the city at the top of most liveability rankings. Needless to say, there is a very strong demand for a more diverse range of housing options in Vancouver’s amenity-rich low-rise neighbourhoods. This high demand and limited supply, more than anything, is the main reason behind Vancouver’s expensive housing market. Mid-rise, mixed-use buildings on arterials can offer more diverse housing options in these neighbourhoods. Unfortunately, the high costs of development likely do more to limit supply and the ability to provide a wider variety of price points in smaller projects such as those in the C-2 zones.

4.1.2 NEIGHBOURHOOD APPEAL

Developers building in the C-2 zones are fully aware of the appeal of these neighbourhoods, which is evident in their marketing of projects. Because mid-rise buildings are usually not large enough to contain amenities typically found in high-rise buildings such as exercise rooms and swimming pools, developers rely on promoting existing neighbourhood amenities including cafes, restaurants, parks and entertainment venues (Fig. 7). There is emerging evidence that buyers in North American cities are drawn to ‘walkable urbanism’, defined as mixed-use, compact, amenity-rich, transit-accessible neighbourhoods (Leinberger & Alfonzo, 2012). The developers interviewed from Vancouver echoed this sentiment and demonstrated a strong preference in the Hypothetical Site Selection exercise for locations that had greater amenities and better access to transit.
Fig. 7. A map of nearby amenities on the marketing website for a mid-rise, mixed use project on Broadway

Neighbourhood Amenities

Cafes
1. Gene
2. Our Town
3. Rhizome Cafe
4. Cuppa Joe
5. Roosted Cafe
6. Bean Around the World
7. JJ Bean

Entertainment
8. Grace Gallery
9. VIVO Media Arts
10. The Anza Club
11. Fox XXX Cinema
12. Goh Ballet
13. Guys and Dolls Billiards
14. Planet Bingo

Neighbourhood Amenities
15. Mount Pleasant Community Centre
16. Kingsgate Mall
17. IGA Marketplace

Specialty Services
18. Yoga on 7th
19. Tattoo Union
20. Banana Tans
21. Gaming Arena
22. Mount Pleasant Optometry Center
23. Animal Wellness Hospital
24. Capoeira Ache Brasil Academy
25. Launder-All Dry Cleaning
26. Happy Bats Video Rental

Specialty Shops
27. Refind Antique
28. Architectural Antiques
29. F as in Frank Vintage Clothing
30. Sherry Convenienc Store
31. Mr. Lee’s General Store
32. VGH Thrift Shop
33. Western Town Boots and Apparel
34. Atic Computers
35. Mighty Riders
36. On the Rivet Clothing
37. Salvation Army Thrift Shop
38. Company of Cars

Additional Features
39. Park
40. Mount Pleasant Elementary School
41. Florence Nightingale Elementary School

Source: http://www.liveonque.com/index.html
4.1.3 TARGET DEMOGRAPHICS

Typical buyers in mid-rise, mixed-use buildings include young people entering the market and aging empty nesters or retirees. The younger demographic are attracted to the urban lifestyle and are generally more tolerant of the higher noise levels on the street-facing units, which are usually priced lower than quieter rear-facing units. In some cases, they may not have a car or are wishing to get rid of the one they have. The types of people who buy units in these projects is very much dependent on the neighbourhood. According to one developer with projects in the more affluent Westside, their purchasers are often older people from the local neighbourhood looking to downsize. They like the neighbourhood and perhaps more importantly from an aging in place perspective, are familiar with it. This geographic trend was confirmed by data obtained from MPC Intelligence, which also shows that younger people comprise a greater percentage of buyers in the more affordable Eastside (Table 1).

Table 1. Buyer types for projects on the market from Jan 2005 to Mar 2013

<table>
<thead>
<tr>
<th>Primary Buyer Types</th>
<th>Westside</th>
<th>Eastside</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; 10 storeys</td>
<td>7-10 storeys</td>
</tr>
<tr>
<td>Young Singles</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Young Couples</td>
<td>29%</td>
<td>46%</td>
</tr>
<tr>
<td>First Time Buyers</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Empty Nesters</td>
<td>22%</td>
<td>38%</td>
</tr>
<tr>
<td>Retirees</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>Immigrant Buyers</td>
<td>61%</td>
<td>38%</td>
</tr>
<tr>
<td>Investors</td>
<td>56%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: MPC Intelligence, 2013
When asked about the breakdown of unit sizes and number of bedrooms provided, developers did not seem overly concerned with targeting a specific ratio. Instead, simply creating units that work was deemed more important. More family-friendly three-bedroom units, which are priced per square foot and are therefore unaffordable for most families, are currently not very feasible in Vancouver. The market for three bedroom apartments is also less established, which creates greater risk that a large million-dollar unit will remain empty. The market is of course less established because there aren’t many three-bedroom units available, but it is easy to understand why builders may be concerned with devoting so much space to an expensive unit, especially in smaller mid-rise projects. One developer suggested that the CoV might consider incentivizing family-sized units in condo buildings.

**Fig. 8. The breakdown of number of rooms provided per unit in wood frame projects under six storeys**

- **Westside (25 Projects)**
  - 1 Bedroom: 54%
  - 2 Bedroom: 31%
  - 3 Bedroom: 12%
  - Other: 3%

- **Eastside (41 Projects)**
  - 1 Bedroom: 47%
  - 2 Bedroom: 47%
  - 3 Bedroom: 2%
  - Other: 4%

Source: MPC Intelligence, 2013

**4.1.4 SUMMARY**

Regardless of the challenges facing the redevelopment of these streets, full build-out under the existing zoning should not be expected if it exceeds market demand. Although mid-rise, mixed-use buildings do very well in Vancouver’s strong housing market, due in
part to the growing appeal of ‘walkable urbanism’, land speculation and developer ambition means that much of the market for new units is absorbed by larger projects. As evidenced by the new developments in South East False Creek and the massive planned redevelopment of the Oakridge Mall, there is still a strong inclination for megaprojects in Vancouver that disrupts more incremental forms of growth. The breakdown of typical buyers in mid-rise buildings suggests that they are offering more diverse housing options for both young and old demographics. However, housing families with more than one child remains a challenge.

4.2 FINANCIAL FACTORS

“Mixed-use is a challenge, but we have a lot of experience with it and are quite good at it…. Mid-rise is definitely not as profitable as high-rise.”

- Interview Participant (Developer)

4.2.1 MID-RISE ECONOMICS

Relative to high-rise construction, the economics of developing mid-rise buildings can be challenging. Many of the consulting, marketing and even construction costs in multi-unit residential buildings are fixed. The height restrictions placed on mid-rise buildings therefore make them more expensive to build on a per-unit basis than high-rise buildings. In mid-rise projects, you cannot simply increase profits by adding another layer of floor plans, which can “make up the gravy for developers” (Flaxman, 2010). Building straight up is much less cost-efficient than including terraces and angular planes, which are required in most mid-rise projects. Because units in high-rise and mid-rise buildings sell at a comparative price, developers doing mid-rise projects are forced to make more efficient use of space and must constantly look for ways to keep costs down. This can be difficult in Vancouver’s competitive new housing market, which requires extensive marketing and demands high quality finishes. Mixed-use projects can be especially challenging due to their inherent
complexities. For example, providing the necessary fire and noise separation between uses adds substantially to construction costs.

4.2.2 CONSTRUCTION MATERIALS & TECHNIQUES

Mid-rise, mixed-use buildings in the C-2 zones benefit from the lower costs of wood-frame compared to concrete construction. Table 2 provides an estimated range of on-site construction costs per square foot for medium and high quality building types and materials in the Westside and Eastside neighbourhoods of Vancouver.

Table 2. The on-site construction costs of a medium and high quality project per square foot

<table>
<thead>
<tr>
<th>Building Type/Materials</th>
<th>Storeys</th>
<th>Westside</th>
<th>Eastside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete; underground parking</td>
<td>&lt; 12</td>
<td>$246.10</td>
<td>$263.24</td>
</tr>
<tr>
<td>Wood-framed residential; underground parking</td>
<td>≤ 6</td>
<td>$173.34</td>
<td>$185.41</td>
</tr>
<tr>
<td>Mixed-use commercial/residential; underground parking</td>
<td>≤ 6</td>
<td>$177.62</td>
<td>$189.99</td>
</tr>
<tr>
<td>Mixed-use commercial/residential; without underground parking</td>
<td>≤ 6</td>
<td>$149.80</td>
<td>$160.23</td>
</tr>
</tbody>
</table>

Source: Butterfield Development Consultants LTD. Cost Index Calculator. Available at: http://www.bdconsultants.com/tools/costindex

Due to the lower costs of wood-frame, the majority of developers doing projects in the C-2 zones opt for a combination of wood-framed apartments over concrete CRUs and underground parking. Underground parking adds substantial costs but remains necessary in C-2 projects due to municipal parking requirements. Normally, concrete construction of anything less than twelve storeys is cost-prohibitive. However, there are developers in Vancouver who have opted for complete concrete construction in C-2 projects of only four storeys, a choice only made possible by the premium buyers pay for housing in Vancouver. According to one developer builds opts for concrete in mid-rise projects rationalized their
decision by the ability to sell the units at a higher price due to the superiority of the product, claiming “it’s cooler, quieter, and sturdier” (Table 3).

There was considerable excitement in the development industry after the 2009 changes to the B.C. Building Code increasing the height limit for wood-frame construction from four to six storeys. The belief was that it would improve the viability of mid-rise projects and lead to a more affordable product for builders and buyers. However, the results so far have been disappointing. According to one developer, the additional complexities and requirements of building wood-frame at six storeys negate any significant savings over using concrete construction. This is especially true of C-2 projects that are more complex and expensive to build due to the requirements for terraced step backs after three storeys above grade. As a result, it was suggested that six storey wood-frame C-2 projects would not be built because buyers will want concrete construction at that cost.

### 4.2.3 COMMERCIAL TENANTS

The development models for mixed-use buildings are far more complicated than single-use buildings. A fact that gives developers with experience doing mixed-use buildings a considerable advantage. In Vancouver’s mixed-use buildings, residential units currently sell for about double the amount of commercial units per square foot. Despite this, the viability of mixed-use projects, often hinges on the success of the commercial component, especially in smaller mid-rise projects in the C-2 zones. Finding a secure, long-term commercial tenant on the ground floor can therefore be critical to success. Due to this imperative, developers favour entering into agreements with large commercial anchors (e.g. chain grocery stores and drugstores). Not only are chains easier to contact than

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Average Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>New concrete condominiums</td>
<td>$563,307</td>
</tr>
<tr>
<td>New wood frame condominiums</td>
<td>$470,391</td>
</tr>
<tr>
<td>New townhomes</td>
<td>$765,752</td>
</tr>
<tr>
<td>MLS single family</td>
<td>$1,457,000</td>
</tr>
</tbody>
</table>

Source: Urban Development Institute, 2013
independent businesses, but they also fill larger spaces, limiting the number of contracts to manage. In other words, filling one large commercial space is much easier than filling small independent spaces. One plus for developers is that large chains are recognizing the benefits of locating in mixed-use buildings and are openly seeking such opportunities. Because projects in the C-2 zones often replace the existing fabric, the loss of distinctive local businesses is a sensitive neighbourhood issue. While discouraging sameness on all neighbourhood shopping streets is an important design and planning consideration, it is also very difficult to regulate the user, which is essentially a business issue. Those lamenting the loss of local neighbourhood icons can take some solace in the fact that it rarely makes economic sense to displace a successful revenue producing business.

4.2.4 TYPE OF TENURE

When all units are stratified as condominiums, the residential owners typically hold majority control of the strata council over business owners. This imbalance of power is often detrimental to the success of the commercial businesses, as residential owners advocate for their own rights. Although selling stratified CRUs provides immediate income to developers, holding and managing the commercial component provides a long-term revenue stream that can be used to finance future projects. Two developers that were interviewed were adamant that the commercial component should be held and managed carefully for the benefit of the building and neighbourhood. Their reasoning is based on the belief that stratified CRUs often don’t work well together, tend to have higher vacancies, and are difficult to consolidate, which leads to less long-term flexibility. The additional support that a commercial manager provides may also help independent businesses locate in mixed-use buildings. Unfortunately, smaller developers with less working capital may not
have the resources or expertise to hold and manage CRUs. Further discussion of the functioning of CRUs is under the design factors section.

Although one developer had just recently completed a purpose-built rental project, two others believed that purpose-built rental residential units have been deemed non-viable for decades. They claimed that due to the high costs of land and superior profits available from condominium development, they would never choose to build purpose-built rental dwelling units without development incentives. The CoV has come up with relatively successful incentive packages for projects where 100% of the units are purpose-built rental, including the now defunct STIR program and its replacement, Rental 100. Incentives for Rental 100 include additional density, an expedited approvals process and relaxations of some development charges. Rental incentive packages like Rental 100 are especially attractive to smaller firms looking to hold properties over the long term and that wish to minimize the high marketing costs associated with presales.

4.2.5 FINANCING

Redevelopment opportunities in the C-2 zone tend to attract development firms of varying sizes and expertise. These include large established firms that specialize in high-rise construction, medium sized firms that build primarily medium density townhouses, and small boutique firms that do exclusively infill projects. There are also firms that have owned and managed many of these commercial properties for a long period of time and are just now starting to redevelop them as the life span of the buildings begin to expire. These firms are at an obvious advantage because they already own the property, which likely has zero or minimal mortgage payments remaining. Otherwise, all developers are in the same position: trying to buy these properties from landowners at a reasonable price in order to make a reasonable return from redevelopment.
Smaller sites in the C-2 zones are generally more attractive opportunities for smaller developers, which cannot support the same cost overheads as larger firms. On the other hand, larger sites with greater potential for increased density above the current C-2 zoning are more attractive to large firms that can afford the added costs of the rezoning process. One advantage larger firms have is they can pay the equity needed outright to finance projects. Paying out-of-pocket creates interest savings and construction can commence earlier, however it also exposes developers to greater risk should unforeseen delays occur. Developers setting up financing deals in Vancouver need to demonstrate a minimum 15% return on their investment (ROI) in their pro formas.

4.2.6 SUMMARY

Despite being closer to the edge of feasibility than high-rise projects, there is nothing inherently unviable about mid-rise, mixed-use projects in Vancouver’s C-2 zones. They are generally economical to build and hit the market at a variety of price points. Although these redevelopment opportunities historically catered to smaller companies, there are now a variety of firms building mid-rise, mixed-use projects on these streets. However, the inbuilt complexity of their construction and development models is better suited to firms with experience doing similar projects. While not every builder is attracted to these smaller redevelopment opportunities in C-2 zones, there is certainly no shortage of people who want to live in the buildings once they are completed.
4.3 SITE FACTORS

“Assembling properties so you get enough frontage to make these projects profitable can obviously bring about some difficulties... [but] the magic number is often the depth of the lot.”

- Interview Participant (Developer)

4.3.1 FRAGMENTED OWNERSHIP & LOT ASSEMBLY

Even though all sites within the C-2 zones offer as-of-right zoning to build four storeys high, not all sites offer equal conditions for redevelopment, regardless of the neighbourhood. The developers that were interviewed favoured larger sites because they offer greater economies of scale and more flexibility. Larger sites in the C-2 zones include former gas stations and surface parking lots, which offer savings on demolition costs and are usually pre-assembled. Sites like these are therefore often the first to be developed and are becoming increasingly scarce along Vancouver’s neighbourhood shopping streets. The majority of sites are narrow 33 or 66 feet lots with single or two-storey commercial buildings and very fragmented ownership patterns. Although there are some examples of mid-rise, mixed-use projects with only 66 feet of frontage and one spectacular precedent on a 33 feet lot (see APPENDIX A: MONAD), developers agreed that 100 feet is ideal for a four-storey building. One developer from a large firm preferred a minimum 150 feet of frontage, or “virtually a whole block on shorter north-south streets.” In most cases, at least some assembling of successive properties is required.

Assembling properties in a row can be difficult to accomplish due to the individual motivations of every landowner. No matter the condition of their building, some landowners are simply in it for the long haul and are not interested in paying the taxes incurred from selling their property. The value of the land is ultimately decided by the ‘the highest and best value’ of the site, meaning the development potential according to the current zoning bylaw. When considering the lost revenues from the sale of a property, what some developers
explained is that the potential returns from the existing density allowed under the zoning bylaw is often not enough to facilitate the turnover at the landowner’s asking price. Moreover, it is not uncommon for landowners to holdout for a higher price during the assembly period, which increases costs associated with project delays. Funding is not typically available until after the site is completely assembled.

4.3.2 OPTIMAL LOT CONDITIONS

Developers that were interviewed preferred corner lots over mid-block lots for a number of reasons. First, the CRU at grade is often more successful and can therefore demand higher rents. Second, they offer greater flexibility in the layout of floor plans with potential for very desirable corner and side-street units that allow more access to natural daylight. Third, rear-lane parking access is simpler to design. On deeper corner lots, there is also potential for a townhouse component at grade on the side street perpendicular to the arterial. While there was some disagreement over the preferred lot frontage, there was a strong consensus surrounding the importance of lot depth. Lots need to be deep enough to allow for the related servicing (loading bays, waste, etc.) in the alley and for functional parking layouts of no more than 1 ½ underground storeys. Although 112 feet was considered sufficient, 120 feet of depth was preferred. Measurements of the depth of existing lots in the C-2 zones were not undertaken in this study. However, two developers suggested some lots were well under 100 feet and are therefore undevelopable unless dramatic reductions in parking requirements are made.

In the Hypothetical Site Selection exercise, developers demonstrated a strong preference for high-amenity neighbourhoods with good access to transit. This is not surprising given the old real-estate cliché: location, location, location! One factor that was not raised by developers, but was deemed significant by CoV planners was the orientation
of the street. Redevelopment that occurs on east/west heading streets will have a greater
shadowing impact on the sidewalks than redevelopment that occurs on north/south heading
streets.

4.3.3 SITE CONTAMINATION

Developers are well aware of the above-ground costs of construction in the C-2
zones because the development potential is so tightly managed by the CoV. What is far
less predictable and exposes developers to risks of overpaying for a property is the
underground costs. Soil type, dewatering, and contamination are all examples of factors
that can add significant costs to the excavation and clean up of a site. Many of these sites
are potentially contaminated from present or past uses including gas stations, auto repair
shops and drycleaners. Drycleaners are especially problematic due to their past prevalence
(at one time there was one on virtually every block) and the unpredictable underground
distribution of their contaminated plume. As a result, a site may have been contaminated
even if it was a neighbouring property that was once a drycleaner. Developers will consider
clean up costs when purchasing a property but may just be turned away completely if the
risks are too high. When the discovery of an unknown contamination can cost upwards of
$500,000, employing good environmental consultants and obtaining detailed historical data
becomes very important.
4.3.4 SUMMARY

The amount of frontage required for a successful redevelopment project varies on a case by case basis. With the exception of very large sites such as parking lots, gas stations, big box stores, and pre-consolidated properties, lot assembly is often required. Given the height restrictions, it would seem that profitability would increase proportionally with the amount of frontage assembled. However, the asking price and negotiation delays with landowners can quickly force developers to do more with less frontage. Other landowners simply show no interest in selling. There have been some innovative design responses on narrow sites that maintain the visual interest of the streets’ fine grain character. More significant deal breakers are the depth of the site and the potential for underground contamination. Without associated changes to policy, decreases to parking ratios and publically funded site clean ups respectively, some developers claimed many sites are presently undevelopable.
4.4 LAND USE & URBAN DESIGN FACTORS

“The building envelope in the C-2 zones are very prescriptive in order to create a neighbourly relationship with the residential behind and a dynamic public realm on the shopping street.”  
- Interview Participant (Planner)

4.4.1 ABUTTING SINGLE-FAMILY DISTRICTS

The adjacency of single-family districts presents unique redevelopment challenges. Residents who live behind proposed developments are often concerned that multistory buildings will result in blank walls that shade their property and windows or patios that reduce privacy. They may also be concerned with the increased traffic related noise from private cars and particularly service trucks if new large format commercial arrives with it. While so-called ‘layer cake buildings’ can add to construction costs, they can help improve the relationship with the abutting ground-oriented homes. They also present opportunities for large patios and amenity space for the residents of the arterial building. Other mitigating strategies include significant ‘lanescaping’. Some innovative projects even include townhouse units at grade that face the lane.
3333 Main is a five-storey building that includes large terraces, laneway units, and significant ‘lanescaping’ that creates a nice transition to the abutting single-family homes.

The CoV’s Interim Rezoning Policy for Increasing Affordable Housing Choices is auditioning the idea of six-storey buildings on arterials with the C-2 zoning or near local shopping areas (Fig. 9). However, one developer had little interest in the program and believed that anything too much higher than four stories would be difficult to get approved due to the presence of abutting single or two-family homes. Also included in the policy and favoured by multiple developers was Geller’s idea to create a “transition zone” of higher-density housing forms behind all arterials (2012). Stacked townhouses and rowhouses would create a better transition, however there are still serious compatibility issues even with higher density types of ground-oriented housing that need to be regulated by policy. It
is very likely that these transition zones would also face significant push back from nearby residents.

Fig. 9. Map of areas considered in the CoV’s Interim Rezoning Policy

4.4.2 BUILDING DESIGN & CHARACTER

The Zoning Bylaw regulations for development in the C-2 zone are supplemented by a fairly extensive set of design guidelines (City of Vancouver, 2003). The design guidelines apply to all developments and are intended to further address issues of scale, neighbourliness, pedestrian design and visual integrity. Though not intended to be area-specific, there contains some mention of different strategies to address the wide range of lot sizes and orientations found in the C-2 zone. Together, the Zoning Bylaw and Guidelines
provide plenty of direction for what developments should look like in the C-2 zone. As a result, many projects follow the same plain pattern and end up looking very similar. According to more than one developer interviewed, the lack of flexibility in the regulations stifles creativity. However, according to a long-serving member of CoV Urban Design Panel, the proliferation of uninspired and replicated designs is a result of the quality of architects responding to the regulations, not the regulations themselves. According to Brent Toderian, there’s nothing inherently wrong with pattern buildings as long as “strong architectural statements are made at those most visible moments in the street.” As previously mentioned, there are some examples of innovative responses to the regulations impacting building form and design.

One issue that appeared to trouble developers was how these buildings are supposed to represent the existing neighbourhood character. When they do appear sporadically on these streets, they often sit isolated and do little to reinforce the street wall. One developer expressed that they had tremendous difficulty defining the character of the area due to the broad variety of age and condition of the buildings on the street. Because of the lack of comparable buildings surrounding it, they felt there was an opportunity to simply build something attractive that would define the future character of the street. They can work quite nicely together when there are successive redevelopment projects, such as west of Trimble Street on West 10th Avenue. More so than scale and height, the individual character of these streets is associated more closely with what’s at grade and the pedestrian environment that is created.

4.4.3 CRU DESIGN & CHARACTER

As stated previously, the success of the commercial units at grade can be critical for the financial success of the project. It is also probably the most important factor that
determines how the building relates to the public realm and therefore benefits the
neighbourhood. Unfortunately the execution of the CRUs at grade in mixed-use projects in
the C-2 zone is an afterthought leaving much to be desired.

In some cases, the problem lies in the design of the CRUs, in particular the canopies
and signs. According to a developer with many years experience with mixed-use projects,
successful retail needs to be able to express intimacy and individuality. Patios that allow
cafes and restaurants to spill out on to the sidewalk are also rarely considered. Expressions
of individuality in storefronts are hindered by the C-2 Guidelines, which calls for a
“continuous, architecturally integrated weather protection and signage system.” The result is
often a bland replication of uninteresting storefront signs. Vancouver, as you may have
heard, is a rainy city that necessitates proper weather protection. However, there is no
reason why more interesting storefronts shouldn’t be encouraged in mixed-use buildings.
Taller ceiling heights at grade also create greater interior spaces while improving the
flexibility of uses to more easily accommodate restaurants that require hood fans and
ventilation. One developer stated that shallow CRUs have limited appeal to tenants due to
the lack of walls for displays and limited back of house areas for restaurants.

Another developer believed that one reason the at-grade commercial may fail has to
do with the changing of the retail landscape and the saturation of small commercial spaces.
Unfortunately, it is becoming increasingly difficult for small independent shop owners to
survive. Redevelopment often follows unsuccessful retail. When redevelopment occurs in
the middle of central shopping areas in the C-2 zones, rents usually increase and the
character of the retail tenant changes. Regardless of the change of character and the
negative feelings of some local residents’ towards it, the replacing retail usually has a good
chance to be successful since it is located in busy areas with an established critical mass of
foot traffic. On the other hand, when redevelopment occurs in less frequented shopping
areas often on the edges of the C-2 zones, unsuccessful retail is usually followed by unsuccessful retail. The argument for mid-rise, mixed-use buildings replacing single-use commercial uses usually includes a statement that the addition of more residents will help sustain local businesses. While the role of these streets is indeed to serve the shopping and service needs of the neighbourhood, one planner questioned whether there may be other types of uses at grade that would better serve the community and support the addition of more housing through improving the profitability of redevelopment on the edges of the C-2 zones.

Inattention to the design of CRUs at grade often leads to the bland replication of uninteresting storefronts, which have trouble attracting tenants and do a poor job of activating the street.

4.4.4 RESIDENTIAL UNIT DESIGN

There are real negative externalities to consider when placing residential units on busy arterials. For one developer who used to live in an older apartment on 4th Avenue, the traffic noise and air particles from busses forced her to plan errands or other activities to get out of the apartment during rush hour. However, the majority of the developers that were
interviewed didn’t seem overly concerned with their ability to sell street-facing units. To some, new construction techniques and the CoV requirements that different portions of dwelling units don’t exceed certain noise levels make it practically a non-issue. In some instances, the street facing units are the first to sell. The CoV takes issues of liveability very seriously. On particularly noisy streets, they are now requiring thermal comfort studies where engineers sign off on the acoustic and ventilation systems in the buildings. In some cases, air conditioning is even mandated primarily to mitigate traffic noise. One developer reluctantly admitted that units that do not properly address these liveability concerns end up being used as short-term transitional housing.

Other developers believed the CoV’s concerns are overblown, calling it a “suburban mentality.” In particular, developers disputed the inconsistent application of the Horizontal Angle of Daylight requirement, which doesn’t allow for internal bedrooms. In mid-block buildings, this daylight requirement can be difficult to achieve. One solution is the courtyard building design, which provides more access to daylight and greater private amenity but is easier to accomplish on deeper lots (Fig. 10). Developers were frustrated by the lack of clarity and consistency regarding the application of this rule and others by different development planners. However, they also questioned the need for such high standards when plenty of units exist in older multi-unit buildings in Vancouver that would fail to meet today’s requirements. If more affordable units are desired, the balance between liveability and costs may require closer examination. For example, Geller (2012) makes an interesting case for allowing smaller suite sizes, which one developer suggested is “really the only way to provide relative affordability through the market in Vancouver.”
4.4.5 SUMMARY

Due to the public nature of these buildings, the CoV has developed fairly stringent regulations regarding form and design. As a result, there is little variation in the appearance of most projects, with some noted exceptions. The redevelopment of these streets does represent significant neighbourhood change. While neighbourhood change is both inevitable and necessary to house the city’s growing population, the extent of the change could be mitigated to some extent by working with developers to improve the CRUs at grade. The liveability of arterial facing-units is something that should always be monitored closely. However, policies impacting liveability should perhaps be revisited, or at least applied consistently.

4.5 REGULATORY & PROCESS FACTORS

“It’s the age-old saying: your project is only as good as the planner you’re working with. We’ve been lucky but I’ve also heard nightmare stories. Building a good working relationship, a good rapport with the City is extremely important.”

- Interview Participant (Developer)

4.5.1 PARKING REQUIREMENTS

As Table 2 in the Financial Factors section demonstrated, providing underground parking adds significantly to costs and can ultimately decide the feasibility of a project. In Vancouver, one additional parking stall can cost upwards of $45,000 without the costs of maintenance (Metro Vancouver, 2012). The CoV has already taken an innovative approach
to reducing off-street parking minimums in apartment buildings, especially near transit and in rental projects. One developer building under the Rental 100 program revealed they received a 20% reduction in required parking spaces. The CoV has also entertained other innovative strategies to reduce parking requirements including parking districts, payments-in-lieu and trade-offs for bike parking and car-sharing. They are even beginning to allow units to be sold without any parking spaces, though only in larger projects closer to major transit lines. However, there was a general consensus amongst the developers interviewed that parking requirements were still excessive, overly rigid and could be even more flexible in smaller projects on existing bus lines.

The one exception was a developer with a C-2 project further from the downtown core on a street with less transit accessibility, who warned that it was still too risky to try and sell units without any parking spaces. In this case, the demand for parking is clearly driven by locational factors such as transit accessibility and proximity to employment areas. Nonetheless, developers agreed that the emerging trend of decreasing car ownership gives all the more reason to allow the market to decide parking ratios. At the same time, maximum ratios can be maintained while education about potential parking alternatives is provided.

4.5.2 BUILDING CODES, GREEN STANDARDS & UDP REVIEW

Under the Vancouver Charter, the CoV is offered more autonomy and authority to regulate the construction and design of buildings than any other municipality in British Columbia. The CoV’s Building Bylaw, which addresses issues of safety, accessibility, and energy utilization, is more demanding than the BC Building Code. Developers did not take issue with these stricter requirements, as they lead to safer and higher quality buildings that are more durable over time. They did note that the additional energy efficiencies required do
add substantial costs to a project. As the bylaw stands, its energy requirements are higher than any other jurisdiction in Canada, comparable to LEED Silver.

While developers did not dispute the Building Bylaw and the CoV’s commitment to sustainability, they took strong exception to the insistence that all rezonings receive official LEED Gold accreditation. First, they were against using a third-party standardized rating system that often doesn’t apply to Vancouver’s specific climate. Second, they were completely at odds with the added administration costs and delays associated with undergoing registration and hiring the necessary consultants. One developer estimated that LEED accreditation increases construction costs by up to 10%. Given that many of the developers who were interviewed were sceptical that buyers were willing to pay a premium for LEED accredited buildings, this is an exceptional premium to pay. The additional costs are especially significant in projects in the C-2 zones, where the additional development potential in rezonings is limited to an extra storey or two due to site and land use constraints. There are perhaps better ways to encourage and measure improved environmental performance.

The CoV has a longstanding Urban Design Panel (UDP) that has increased its influence as a central component of the CoV’s development permit processing system. Though praised by Punter (2003) for addressing the shortcomings of typical design panel systems, developers expressed frustration with some of the UDP’s decisions and processes. Some developers questioned the necessity of going through UDP review at all when the C-2 zones are already so prescriptive. Others believed that the UDP regularly overstepped its boundaries, giving minor directions such as choice of construction material and colours. One developer claimed that smaller projects, such as those in the C-2 zones, sometimes receive unfair treatment at UDP hearings. On one occasion for example, the
applicant was asked to provide an architectural model to a larger scale than other projects at the same hearing, which he claimed opened it up to greater criticism.

4.5.3 ZONING AND APPROVALS

More than anything, developers expressed a need for clarity in the application of the Zoning Bylaw and throughout the approvals process. For the most part, developers with experience building in the C-2 zones believed the existing as-of-right zoning provides sufficient direction. While acknowledging that processing delays do add costs, developers stated the CoV usually delivered on their honest estimation that processing will take six to nine months. Without a rezoning, the process is “fairly straightforward.” However, there is much less clarity involved when a developer applies for a rezoning, which can easily extend the processing time to over two years. With a rezoning, further requirements are added such as LEED accreditation, more detailed design review, and a more extensive community engagement process. It also begins the complicated discussion of how Community Amenity Contributions (CAC) will be provided. CACs allow the City to negotiate and preemptively collect about 75-80% of the increase in value from the projected rezoning (or ‘land lift’) from the developer. The CoV has benefited tremendously from these contributions. According to Toderian, they are the “cornerstone of the Vancouver model of city building (qtd. in Jackson, 2011).

Some developers favoured moving to a fixed CAC rate, something the CoV is considering in smaller projects (Sherlock, 2013). While such a move may make costs clearer, developers skilled at negotiation may feel they have an advantage the way things are. Any fixed rate would have to straddle a very delicate balance. Too high, and smaller builders like those involved in many C-2 projects could be priced out. Too low, and the public would receive far less in amenity contributions. Whether CACs are negotiated or not,
negotiation will never be completely removed from the approvals process. Lines of communication should always be open with the CoV, which favours an “incremental approach to adopting policy changes,” as stated by one CoV Senior Planner. The CoV does routinely distribute satisfactory surveys to developers. However, some developers supported the idea of greater collaboration through workshops and symposiums, where other important stakeholders such as UDI and TransLink can also be engaged.

4.5.4 PUBLIC OPPOSITION & ENGAGEMENT

Improved clarity with the public can be vital to a project’s success. Developers cited the typical self-interest NIMBY attitudes as major barriers to introducing higher density forms of housing in established neighbourhoods. Because of the adjacency of single-family districts and the affinity for the existing state of neighbourhood shopping streets, redevelopment often draws public opposition, even if the project is within the existing zoning. The intensity of the opposition is very dependant on the neighbourhood, though for different reasons. In the Westside, Dunbar in particular, longstanding residents are opposed to any change that they perceive might increase traffic and diminish their high property values. In the Eastside where mid-rise condos are increasingly appearing on the Hastings Corridor, existing residents fear for the displacement effects of gentrification. Adopting an extensive and pre-emptive public engagement strategy that exceeds the normal CoV requirements helped certain developers move their projects forward. Some developers called for updated neighbourhood planning efforts, which would facilitate public discussions surrounding the suitability and need for denser building forms from a sustainable communities perspective.
4.5.5 SUMMARY

Development in the C-2 zones is strictly managed by regulations in the zoning bylaw, building codes, and design guidelines. While not all developers agreed with the requirements, they were at least satisfied that a level playing field is being created. Greater flexibility was desired in the amount of parking required and the CoV’s green building standards, which adds costs to construction and can significantly impact project viability. Depending on the developer’s personal experiences, satisfaction over the time it takes for permit processing varied on a case-by-case basis. Generally, developers were not pleased with ‘unexpected’ delays that arise when a regulation is not applied clearly or consistently. Whether developers remain within, or exceed the FSR permitted under the existing zoning, some form of community opposition is to be expected. Such delays can be mitigated by an extensive public engagement strategy.
5.0 RECOMMENDATIONS: WAYS TO ENCOURAGE FURTHER AND MORE SUCCESSFUL REDEVELOPMENT

The redevelopment of Vancouver’s neighbourhood shopping streets can accommodate future growth in a sustainable manner that caters to transit users and pedestrians. Despite existing zoning and policy directing growth on these streets, developers face significant implementation challenges. The following recommendations are intended to facilitate further redevelopment, and in some cases improve the resulting product. While many of the recommendations are for the CoV to consider, developers need to be active players in the discussion and creation of policy that guides the implementation of future redevelopment.

#1 REDUCE PARKING REQUIREMENTS AND MAKE THEM MORE FLEXIBLE

The CoV should continue exploring different strategies to reduce parking requirements in projects with good accessibility to transit. Providing the required parking spaces and room for ramps on smaller sites in the C-2 zones requires costly excavation for underground parking. Limiting excavation to one underground storey or even eliminating the need for underground parking in some cases would improve the viability of redevelopment. With the exception of purpose-built rental projects, the parking requirements in C-2 zones in different neighbourhoods remain rigid. In many multi-family developments across Metro Vancouver, supply of spaces often exceeds demand (Metro Vancouver, 2012). Instead of continuing to set parking minimums, the CoV should consider adopting a more flexible, market-based approach to parking regulations in specific areas such as close to downtown where no car ownership is more likely. This freedom may allow developers to more specifically target demographic groups that do not favour car ownership. The inclusion of alternatives to car ownership such as spaces for co-op cars should also be encouraged. In addition, the CoV should also revisit commercial parking minimums, which are much less
flexible as it stands. At the same time, the impact of such reductions on nearby street parking needs to be monitored.

This newly renovated building on the corner of Main St. and 17th Ave. contains eight rental units and a large full-service restaurant, but only has five parking spaces.

**#2 MODIFY EXISTING HEIGHT AND FSR REGULATIONS IN C-2 ZONES**

After a thorough review of its bylaws and guidelines, the CoV has established a strong program for redevelopment in the C-2 zones. However, one significant issue according to Brent Toderian is “it assumes a one-size fits all approach for the city’s corridors”. While many of these streets carry similar characteristics and functions, no two streets are the same. They vary distinctively in character, traffic, transit service, and widths of sidewalks and R.O.W. On some streets, the existing four-storeys may be just right while others may be suitable for six storeys or more. Moreover, the CoV may wish to discourage adding residential uses to small select areas where compatibility issues arise, such as bar
or entertainment districts. Undergoing an extensive study of the City’s corridors to determine where more or less density is suitable would improve certainty for the public and developers while eliminating the need for costly incremental rezonings. With appropriately scaled step backs, six storey buildings should be suitable on most C-2 zoned streets without a rezoning. This is especially true on north/south heading streets, which receive more sunlight throughout the day. However, more research and experimentation is required into wood six storey wood frame buildings, currently allowed under the building code but not being built due to their high costs that are comparable with concrete construction. Even if the CoV determines that four storeys is the maximum that should be allowed, total permitted height should be increased to allow for taller CRUs, a key factor for potential tenants.

**#3 CONTINUE EXPLORATION OF ‘TRANSITION ZONES’ BEHIND ARTERIALS**

One of the commonly stated benefits of directing growth on Vancouver’s arterials is that it avoids transforming the abutting single-family areas. While these redevelopment projects do introduce a greater variety of housing options in these neighbourhoods, not everyone wishes to live on arterials. The CoV should continue to strategically increase density in established neighbourhoods with initiatives like the laneway housing program and zoning for medium density ground-oriented housing forms. In addition to increasing density, creating transition zones behind arterials would result in a better laneway relationship with arterial redevelopment. Currently the Interim Rezoning Policy effectively does just that, encouraging rowhouse and townhouse development behind arterials. Low-rise apartments, such as those older buildings found in Kitsilano, may also be suitable in some areas. One consideration for the implementation of a transition zone is the direction of the arterial road. While a higher density transition zone would work best behind east-west streets, a slightly lower density may be more compatible on north-south streets. This is because behind
north-south streets, a low-rise apartment building would be adjacent to a single-family house.

#4 ENCOURAGE INNOVATIVE DESIGN SOLUTIONS THROUGH PERFORMANCE-BASED ZONING

Many projects developed in the C-2 zones follow a similar pattern. While not all projects need to reflect excellence in design, there needs to be more examples that properly acknowledge the public role of these streets. Those that do tend to come at a much higher price point. However, great design doesn’t necessarily need to mean more expensive to build. The award-winning ROAR_one was built at $195 per SF, lower than many projects in the C-2 zones (see APPENDIX A: ROAR_one). That project fit the existing building envelope in the C-2 zone but required over 100 variances to be approved, yet it performs remarkably well. Unfortunately, most builders do not respond as creatively to the existing regulations. Rather than remove the requirement that projects in the C-2 zone undergo UDP review, as some developers suggested, the CoV should encourage innovative solutions by implementing performance-based zoning regulations.

#5 ENCOURAGE BETTER DESIGN OF CRUs

One issue the UDP should pay closer attention to is the design and execution of CRUs, in particular the storefronts, signs, and canopies. Too often, storefronts fail to express any sense of individuality resulting in deteriorating character of the commercial strip. Developers requested more freedom to allow incoming tenants to choose how they would like their storefront to be designed. This would mean leaving storefronts relatively bare until a tenant is secured. In some instances, getting better results may mean requiring less at the UDP review stage. Greater ceiling heights at grade, without it affecting the total number of permitted storeys, should also be allowed to better accommodate full-service restaurants.
#6 ALLOW FOR GREATER FLEXIBILITY OF USES AT GRADE

The purpose of the C-2 zones is to provide neighbourhood shopping and service needs. However, sometimes on the edges of C2 zones, the new retail in mixed-use projects that displaced the old retail is equally unsuccessful and therefore contributes little to the neighbourhood. The CoV should consider shortening the C-2 zones in these cases and work with developers to include other suitable at grade uses such as work-live units, artists’ studios, etc. Removing the requirement for the elevated servicing needs that are associated with at-grade commercial units may also make it easier to design projects that better address the laneway, such is being done on the Cambie Corridor where some projects include rear townhouse units.

#7 ALLOW FOR SMALLER UNITS TO IMPROVE AFFORDABILITY

In order to maintain liveability, current CoV bylaws require rental units and market units to be no less than 320 and 398 square feet respectively. However, there are a handful of examples across Metro Vancouver of successful projects with smaller suite sizes. There has been no problem filling affordable rental units in 600 Drake Street, built in 1993, and the recently renovated Burns Block in the DTES, where the majority are well below 320 square feet (Geller, 2012). However, it’s not just developers doing rental projects that are experimenting with smaller suite sizes. Balance, a new development in Surrey will soon be
offering Canada’s smallest condos priced from $109,900 (Geller, 2013). With careful attention to the flexibility of layout designs, Geller (2012) contends that units less than 320 square feet can be quite liveable, especially for those inclined to spend more of their time in ‘third spaces’ such as pubs and coffee shops. Why not experiment with smaller units in the C-2 zones that are literally above or on the same block as these third spaces? Moreover, smaller units with more than one bedroom may also help provide new housing for families. Despite sceptics that argue developer cost-savings aren’t always passed on to the buyer, smaller suite sizes may be the simplest way to provide more affordable rental and entry-level units in Vancouver.

**#8 EXPLORE ALTERNATIVES TO LEED ACCREDITATION**

The CoV’s maximum building-energy requirements for new developments are one of the greenest in North America (City of Vancouver, 2012). Recognizing the significant contribution buildings make to GHG emissions, developers were not against working with the City to meet their Greenest City objectives. Developers did have serious issues with the costs associated with the CoV’s requirement that all rezonings meet LEED Gold certification, which can be especially difficult to bear in smaller projects in the C-2 zones where profit margins are already tight. The CoV should consider waving that requirement for wood frame mid-rise buildings on or near arterials, which are already significantly more energy-efficient than concrete, steel, and glass high-rises. Incentives for environmental performance that exceeds the Building Code may be considered. However, placing additional dwelling units closer to transit where people are less likely to drive should take priority.


**#9 IMPROVE SITE APPROVALS PROCESSING EFFICIENCY**

The costs of application processing delays can be especially burdensome on smaller projects. Although most developers attested to the CoV’s ability to meet its six to nine month approval period, others were frustrated at the lack of consistency and clarity regarding the application of certain regulations. The UDP in particular was singled out by more than one developer for its occasionally frustrating decisions and processes. However, the UDP has long been an important facilitator of good design in Vancouver. Given the very public nature of redevelopment projects in the C2 zones, it would not be wise to remove the influence of the UDP. Conflicting requirements from different departments can also add time to receive development approvals (Geller, 2012). With the prescriptive zoning that exists in the C-2 zones, resolving these conflicts and improving the clarity surrounding requirements like the Horizontal Daylight Angle should improve approvals efficiency.

**#10 UPDATE NEIGHBOURHOOD PLANS AND IMPROVE COMMUNICATION PROCESSES**

Neighbourhood opposition can cause serious delays in project approvals even if the application fits under the existing zoning regulations. Part of this opposition can be blamed on typical NIMBY attitudes, which can be expected given these projects represent significant neighbourhood change on the arterials and do abut single-family districts. Opposition may be mitigated somewhat if the CoV undertook further neighbourhood planning efforts so as to provide greater clarity over future development. Many of the neighbourhoods that these streets pass through have gone decades without an updated plan and associated public consultation process. The Cambie Corridor Plan (2011) included a lengthy engagement process that included input from the public and developers. The result was a document that gave the public a clear idea of what the corridor might look like...
in the future. In addition, it would benefit developers to take a proactive approach to public engagement strategies that exceed what is required from the CoV.

### 5.1 CONCLUSION

This report conducted an extensive analysis of the factors affecting a common type of building form that has the potential to contribute to meeting Vancouver’s environmental goals and alleviating its housing challenges. Mid-rise, mixed-use buildings along arterials can increase density in established residential neighbourhoods close to transit and other services while preserving the existing pedestrian-oriented character. One walk down any of these streets filled with older one-storey buildings and it is clear that there is tremendous capacity to further accommodate this building form. Given that redevelopment of this kind is included as-of-right in the existing C-2 zones, there is a perception that these sites are Vancouver’s ‘lowest hanging fruit’ for intensification. However, there are still many challenges to overcome for this capacity to be filled including fragmented ownership, size-constrained lots, strict parking and design regulations, neighbourhood opposition, and a lengthy approvals process.

In many cities, mid-rise buildings along main streets are deemed financially unviable. In Vancouver, the conditions for redevelopment are ideal: the transit network is already in place and improving, land constraints makes intensification the only way to accommodate growth, and land values are so high that achieving the highest and best value is paramount. Of course, every site must realistically compete with every other in the region and there are a number of major projects in Vancouver that absorb much of the market share for new housing units. While smaller mid-rise, mixed-use projects do less to disrupt the existing fabric and allow more people to contribute to building the city, not all projects are equally successful at maintaining a high-quality public realm. Therefore, this report included a
number of recommendations to not only facilitate further redevelopment, but also to improve the resulting product. Rather than firm directions, the report’s recommendations are more like considerations to begin evaluating what the CoV is getting in terms of mid-rise, mixed-use redevelopment in the C-2 zones and how to improve future projects.

5.2 AREAS FOR FUTURE RESEARCH

Chapter Three of this report outlined the numerous benefits of continuing to redevelop Vancouver’s neighbourhood shopping streets. In the CoV’s continued effort to provide more homes, it must be remembered that the C-2 zones act literally as the ‘homes’ for many businesses and jobs that contribute to the city’s economy. Although the commercial function remains when a new mid-rise, mixed-use building is developed in the C-2 zones, the character and type of use often changes. This report emphasized the importance of improving the execution of commercial at grade units in new mixed-use buildings. However, it would be beneficial to gain a greater understanding of what type of tenants occupy mixed-use and single-use buildings on shopping streets. It is possible, with developer preferences for larger format retail, that redevelopment with mid-rise, mixed-use buildings results in a lesser variety of tenants. Perhaps certain types of commercial uses are not being properly accommodated in mixed-use buildings. For example, are bars or restaurants more or less likely to locate in mixed-use buildings? In terms of understanding the change of character that occurs as a result of redevelopment, it would also be beneficial to examine whether there are significant changes in the rents charged for commercial spaces in mixed-use buildings.

The intent of this report was to gain a greater understanding of all the factors that developers must consider when contemplating a redevelopment project along Vancouver’s neighbourhood shopping streets. As mentioned in Chapter Two, one main limitations of this
report is that it does not utilize financial and market analysis to determine development feasibility. Although planners can benefit from a greater understanding the key factors discussed in this report, understanding how each factor plays a role in developer pro formas and market analysis will only act to further improve the conversations between these two groups. Similar research is being undertaken by development organizations, but there is opportunity for planners to become more involved in, or at least aware of these studies.
REFERENCES

A Convenience Truth. 2011. A Sustainable Vancouver by 2050. *A project of the School of Architecture and Landscape Architecture & the School of Community and Regional Planning of the University of British Columbia*. Edited by Patrick Condon and Scot Hein.


This former gas station site occupies the full block between 24th and 25th avenues. The residential units are market strata condos and the retail spaces will be leased by one owner. The building recognizes the significance of the King Edward and Main Street intersection with enhance height and massing at this prominent corner. Continuity of the urban street wall is maintained reinforcing the established pedestrian oriented retail character. East 24th Ave. transitions from retail to single family residential across the lane. This transition is mediated by ground oriented townhouse units and heavily landscaped roof terraces on level 2 facing the lane. Variances were obtained for height and the front yard setback. The project was first submitted for Planning Review on August 17th, 2011.
For the first time in Vancouver, a standard 33 by 110 ft. lot was fully leveraged using wood frame modular housing. Monad is a truly exceptional example of an urban redevelopment project in the C2 zone, providing high quality living environments with remarkable sustainability features. The interior courtyard offers abundant daylight, natural cross ventilation, and brilliant views for all four units. "The problem with current corridor housing " explains architect Oliver Lang "is that there is often only one window and therefore no cross ventilation and not much light." (qtd in Ditmars, 2011). While calling the units affordable – the 1,700 SF south-facing penthouse was listed at $1.6 million – is a stretch, the innovative approach to construction did yield significant cost-savings.

Underground parking was avoided by utilizing an innovative two-platform parking elevator, the first in Vancouver, that provides one parking space for each unit. Another advantage of modular housing is the time it takes to build a project. At Monad, the units were ready for occupation in April only four months after the pre-assembled modules were lifted onto the site. The architect’s website claims that Monad is an “an adaptable model that can readily accommodate varying home sizes and configurations, [and] is readily scalable to varying urban contexts, lot sizes and heights.”

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Monad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Address</td>
<td>3351 W 4th Ave.</td>
</tr>
<tr>
<td>Developer</td>
<td>Intelligent City</td>
</tr>
<tr>
<td>Architect</td>
<td>LWPAC Group</td>
</tr>
<tr>
<td># of storeys</td>
<td>4</td>
</tr>
<tr>
<td>Gross floor area</td>
<td>12,600 SF</td>
</tr>
<tr>
<td>Residential units</td>
<td>4</td>
</tr>
<tr>
<td>Parcels assembled</td>
<td>1</td>
</tr>
<tr>
<td>Zoning</td>
<td>C-2</td>
</tr>
<tr>
<td>Completion date</td>
<td>2011</td>
</tr>
</tbody>
</table>

Source: Lang Wilson Practice in Architecture Culture
ROAR_one is an award-winning project in the heart of the West Tenth shopping area. The ambition for the project was to create a model of dense urban living/working through the introduction of design strategies that emphasized liveability, flexibility, and sustainability. On this 66 ft. lot, the absolute maximum permissible building volume was achieved by negotiating all possible density relaxations. Rumour is that over 100 variances were obtained. All units, ranging from 800 to 2,000 SF, are stacked double-storey “sky houses” surrounded by patios and walkways that allow light and ventilation through the building. Despite all these innovative architectural features, the project was built at $195 per SF, proving that exceptional design doesn’t necessarily mean more expensive design.

Source: Lang Wilson Practice in Architecture Culture (both photos)
The project was approved under the CoV’s Rental 100 program, which offers incentives for building 100% purpose-built rental units. The rezoning from C-2C to CD enabled increased building height from four to five storeys and increased FSR from 3.0 to 3.5. The increased height drew significant opposition and some hesitation from city councillors but the project was ultimately approved based on the need for more rental housing in the area. Once completed, it will be interesting to see how the public perceives the additional storey. Shadow studies demonstrate that the additional storey creates a minor increase in shadowing due to the step back provided after the fourth floor. Of the 83 units proposed, 19 are two bedroom and four are three bedroom units, making them quite suitable for families. The commercial at grade will feature a 1,500 SF CRU and a large 14,000 SF Shoppers Drug Mart, which is relocating from its existing location across the street. The developer did not take full advantage of the residential parking relaxations available but did ask for dramatic reductions in the amount of commercial parking spaces provided. Shoppers Drug Mart stated that they only require 22 parking stalls, far below the minimum 53 outlined in the parking bylaw for a drugstore of that size.
The corner of Bayswater and West Broadway is a prominent location in the heart of Kitsilano’s shopping area. The site formerly housed a large restaurant, Tomato Fresh Café, and luxury men’s clothing retailer Mark James. The new four-storey building achieved just under the maximum permitted 3.0 FSR in the C-2C zone. The design is an attempt to add some historical context into a neighbourhood that is in transition. However, at least one member of the UDP questioned whether the warehouse-like design was suitable for the neighbourhood. Nonetheless, there was significant interest in the project from community members. All units have been sold primarily to two categories of buyers, existing neighbourhood residents looking to age in place by downsizing and young professionals who value the urban lifestyle, some of whom have grown up in the area. Room sizes range from 580 to 1,070 sq. ft., many with integrated workspaces.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Bayswater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Address</td>
<td>2118 W 15th Ave.</td>
</tr>
<tr>
<td>Developer</td>
<td>Mosaic Homes</td>
</tr>
<tr>
<td>Architect</td>
<td>Shift Architecture</td>
</tr>
<tr>
<td># of storeys</td>
<td>4</td>
</tr>
<tr>
<td>Gross residential</td>
<td>26,765 SF</td>
</tr>
<tr>
<td>Gross commercial</td>
<td>6,856 SF</td>
</tr>
<tr>
<td>Total FSR</td>
<td>2.9</td>
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<tr>
<td>Residential units</td>
<td>31</td>
</tr>
<tr>
<td>Residential parking</td>
<td>36</td>
</tr>
<tr>
<td>Commercial parking</td>
<td>9</td>
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<tr>
<td>Previous site use</td>
<td>Commercial</td>
</tr>
<tr>
<td>Parcels assembled</td>
<td>1</td>
</tr>
<tr>
<td>Zoning</td>
<td>C-2C</td>
</tr>
<tr>
<td>Completion date</td>
<td>2014</td>
</tr>
</tbody>
</table>
B – BUILDING HEIGHTS MAPS
C - SAMPLE INTERVIEW QUESTIONS

Questions for Developers and Other Private Sector Professionals
1. What is your involvement or experience in developing mid-rise, mixed-use projects in Vancouver?
2. The City of Vancouver has zoned all neighbourhood shopping streets for redevelopment with mid-rise, mixed-use buildings. Do you think these sites represent good and profitable redevelopment opportunities under the current zoning?
3. What are the major challenges that discourage this type of development? (e.g. mixed-use, ownership patterns, lots size, abutting detached homes, etc.)
4. What are the critical success factors that enable these challenges to be overcome?
5. What kind of market do you think this type of housing is best suited for in terms of demographics? What about tenure?
6. What are the key methods used by developers in determining project viability?
7. How do municipal and provincial policies, guidelines and regulations affect the redevelopment potential of these sites (e.g. building codes, design guidelines, development charges, rental policies, etc.)?
8. Have you found that the City of Vancouver planning department to be helpful in facilitating this type of development? How was the site approvals process?
9. Please review these four hypothetical redevelopment opportunities and fill out the Site Selection matrix as instructed.

Questions for Planners and Other Public Sector Professionals
1. The City of Vancouver is encouraging the redevelopment of arterials in general and neighbourhood shopping streets in particular with mid-rise buildings: why do these sites present good opportunities to increase density in Vancouver?
2. Should we be focusing density on neighbourhood arterials? Is enough attention being paid to the liveability of the units in these buildings?
3. Existing neighbourhood shopping streets are typically composed of small buildings that vary in age, character and shop-front style. Should diversity be maintained by encouraging smaller infill projects, and if so, how?
4. What are the major challenges that discourage this type of development?
5. What are the critical success factors that encourage this type of development?
6. What kind of market do you think this type of housing is best suited for in terms of demographics? What about tenure?
7. How do municipal and provincial policies, guidelines and regulations affect the redevelopment potential of these sites (e.g. building codes, design guidelines, rental policies, etc.)?
8. What are and what aren’t the City of Vancouver planning department doing to help facilitate this type of development?
9. What has been the response from the development sector regarding the regulations and policies encouraging this type of development?
D - HYPOTHETICAL SITE SELECTION EXERCISE

Instructions
1. Please begin by weighting each criterion from 1 to 5 by level of importance (5 being the most important).
2. If there are additional criteria not listed that are important in your opinion, please add them and weight them accordingly in the space provided.
3. If possible, please rank each development opportunity according to each criteria from 1 to 3 (3 being the highest).

Site Selection Matrix
The following table displays the results of the Hypothetical Site selection Exercise completed by five development professionals. The criteria are rearranged in the order they were weighted from most to least significant.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
<th>West Tenth</th>
<th>Dunbar Street</th>
<th>West Broadway</th>
<th>Main Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>5.00</td>
<td>3.00</td>
<td>2.00</td>
<td>3.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Zoning (rezoning potential)</td>
<td>4.25</td>
<td>2.67</td>
<td>2.33</td>
<td>2.33</td>
<td>2.33</td>
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<tr>
<td>Lot size</td>
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<td>1.67</td>
<td>1.00</td>
<td>2.00</td>
<td>1.00</td>
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<tr>
<td>Lot assembly</td>
<td>3.50</td>
<td>1.67</td>
<td>1.00</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Transit availability</td>
<td>3.25</td>
<td>3.00</td>
<td>2.00</td>
<td>3.00</td>
<td>2.25</td>
</tr>
<tr>
<td>Adjacent property uses</td>
<td>3.00</td>
<td>2.50</td>
<td>1.75</td>
<td>2.75</td>
<td>2.00</td>
</tr>
<tr>
<td>Former site uses</td>
<td>2.75</td>
<td>2.33</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Proximity to amenities</td>
<td>2.75</td>
<td>2.75</td>
<td>2.00</td>
<td>2.75</td>
<td>2.50</td>
</tr>
<tr>
<td>Proximity to employment</td>
<td>2.75</td>
<td>2.50</td>
<td>1.75</td>
<td>2.75</td>
<td>2.75</td>
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<tr>
<td>Existing streetscape</td>
<td>2.25</td>
<td>2.75</td>
<td>1.75</td>
<td>2.50</td>
<td>2.00</td>
</tr>
<tr>
<td>Additional Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land cost</td>
<td>4.25</td>
<td>2.00</td>
<td>1.00</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Neighbourhood</td>
<td>4.25</td>
<td>2.75</td>
<td>2.50</td>
<td>2.75</td>
<td>2.50</td>
</tr>
<tr>
<td>Neighbourhood plan</td>
<td>2.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>
1. WEST TENTH

Site Description:
Five mid-block parcels between Tolmie and Sasamat. It is directly adjacent to a mixed-use, mid-rise building and across from Safeway and nearby the 99-B-line bus stop. Existing buildings are old single-storey commercial.
Present Land Value (2 lots): $3,925,000

2. DUNBAR STREET

Site Description:
Three parcels on NW corner of 30th and Dunbar St. It is at the end of the C2 zone with residential across 30th Ave. It is adjacent to the Dunbar Theatre and directly across from the Stong’s Market (grocery store) parking lot.
Present Land Value (2 lots): $3,425,000
3. WEST BROADWAY

Site Description:
Four parcels of varying sizes on the NE corner of W. Broadway & Blenheim St. Existing buildings are old single-storey commercial. All other corners of the intersection have different styles of mid-rise, mixed-use buildings.
Present Land Value (2 large lots): $7,509,000

4. MAIN STREET

Site Description:
Four narrow, but deep parcels on the corner of 26th Ave. and Main Street. Existing buildings are old single-storey commercial. A large mixed-use mid-rise building was just completed on the NE corner of King Edward Ave and Main Street.
Present Land Value (2 lots): $1,449,000