City of Vancouver City-wide DCL Rate Update: Evaluation of Potential Impacts on Urban Development

Draft
5 June 2017

Prepared for:
City of Vancouver

By:
coriolis
CONSULTING CORP.

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1.0 Introduction

1.1 Background

The City of Vancouver charges Development Cost Levies (DCLs) on new development to generate revenue to help pay for the infrastructure costs associated with new urban growth. DCLs help pay for growth-related capital projects for the following amenities and services:

- Parks.
- Engineering infrastructure.
- Replacement housing.
- Childcare facilities.

DCLs in Vancouver vary depending on the location of the project (as well as the zoning, use and density), but most projects are subject to the City-wide DCL. In July 2015, Council directed staff to update the City-wide DCL bylaw. The last major review of the City-wide DCL was in 2003. The DCL update includes:

- Updating population and job growth projections.
- Identifying capital costs for growth-related amenities.
- Determining DCL allocations and rates.
- Preparing a new City-wide DCL by-law.

The City expects a need to increase the City-wide DCL rate in order to recover the costs associated with the updated DCL program.

Therefore, as one input to the overall update, Coriolis Consulting Corp. was retained to evaluate the financial ability of new development projects in the City to support an increased DCL rate. An increased DCL rate could have a negative impact on the number of sites in the City that are financially attractive for redevelopment. If the supply of development sites is reduced, this could cause residential prices and/or commercial and industrial lease rates to rise, which is generally regarded as an undesirable outcome.

Therefore, for a wide range of case study sites across the City, we analyzed the financial viability of redevelopment to determine whether or not each site could support an increased DCL rate.

Following our analysis, the City provided us with the draft proposed City-wide DCL rates. As part of our overall work, we compared these draft proposed rates with our estimated supportable rates at each case study site to gauge the likely impact of the proposed rates on the financial viability of redevelopment in the City.

This report documents our analysis and conclusions. Our work was completed in December 2016 and January 2017 so the financial analysis contained in this report is based on market conditions and construction costs as of December 2016. Since this time, strata unit prices have risen so our analysis could be considered conservative.

1.2 Types of Redevelopment Projects Analyzed

Projects which are subject to negotiated Community Amenity Contributions (CAC's) are not included in our evaluation as any negative impact created by an increased DCL rate can be off-set by a lower negotiated CAC value so the viability of redevelopment should not be affected.

The types of projects included in our evaluation are:

- Development projects which proceed under existing zoning and do not require a density bonus contribution.
- Development projects which proceed under existing zoning, but require a density bonus contribution to achieve the maximum permitted density. This includes townhouse and apartment redevelopment projects in density bonus districts in Marpole, Norquay Village, and Joyce Station.
- Development projects which require rezoning, but are in a location with a target fixed rate CAC.

1.3 Professional Disclaimer

This document may contain estimates and forecasts of future growth and urban development prospects, estimates of the financial performance of possible future urban development projects, opinions regarding the likelihood of approval of development projects, and recommendations regarding development strategy or municipal policy. All such estimates, forecasts, opinions, and recommendations are based in part on forecasts and assumptions regarding population change, economic growth, policy, market conditions, development costs and other variables. The assumptions, estimates, forecasts, opinions, and recommendations are based on interpreting past trends, gauging current conditions, and making judgments about the future. As with all judgments concerning future trends and events, however, there is uncertainty and risk that conditions change or unanticipated circumstances occur such that actual events turn out differently than as anticipated in this document, which is intended to be used as a reasonable indicator of potential outcomes rather than as a precise prediction of future events.

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In no event shall Coriolis Consulting Corp. be liable to the City of Vancouver or any third party for any indirect, incidental, special, or consequential damages whatsoever, including lost revenues or profits.

2.0 Vancouver's DCL System and Project Methodology

2.1 Vancouver's DCL System

The City of Vancouver charges DCLs on new development, whether or not a rezoning is involved, in order to generate revenue to help pay for some of the infrastructure costs associated with new urban growth. The City can use DCL revenues to pay for transportation infrastructure, sewer, water, drainage, parks, child care, and replacement affordable housing (to replace any low income units lost in the redevelopment process). At present, the City levies two different kinds of DCLs:

- Area-Specific DCLs. Some neighbourhoods that have been undergoing redevelopment have an area-specific DCL that is imposed on new development in the neighbourhood. This includes False Creek Flats, Grandview Boundary, Southeast False Creek and Downtown South. Generally speaking, in such areas the DCL rate is determined by adding up the total estimated costs for infrastructure, parks, child care, and replacement housing and dividing this amount by the estimated total redevelopment capacity of the neighbourhood, resulting in a dollar rate per square foot of new space. The City applies an "assist" factor -- using revenues from other sources -- to keep the DCL rate at a level that does not make redevelopment financially unattractive.
- City-wide DCL. There is a City-wide DCL that applies to the entire City, except for excluded areas in which infrastructure and amenity contributions have been negotiated as part of area-wide or large site rezonings (such as False Creek North, Central Waterfront Port Lands).

The current City-wide DCL rates are summarized in Exhibit 1.

Exhibit 1: City-wide DCL Rates by Land Use

	DCL per sq. ft.
Residential at or below 1.2 FSR	$3.23
Residential above 1.2 FSR	$13.91
Commercial	$13.91
Industrial	$5.55

Source: City of Vancouver

In neighbourhoods where an area-specific DCL was adopted before the City instituted the City-wide DCL charge, only the area-specific rate is payable. In the past, there were a number of neighbourhoods where only the area-specific DCL applied. However, some of these were folded into the City-wide DCL. There is now only one neighbourhood, Downtown South, where only the area-specific DCL applies.

In some neighbourhoods where an area-specific DCL has recently been adopted, both the area-specific DCL and the City-wide DCL apply. These are called 'Layered DCL's' and apply to three neighbourhooods in the City. These include:

- False Creek Flats.
- Grandview Boundary.
- Southeast False Creek.

Exhibit 2 summarizes area-specific DCLs and Layered DCLs in the City of Vancouver.

Exhibit 2: Area-Specific DCLs in the City of Vancouver

	Area-Specific DCL Only	Layered (Area-Specific and City-wide DCL)		
	Downtown South	False Creek Flats	Grandview Boundary	SE False Creek
Residential at or below 1.2 FSR	n/a	\$3.23	\$3.23	\$3.23
Residential above 1.2 FSR	\$19.09	\$19.80	\$14.82	\$33.07
Commercial	\$19.09	\$19.80	\$14.82	\$33.07
Industrial	n/a	\$11.44	\$9.19	\$8.46

Source: City of Vancouver

The City's objective in establishing these levies is to recover some of the costs of new urban growth. The City strives to set the rates at levels that generate sufficient revenues to offset the costs of growth, but that do not inhibit new development. Because the DCL rate is mainly based on the estimated costs of accommodating growth, it is not an arbitrary tax on new development. The DCL rate reflects the fact that significant improvements in infrastructure, parks, and community amenities are usually required in order to allow an area to absorb a significant increase in the density of urban development and the associated significant increase in population and employment. In effect, the DCL helps finance area-wide off-site costs that developers would have to fund in any case to allow redevelopment to proceed.

2.2 Approach to Evaluating the Impact of Levies

There is a widespread perception that development levies can have a direct impact on the cost of new development and therefore add to the sale price or lease rate for new floorspace. Consequently, there is a concern that levies will directly cause residential or commercial prices to rise, which is generally regarded as an undesirable outcome.

The actual market dynamics are more complex, however. To address these concerns and describe the actual general market impacts of levies, the City of Vancouver commissioned a detailed report ("Urban Development Charges: An Evaluation of Market Impacts")[1]. The key findings of that earlier report can be summarized as follows:

1. In a competitive marketplace, developers cannot simply add the cost of a levy onto the asking prices for new floorspace. Adding the levy on to the asking price would imply that purchasers are willing to pay more for "levied" space than they would pay for comparable space in comparable neighbourhoods with lower (or no) levies. This, of course, does not happen. Unless someone has a monopoly on a commodity, prices are set by the interaction between supply and demand; no supplier can unilaterally determine price simply because costs are higher. In a sense, a levy in a particular area is no different than if the area had unusually poor soil conditions and therefore above average construction costs. Prices in the affected area will not be arbitrarily higher than in directly competitive areas simply because costs are higher. Something else must "give".

[1] Coriolis Consulting Corp., "Urban Development Charges: An Evaluation of Market Impacts." Prepared for the City of Vancouver, July 2000.

2. While developers pay the levy when they obtain project approval, they will seek ways to transfer the impact to others, because developers require a profit margin to make development an attractive business. Being neither willing to absorb the levy as a reduction in profit nor able to simply add a surcharge on end prices for their products, the first response of developers to a levy is to lower the bid price for development sites by an amount equal to the levy[2]. The primary impact of levies, therefore, is to put downward pressure on the value of properties for redevelopment. As noted earlier, this is no different than a developer's response to the fact that an area has worse soils conditions than comparable areas. A developer will be willing to pay less for such sites, by an amount equal to the cost of remedial work (e.g., piling, drainage, excavation, or extra construction costs) needed to make the net cost of the site equivalent to comparable land with no soils problems.

3. It is the land market's response to the downward pressure on land value that mainly determines the ultimate impact of a new (or increased) levy. If the same amount of land remains available for new development projects (i.e., available for sale at a price developers are willing to pay) after the introduction of a levy, broadly speaking the supply of new product to the market should be unchanged and there will not be an impact to the price of new floorspace.[3] Developers experience the same total project cost (albeit made up of different line items) as they would face without the levy, the same amount of new development happens, and there is no reason for demand to change, so prices to consumers and profits for developers remain where they were before the introduction (or increase) of the levy. Only the land value supported by redevelopment changes.

   However, if the downward pressure on land value for development sites means that less land is available for new development after the levy (because the reduced offered price for land results in less land being available on the market), the supply of new product will be reduced. This leads to rising prices for all existing and new supply, not just for new floorspace.

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[2] Urban land economists use a method called residual land value analysis to demonstrate this point, which is also reflected in appraisal methodology and in the way developers determine how much they can afford to pay for a particular site.

Total revenues from a proposed new project are estimated. These are assumed to be the same with or without a levy, as developers in a non-monopolistic market are price-takers.

Then all product creation costs (except land) are deducted. These include construction costs, professional fees, financing, and all permit fees and levies. Again, developers are price-takers. They cannot arbitrarily reduce the cost of building construction because they are required to pay a levy.

Next, the developer deducts an allowance for profit, which is budgeted as a target rather than left to chance as whatever happens to remain after project completion. Market forces tend to produce market-wide consistency in target profit levels (i.e. if profits are too low, some participants will leave the business, which over time will lead to higher prices and higher profits, as supply of new units will fall; if profits are high, some new participants will enter the business).

Deducting all costs and targeted profit from revenue leaves the residual amount that a developer can afford to pay for land. This residual amount is reduced if unit sales prices fall or if any cost goes up, including the introduction or increase of a municipal levy.

[3] There is one exception to this. If a levy is used to finance the creation of new or better amenities and services in a district, prices for space in this area could rise because the area has become more desirable. This is an impact of the amenities, not the levy per se, and it would be the same if the amenities were funded by property tax revenues or provided by private developers, rather than funded by levies.

4. The key to understanding and anticipating the impact of levies, therefore, is to understand how the levy is likely to affect the supply of land available for new development. This depends on the characteristics of individual properties, market conditions, the objectives of individual owners, and other factors.

   At any given time, there is a pool of properties available for redevelopment for residential, commercial, or mixed-use development. Levies can cause a range of possible impacts on the size of this pool of properties available for redevelopment:

   a. The pool of redevelopment sites can be *increased* in cases where the levy is associated with a rezoning or an infrastructure upgrade that allows development that could not otherwise occur.

      In the case of rezoning, if the levy is a necessary cost of achieving the new zoning (e.g. increased density or more valuable mix of uses) and if the value of the additional development rights created due to rezoning is greater than the cost of rezoning including the levy, "new" land is available for redevelopment.

      In the case of an infrastructure upgrading (without rezoning), if the levy finances and facilitates upgrading that could not otherwise occur (or that could only otherwise occur with greater cost or greater complexity as the result of coordinated actions by individual landowners), additional land will be available for redevelopment. In this case, the levy effectively replaces an off-site cost that would have been absorbed in any case.

      In a rezoning, the developer may also be paying an amenity contribution in exchange for additional density, as well as paying a levy for infrastructure. The economic impact of the amenity contribution (or cash in lieu) and of the levy are quite different:

      - The amenity contribution is provided in exchange for additional density that was not formerly permitted at the development site. By obtaining additional density, the developer is in effect acquiring more land by providing the value of the amenity. If the value of the amenity contribution is equal to the value of the additional density, this transaction has no effect on the original land owner, the developer, or the consumer, other than the effect of marginally increasing the total capacity for new urban development. If the amenity contribution has a lower value than the value of the additional density, then it is a financial benefit to the land owner and/or the developer.
      - In contrast, a levy is applied to all development, not just new density created by rezoning. <u>As a cost on all development, it reduces the value of all development sites.</u>

   b. The levy has a *neutral effect* on the pool of redevelopment properties in cases where the value of a given property as a redevelopment site (i.e., land value) is still higher, after deducting the amount of the levy, than the value of the property under its existing use (e.g. income producing investment property or existing residence). As well, the levy has a neutral effect on the pool of available redevelopment properties in cases where (even before the levy) properties were not candidates for redevelopment because they are too valuable in their present use.

   c. The levy *decreases* the pool of redevelopment properties in cases where the levy makes previously viable redevelopment less financially attractive than retaining the existing use. For example, if redevelopment as residential supports a higher land value than continuation of an existing older commercial use before the introduction of the levy, but the levy tips the balance in favour of maintaining the existing commercial use, a redevelopment candidate has been “lost” until prices rise enough to warrant redevelopment under the new levy system.

Any new or increased levy can have a combination of these various effects (on different properties), so it is the net combination that determines the impact of a levy on the likelihood of redevelopment and on the ultimate price of new floorspace.

3.0 Case Study Sites and Approach to Analysis

3.1 Approach to Analysis

Our approach to the analysis is to estimate the value of each case study site under its existing use (e.g. residential, income producing investment property) and compare this with the estimated redevelopment land value of the site to determine if the site is financially attractive for redevelopment under the existing DCL. For sites that are financially attractive for redevelopment, we then estimate the maximum DCL which could be supported by redevelopment.

The methodology can be broadly summarized in the following steps:

1. The financial viability of redevelopment varies in the City depending on a site's location, existing zoning, maximum achievable density and value supported by the existing use. Therefore, we identified 22 different hypothetical case study development projects that are considered representative of the kinds of new development projects that typically occur (or are anticipated to occur based on existing policy) in a variety of locations across the City on sites that are representative of the stock of redevelopment sites available in the City. These case studies were agreed upon with the City. Section 3.2 provides a detailed description of each case study site and the redevelopment scenarios tested for each site. Exhibit 3 provides a summary of the general location of each of the 22 sites and the redevelopment scenarios tested. For some sites, we tested more than one redevelopment scenario.

Exhibit 3: Summary of Types of Case Study Sites Analyzed

	Apartment or Mixed-Use	Townhouse	Office	Industrial
Downtown Sites	2	0	1	0
West Side Sites	4	2	2	1
East Vancouver Sites	7	4	1	0
Total Sites	13	6	4	1

2. For each case study site, we estimated the property value supported by the existing use of the site.
    a. For income producing properties (commercial, industrial), this is the capitalized value of the net income stream generated by the existing improvements. This is the value that an investor would be willing to pay for the property to retain the existing improvements and collect rent for the long term. This is the minimum price that a developer would need to pay for the site to acquire it for redevelopment purposes.
    b. For existing single family (or duplex) properties, this is the value of the property as an existing residence. For residential properties that require assembly, we assume that the developer would also need to pay a 20% premium over existing value in order to create an incentive for the existing property owner to sell for redevelopment.
3. Using proforma analysis, we determined whether redevelopment is financially viable under current market conditions and the current applicable DCL rate. That is, we calculated whether redevelopment supports a land value that is higher than the value supported by the existing use (from step 2 above). Our estimates of supportable land values from redevelopment are based on a land residual analysis which estimates the potential revenue from a new completed project and deducts all creation costs and a developer's

profit to estimate supportable land value. The revenue and cost assumptions used in the land residual analysis is based on market research completed in December 2016 to ensure that the results are consistent with market conditions.

4. For sites that are financially viable for redevelopment, we then estimated the maximum increase in the DCL rate that could be supported by the redevelopment concept. This is the DCL rate that would result in the site's value as a redevelopment site being approximately equal to its value under existing use. The estimated supportable DCL is the maximum DCL that could be levied without changing the highest and best use of the case study site from a development property into a holding property.

   Some property owners may not be willing to sell for redevelopment if the land value is equal to the value supported by the existing use. They may require an additional financial incentive to sell for redevelopment. At the maximum supportable DCL rate, sites may not be made available for redevelopment. Therefore, the calculated supported DCL is not a recommended levy; rather it is the absolute maximum that could be charged while ensuring each site probably remains a viable development candidate. In addition, it should be noted that the calculated maximum DCL rates that can be supported by each case study site do not allow any room for:

   - The City to increase other levies on new development, including increased rates for bonus density or fixed rate CACs.
   - Increased levies from regional governments, such as the planned increase to the Greater Vancouver Sewer and Drainage District DCC or other possible regional levies (e.g. the levy TransLink is considering to help fund transit infrastructure).

   Because each case study site represents a typical site within a given location, land use or zoning district, the maximum supportable DCL is meant to provide an order of magnitude of supportable levy for each case study type. Some potential development properties may be able to support a higher DCL and some may support a lower DCL than estimated.

3.2 Description of Hypothetical Case Studies Analyzed

With input from City staff, we identified 22 case study sites to evaluate for redevelopment. These case study sites and redevelopment scenarios are intended to be broadly representative of the range of sites and types of projects that are currently occurring (or anticipated to occur under existing land use policies) in the parts of the City that are subject to the City wide DCL (plus the Downtown South).

While it is not possible to analyze the impact of a change in DCLs on every project in the City, these case studies represent a wide range of potential redevelopment projects in terms of land use, density, building form, and location. Therefore, any impact on these hypothetical projects from an increased DCL will be broadly indicative of the potential impact on similar types of redevelopment projects in these areas.

The case studies are described below. We have organized the descriptions by type of redevelopment project (i.e. apartment/mixed-use, townhouse, commercial/industrial).

3.2.1 Strata Apartment and Mixed-Use Redevelopment Scenarios

We analyzed apartment or mixed-use development at 13 different case study sites in different parts of the City. Each site is in a location that is a focus of apartment growth in the City.

Site 1 - Cambie Corridor Plan, North End of the Corridor
This site is an assembly of adjacent older single family homes zoned RT-2 in the Cambie Corridor. Under the Cambie Corridor Plan, the site can be rezoned (with a fixed rate CAC) to allow 6 storey strata apartment built to an FSR of 2.25. This is representative of residential redevelopment potential along the Cambie Corridor, north of West 41st Avenue and south of West King Edward Avenue.

Site 2 - Cambie Corridor Plan, South End of the Corridor
This site is an assembly of adjacent older single family homes zoned RS-1 in the Cambie Corridor. Under the Cambie Corridor Plan, the site can be rezoned (with a fixed rate CAC) to allow 6 storey strata apartment built to an FSR of 2.0. This site is representative of residential redevelopment potential along the Cambie Corridor, south of West 49th Avenue.

Site 3 - Downtown South (DD)
This site is an assembly of five lower density commercial properties in the Downtown Vancouver area zoned DD - L1 and built to an approximate existing FSR of 1.1. Under the Downtown Official Development Plan the site can be redeveloped to a highrise strata apartment development at an FSR of 5.0. This site is representative of potential apartment redevelopment sites in Downtown South under existing zoning.

Site 4 - West End Community Plan
This site is an existing lower density commercial property in the West End built to an approximate existing FSR of 1.1 and zoned C-6. Under the existing zoning, this site can be redeveloped to a highrise mixed-use project built to an FSR of 8.75. The redevelopment would include retail and residential, including 20% non-market housing as a density bonus contribution. This site is representative of potential redevelopment sites in the West End C-5A and C-6 zoning districts, in the Lower Robson and Lower Davie areas outlined in the West End Community Plan.

Site 5 - Grandview-Woodland Plan
This site is an assembly of adjacent older single family homes zoned RS-1. Under the Grandview-Woodland Plan, the site can be rezoned (with a fixed rate CAC) to 6 storey strata apartment at an FSR of 2.65. The site was selected to represent redevelopment of single family homes to 6 storey apartment development in the Broadway East Multi-Family Area of the Commercial-Broadway Station Precinct.

Site 7 - Grandview-Woodland Plan
This site is an existing lower density commercial property in the C-1 District built to an existing FSR of 0.3. Under the Grandview-Woodland Plan, the site can be rezoned (with a fixed rate CAC) to allow a 6 storey mixed-use building at an FSR of 3.2. The site was selected to represent redevelopment of commercial sites to 6 storey mixed-use development in the Nanaimo Sub-Area of the Grandview-Woodland Plan.

Site 9 - Marpole Community Plan
Two potential apartment projects in the Marpole Community Plan area were analyzed:

a. A site which is an assembly of older adjacent single family homes on 50 foot lots.
b. A site which is an assembly of older adjacent single family homes on 54 foot lots.

The sites can be redeveloped to 4 storey woodframe strata apartment at a density of 2.0 FSR as permitted in RM-9 or RM-9N density bonus districts.

Site 10 - Main Street
This site is an assembly of commercial properties in the Main Street corridor zoned C-2 and built to an approximate existing FSR of 0.79. Under the current zoning, the site can be redeveloped to 4 storey mixed-use with retail at grade at a density of 2.5 FSR. This is representative of potential mixed-use redevelopment sites in the Main Street corridor, south of King Edward Avenue.

Site 11 - Kingsway
This site is an assembly of commercial properties in the Kingsway corridor zoned C-2 and built to an existing density of 0.63 FSR. Under the current zoning, the site can be redeveloped to a 4 storey mixed-use building with retail at grade at a density of 2.5 FSR. This site is representative of potential mixed-use redevelopment opportunities in C-2 zoned areas along the Kingsway corridor.

Site 12 - Joyce Station Precinct Plan
This site is an assembly of adjacent older single family homes on 33 foot lots in the RM-9BN density bonus zone near Joyce Station. Under existing zoning, the site can be redeveloped to a 4 storey strata apartment at a density of 2.0 FSR. This is representative of potential single family home redevelopment opportunities in the 4 storey apartment density bonus zones in the Joyce Station Precinct Plan.

Site 15 - Norquay Plan
This site is an assembly of commercial properties along Kingsway in Norquay Village zoned C-2 and developed at an existing density of 0.63 FSR. Under the Norquay Plan, the site can be rezoned (with a fixed rate CAC) and redeveloped to a 12 storey midrise mixed-use project with retail at grade at a density of 3.8 FSR. This is representative of potential development opportunities in areas designated for midrise development within the Norquay Plan area.

Site 16 - Norquay Plan
This site is an assembly of adjacent older single family homes on 33 foot lots in Norquay. Under the existing density bonus zoning, the site can be redeveloped to a 4 storey strata apartment at a density of 2.0 FSR. This is representative of potential single family home redevelopment opportunities in apartment transition zones adjacent to the Kingsway corridor in the Norquay Plan.

Site 22 - West Broadway
The site is a commercial property in the West Broadway corridor that is zoned C-2C1 and is developed at an existing density of 0.64 FSR. Under the current zoning, the site can be redeveloped to a 4 storey mixed-use project with retail at grade at a density of about 2.75 FSR (the existing maximum permitted FSR in the C-2C1 District is 3.0, but this is not typically achieved due to urban design constraints). This is representative of potential mixed-use redevelopment opportunities along major corridors in the west side of Vancouver.

3.2.2 Duplex and Townhouse Scenarios

We analyzed duplex and townhouse development at four different case study sites in different parts of the City. Each site is in a location that is a focus of planned townhouse growth in the City.

Site 6 - Grandview-Woodland Plan
The site is an assembly of adjacent older single family homes zoned RS-1. Under the Grandview Woodland Plan, the site can be rezoned (with a fixed rate CAC) to allow townhouse development up to a maximum density of 1.3 FSR. The site was selected to represent redevelopment of single family dwellings to townhouse units in the Nanaimo Sub-Area of the Grandview-Woodland Plan. Redevelopment of this site was tested at 1.2 and 1.3 FSR.

Site 8 - Marpole Community Plan
Two potential townhouse projects in the RM-8 and RM-8N density bonus zones in the Marpole Community Plan area were analyzed:

a. A site which is an assembly of older adjacent single family homes on 33 foot lots.
b. A site which is an assembly of older adjacent single family homes on 45 foot lots.

As permitted under the RM-8/RM-8N density bonus districts, these sites can be redeveloped to townhouse units at a density of 1.2 FSR. Although not permitted under existing zoning, the sites were also tested at a density of 1.5 FSR as the City wanted to understand the impact on the supportable DCL rate for higher density townhouse development.

Site 13 - Norquay Plan
Two potential townhouse projects in the RM-7 District in the Norquay Plan area were analyzed:

a. A site which is an assembly of older adjacent single family homes on 33 foot lots.
b. A site which is an assembly of older adjacent single family homes on 45 foot lots.

Under existing zoning, these sites can be developed to allow townhouse development at a density of 1.2 FSR. Although not permitted under existing zoning, the sites were also tested at a density of 1.5 FSR as the City wanted to understand the impact on the supportable DCL rate for higher density townhouse development. This site is representative of redevelopment potential in the Stacked Townhouse designation of the Norquay Plan.

Site 14 - Norquay Plan
Two potential duplex projects in the RT-10 and RT-11 Districts in the Norquay area were analyzed:

a. A site which is an assembly of older adjacent single family homes on 50 foot lots.
b. A site which is an assembly of older adjacent single family homes on 33 foot lots.

Existing zoning allows duplex development at 0.8 FSR. These sites are representative of the redevelopment potential of single family homes to duplex in East Vancouver.

3.2.3 Office and Industrial Redevelopment Scenarios

We analyzed office development at four different case study sites in different parts of the City and industrial development at one site.

Site 17 - Downtown Office

This site is an assembly of a series of existing commercial properties zoned DD-C1 in the Downtown Official Development Plan. The properties are built to an existing density of 1.18 FSR. This site can be redeveloped to a mixed-use office and retail building at a density of 7.0 FSR. This is representative of potential high density office redevelopment opportunities in Downtown Vancouver.

Site 18 - Broadway Uptown Office Precinct

This site is an existing C-3A zoned retail property in the Central Broadway corridor built to an existing density of 1.1 FSR. This site was tested assuming rezoning to allow a mixed-use office and retail building at a density of 5.0 FSR. This is representative of potential office redevelopment sites along Broadway between Yukon and Oak.

Site 19 - South Vancouver Industrial

This site is an I-2 zoned industrial property built at an existing density of 0.6 FSR. Our analysis assumed the site would be redeveloped for industrial use at an FSR of 1.0, which is the maximum achievable density with surface parking. This is representative of potential industrial redevelopment sites in South Vancouver.

Site 20 - Mount Pleasant Industrial/Office

This site is an I-1 zoned industrial property built at an existing density of 0.6 FSR. Under existing zoning, the site can be redeveloped to mixed industrial and office at a density of 3.0 FSR. The overall permitted density of 3.0 FSR includes 1.0 FSR of industrial or production space and 2.0 FSR of office space. This is representative of office redevelopment sites zoned I-1 in Mount Pleasant.

Site 21 - Grandview Boundary Office

This site is an I-2 zoned existing industrial property built to a density of 0.5 FSR. The site can be rezoned to allow an office building at a density of 3.0 FSR. This is representative of office redevelopment sites near SkyTrain Stations in the Grandview Boundary Mixed Employment Area.

4.0 Key Financial Assumptions

All of the detailed assumptions and analysis for our case study redevelopment scenarios are included in Appendix 1. This section identifies the key assumptions used in our analysis.

Exhibit 4 summarizes the sales price, lease rate, hard construction cost, fixed CAC or density bonus rate, and existing DCL rate which applies to each case study.

Exhibit 4: Key Case Study Assumptions

		Existing	Redevelopment					
Site Number	Plan Area/ Location	Existing Lease Rates/ Sq. ft.	Assumed Development Scenario	Residential sales prices per sq. ft.	Commercial Lease Rates	Hard construction cost/sq. ft.*	Existing Fixed Rate CAC/ Density Bonus	Existing DCL
1	Cambie Corridor - North	n/a	6 storey apartment at 2.25 FSR (c)	$1,150	n/a	$325	$60.94 CAC	$13.91
2	Cambie Corridor - South	n/a	6 storey apartment at 2.00 FSR (c)	$1,150	n/a	$325	$60.94 CAC	$13.91
3	Downtown South - DDL1 District	$22.00 psf office $38.00 psf retail	Highrise apartment at 5.0 FSR (c)	$1,300	n/a	$344	n/a	$19.09
4	West End Plan	$22.00 psf office $60.00 psf retail	Highrise mixed use at 8.75 FSR (c)	$1,300	$60.00 psf retail	$336	20% social housing	$13.91
5	Grandview Woodland Plan	n/a	6 storey apartment at 2.65 FSR (w)	$725	n/a	$219	$20.00 CAC	$13.91
6	Grandview Woodland Plan	n/a	Townhouses at 1.3 FSR (w)	$725	n/a	$198	$3.00 Density Bonus	$13.91
7	Grandview Woodland Plan	$30.00 psf retail	6 storey mixed use at 3.2 FSR (w)	$700	$27.50 psf retail	$229	$60.00 CAC	$13.91
8a/b	Marpole Plan	n/a	Townhouses at 1.2 & 1.5 FSR (33 ft. & 45 ft. lots) (w)	$1,000	n/a	$264	$10.78 density bonus	$13.91
9a/b	Marpole Plan	n/a	4 storey apartment at 2.0 FSR (50 ft. & 54 ft. lots) (w)	$900	n/a	$230	$59.41 density bonus	$13.91
10	Main Street	$35.00 psf retail	4 storey mixed use at apartment at 2.5 FSR (w)	$875	$38.00 psf retail	$229	n/a	$13.91
11	Kingsway	$30.00 psf retail	4 storey mixed use at apartment at 2.5 FSR (w)	$700	$35.00 psf retail	$230	n/a	$13.91
12	Joyce Station Precinct Plan	n/a	4 storeys at 2.0 FSR (w)	$675	n/a	$201	$3.00/sf density bonus	$13.91
13	Norquay Plan	n/a	Townhouse at 1.5 FSR (w)	$700	n/a	$172	n/a	$13.91
14a/b	Norquay Plan	n/a	Duplex at 0.8 FSR (w)	$900	n/a	$262	n/a	$13.91
15	Norquay Plan	$35.00 psf retail	12 storey Mixed Use at 3.8 FSR (c)	$750	$35.00 psf retail	$286	$11.08/sf fixed rate CAC	$13.91
16	Norquay Plan	n/a	4 storey apartment at 2.0 FSR (w)	$700	n/a	$201	$16.62/sf density bonus contribution	$13.91
17a/b	Downtown Office	$35.00 psf retail	Office at 7.0 FSR (or higher)	n/a	$35.00 psf office $35.00 psf retail	$332	n/a	$13.91
18	Broadway Uptown Office Precinct	$20.00 psf office $40.00 psf retail	Office at 5.0 FSR	n/a	$32.00 psf office $55.00 psf retail	$303	n/a	$13.91
19	South Vancouver Industrial	$9.00 psf industrial	Industrial at 1.0 FSR	n/a	$17.00 psf office $14.00 psf industrial	$129	n/a	$5.55
20	Mt. Pleasant Industrial/Office	$20.00 psf office $22.00 psf warehouse	Office/Production at 3.0 FSR	n/a	$30.00 psf office $25.00 psf industrial	$281	n/a	$5.55
21	Grandview Boundary Office	$13.00 psf industrial	Office at 3.0 FSR	n/a	$28.50 psf office	$268	n/a	$14.82
22	West Broadway	$45.00 psf retail	4 storey apartment at 2.75 FSR (c)	$1,150	$45.00 psf retail	$325	n/a	$13.91

Source: Coriolis Consulting
Notes: c = concrete, w = woodframe
* this is the all-in cost per gross square foot of building area including the cost of parking

Other key cost assumptions and allowances are as follows.

1. Rezoning application fees and an allowance for rezoning costs are included for sites which require rezoning.
2. A demolition allowance is included based on gross floor area of existing buildings.
3. A site servicing allowance is included based on the site frontage of each property.
4. For residential and mixed-use projects, soft costs and professional fees are set at 10% of hard construction costs. This covers application fees, design, engineering, consultants, survey, legal, insurance, warranties, deficiencies, and other professional fees. A project management fee of 3% is included on the hard and soft costs.
5. For office and industrial projects, soft costs, professional fees and project management fees are included at 15% of hard construction costs. This covers application fees, design, engineering, consultants, survey, legal, insurance, warranties, deficiencies, and other professional fees. Soft costs are typically higher for office and industrial projects than for multifamily projects due to increased design and consulting fees.
6. A contingency allowance of 3.5% is included on hard costs, soft costs and the project management fee.
7. A vacancy allowance is applied for income producing commercial space based on current market vacancy rates.
8. Marketing costs, sales costs and commissions are included based on typical industry standards.
9. Separate allowances are included for property taxes, DCLs, and GVS&DD levies based on current rates. The estimated supportable DCL does not account for any potential increase in levies from other levels of government, such as the planned increase to the GVS&DD DCC or the possible regional transit levy under consideration by TransLink. Increases in other levies would reduce the maximum DCL that could be supported at each site.
10. Construction financing is charged at 5% per year on 75% of the construction costs.
11. Land financing is charged at 5% per year on 50% of the estimated land value. Some developers do not include carrying costs on land in their financial analysis as they treat land acquisition as the invested equity in the project (so the return on the land is a function of the project's profit). However, we typically include carrying costs on land value in our financial analysis (as it can be viewed as an opportunity cost) so we have included this in our proformas.
12. A developer's profit margin of 15% of project costs (including estimated land value) is included.

5.0 Summary of Results of Financial Analysis

All of the detailed analysis for our case study redevelopment scenarios is included in Appendix 1. This section identifies the findings.

5.1 Strata Apartment and Mixed-Use Redevelopment Scenarios

Exhibit 5 summarizes the estimated maximum increase in the DCL rate which can be supported per square foot for each strata and mixed-use case study. These are not recommended rates. These are the calculated maximum increases in the DCL rate that could be supported by each case study.

Exhibit 5: Maximum Supportable DCL Increase for Apartment and Mixed-Use Development Case Studies

Site Number	Plan Area/ Location	Case Study Site Description	Assumed Redevelopment Scenario	Value Supported by Existing Use	Redevelopment Land Value with Existing DCL	Financially Attractive for Redevelopment Under Existing DCL	Existing DCL	Estimated Approximate Total Maximum Supportable DCL Rate psf	Approximate Maximum Opportunity to Increase DCL Rate
1	Cambie Corridor Plan	3 Residential Properties in 5300 Block of Cambie	6 Storey Apartment at 2.25 FSR	$14.1 million	$17.1 million	yes	$13.91	$65	$51
2	Cambie Corridor Plan	2 Residential Properties in 6800 Block of Cambie	6 Storey Apartment at 2.0 FSR	$8.9 million	$9.5 million	yes	$13.91	$32	$18
3	Downtown South (DD)	5 Commercial Properties in 1200 Block of Homer (built to 1.1 FSR)	Highrise Apartment at 5.0 FSR	$24.1 million	$47.6 million	yes	$19.09	$201	$187
4	West End Plan	1 Commercial Property in 1500 Block of Robson (built to 1.1 FSR)	Highrise Mixed Use at 8.75 FSR with 20% social housing	$24.9 million	$50.1 million	yes	$13.91	$197	$183
5	Grandview Woodland Plan	4 Residential Properties in 2200 Block of E Broadway	6 Storey Apartment at 2.65 FSR	$6.1 million	$8.0 million	yes	$13.91	$54	$40
7	Grandview Woodland Plan	1 Commercial Property in 1600 Block of Nanaimo (built to 0.3 FSR)	6 Storey Mixed Use at 3.2 FSR	$3.0 million	$3.1 million	yes	$13.91	$14	minimal
9a	Marpole Plan	3 Residential Properties in 7800 Block of Granville (50 ft lots)	4 Storey Apartment at 2.0 FSR	$8.1 million	$8.6 million	yes	$13.91	$28	$14
9b		3 Residential Properties in 400 Block of West 63rd Ave (54 ft lots)	4 Storey Apartment at 2.0 FSR	$10.7 million	$11 million	yes	$13.91	$19	$5
10	Main Street	3 Commercial Properties in 4100 Block of Main Street (built to 0.9 FSR)	4 Storey Mixed Use at 2.5 FSR	$7.6 million	$7.7 million	yes	$13.91	$17	$3
11	Kingsway	3 Commercial Properties in 2500 Block of Kingsway (built to 0.8 FSR)	4 Storey Mixed Use at 2.5 FSR	$8.7 million	$8.4 million	marginal	$13.91	$7	mimimal
12	Joyce Station Precinct Plan	4 Residential Properties in 3300 Block of Clive Ave	4 Storeys at 2.0 FSR	$6.8 million	$6.4 million	marginal	$13.91	$2	mimimal
15	Norquay Plan	3 Commercial Properties in 2500 Block of Kingsway (built to 0.8 FSR)	12 Storey Mixed Use at 3.8 FSR	$8.7 million	$9.5 million	yes	$13.91	$24	$10
16	Norquay Plan	3 Residential Properties in 2600 Block of Duke Street	4 Storey Apartment at 2.0 FSR	$4.3 million	$4.1 million	marginal	$13.91	$7	mimimal
22	West Broadway	1 commercial property in the 3200 Block of West Broadway (built to 0.65 FSR)	4 Storey Mixed Use at 2.75 FSR	$11.6 million	$13.1 million	yes	$13.91	$48	$34

Source: Coriolis Consulting

Exhibit 5 shows:

1. The calculated maximum supportable DCL rates for some properties are very high. There are different reasons for this depending on the site. For example:

- The Downtown sites (Sites 3 and 4) have very high calculated supportable DCL rates (over $100 per square foot) because each site's value as an income producing property is low in comparison to the land value supported by existing zoning.
- The West Broadway site (Site 22) has a very high calculated supportable DCL rates (over $40 per square foot) because its value as an income producing property is low in comparison to the land value supported by existing zoning.
- The Cambie Corridor sites (Sites 1 and 2) have high calculated supportable DCL rates because the fixed rate CAC is low in comparison to the value of the additional density that can be achieved through rezoning.

It is important to note that each of these properties would be valued in the market based on the land value supported by redevelopment, not on the value supported by the existing use. Even though the DCL could be increased by a large amount without affecting the highest and best use of the property (i.e. the site would still be more valuable for redevelopment than as a holding property), a large increase in the DCL rate would have a negative impact on the market value of the property. This could create problems for developers who recently acquired a property or for property owners that have obtained financing based on the site's land value or for property owners who are relying on the value of their property for other reasons.

2. There is a large variation in the maximum supportable increase in DCL rates by geography, type of apartment project (lowrise, midrise, highrise), and permitted density.
3. Apartment and mixed-use projects in Downtown Vancouver can support a large increase in the DCL rate (an increase over $100 per square foot) without changing the highest and best use of the property (although this would have a large impact on property value).
4. Apartment and mixed-use projects in West Side locations can support a large increase in the DCL rate. The calculated supportable increase ranges from a low of $5 per square foot to over $50 per square foot (although increases at the upper end of this range would have a large impact on property value).
5. The ability of apartment and mixed-use projects in East Vancouver locations to support an increase in the DCL varies between zero and $40 per square foot:

   - 6 storey apartment projects in the Grandview-Woodland Plan area can support an increase in the DCL rate of about $40 per square foot.
   - Midrise mixed-use projects in the Norquay Plan area can support an increase in the DCL rate of about $10 per square foot.
   - 4 storey mixed-use projects along the Main Street corridor can support an increase in the DCL of about $5 per square foot.
   - 6 storey mixed-use projects in the Grandview-Woodland Plan area cannot support an increase in the DCL rate.
   - 4 storey mixed-use projects along the Kingsway corridor cannot support an increase in the DCL rate.
   - 4 storey apartment projects in the Norquay Plan area and in Joyce Station area cannot support an increase in the DCL rate.

5.2 Duplex and Townhouse Redevelopment Scenarios

Exhibit 6 summarizes the estimated maximum increase in the DCL rate which can be supported per square foot for townhouse redevelopment case studies. These are not recommended rates. These are the calculated maximum increases in the DCL rate that could be supported by each case study.

Exhibit 6: Maximum Supportable DCL Increase for Townhouse Redevelopment Scenarios

Site Number	Plan Area/ Location	Case Study Site Description	Assumed Redevelopment Scenario	Estimated Existing Land Value	Redevelopment Land Value with Existing DCL	Financially Attractive for Redevelopment Under Existing DCL	Existing DCL Rate psf	Estimated Approximate Maximum Supportable DCL Rate psf	Approximate Maximum Opportunity to Increase DCL Rate
6a	Grandview Woodland Plan	4 Residential Properties in 2200 Block of Nanaimo (33 foot lots)	Townhouses at 1.2 FSR	$6.3 million	$6.3 million	marginal	$3.23	$1	minimal
6b		4 Residential Properties in 2200 Block of Nanaimo (33 foot lots)	Townhouses at 1.3 FSR	$6.3 million	$6.7 million	yes	$13.91	$27	$13
8a	Marpole Plan	4 Residential Properties in 8000 Block of Shaughnessy (33 ft lots)	Townhouses at 1.2 FSR	$9.8 million	$8.9 million	marginal	$3.23	$0	minimal
8a		4 Residential Properties in 8000 Block of Shaughnessy (33 ft lots)	Townhouses at 1.5 FSR	$9.8 million	$10.6 million	yes	$13.91	$44	$30
8b	Marpole Plan	2 Residential Properties in 8300 Block of French Street (45 ft lots)	Townhouses at 1.2 FSR	$4.7 million	$5.3 million	yes	$3.23	$57	$53
8b		2 Residential Properties in 8300 Block of French Street (45 ft lots)	Townhouses at 1.5 FSR	$4.7 million	$6.2 million	yes	$13.91	$111	$97
13a	Norquay Plan	4 Residential Properties in 2600 Block of Ward Street (33 foot lots)	Townhouse at 1.2 FSR (grade level parking)	$6.1 million	$5.4 million	marginal	$3.23	$0	minimal
13b		4 Residential Properties in 2600 Block of Ward Street (33 foot lots)	Townhouse at 1.5 FSR	$6.1 million	$5.7 million	marginal	$13.91	$0	minimal
14a	Norquay Plan	1 Residential Property in 1600 Block of East 21st Ave (50 ft lot)	Duplex at 0.8 FSR	$1.9 million	$1.9 million	yes	$3.23	$7	$3
14b		1 Residential Property in 1200 Block of East 26th Ave (33 ft lot)	Duplex at 0.8 FSR	$1.7 million	$1.9 million	marginal	$3.23	$0	minimal

Source: Coriolis Consulting

Each of the townhouse and duplex projects requires redevelopment of existing single family homes. The variation in single family home lot size has an impact on the supportable DCL rate for each project as smaller single family lots are more challenging (from a financial perspective) to redevelop than larger lots.

As shown in Exhibit 6, there is very large variation in the maximum supportable increase in DCL rates by geography, existing lot size, and permitted density.

For duplex and townhouse projects built to a maximum density of 1.2 FSR:

- Projects in West Side locations can support a large increase in the DCL rate (over $50 per square foot) if built on larger single family lots. This is due to the low cost to obtain bonus density in comparison to the value of the bonus density.

- Projects in West Side locations cannot support a material increase in the DCL rate if built on smaller (33 foot) lots.
- Projects in East Side locations cannot support a material increase in the DCL rate.

For townhouse projects built to a maximum density between 1.2 and 1.5 FSR:

- Projects in West Side locations can support a large increase in the DCL rate ranging between $30 and $90 per square foot (depending on existing lot size). This is due to the low cost to obtain bonus density in comparison to the value of the bonus density.
- Projects in Grandview-Woodland can support an increase in the DCL rate of about $13 per square foot.
- Projects in other East Side locations cannot support a material increase in the DCL rate.

5.3 Office and Industrial Redevelopment Scenarios

Our analysis indicates that:

1. Office development is only financially viable in limited circumstances:
    - When permitted office densities are high (such as in some Downtown Districts).
    - Where there is a large increase in permitted density due to a rezoning, which typically occurs for Downtown office projects.
    - When the DCL rate is low (such as the I-1 District in Mount Pleasant).
2. Single storey warehouse, distribution, and manufacturing development is not financially viable other than on vacant sites.

As shown in Exhibit 7, office and industrial projects cannot support an increase in the DCL rate at the densities assumed in our analysis.

Exhibit 7: Maximum Supportable DCL for Office and Industrial Redevelopment

Site Number	Plan Area/Location	Case Study Site Description	Zoning	Assumed Redevelopment Scenario	Estimated Existing Land Value	Redevelopment Land Value with Existing DCL	Financially Attractive for Redevelopment Under Existing DCL	Existing City Wide DCL Rate psf	Approximate Maximum Opportunity to Increase DCL Rate
17	Downtown Office	3 properties including older commercial and hostel at Dunsmuir and Seymour	DD	Office at 7.0 FSR	$17.6 million	$13.4 million	marginal	$13.91	minimal
18	Broadway Uptown Office Precinct	1 commercial property in 600 Block of W Broadway (built to 1.1 FSR)	C-3A	Office at 5.0 FSR	$23.8 million	$19.5 million	marginal	$13.91	minimal
19	South Vancouver Industrial	1 industrial property in 8700 Block of Ash Street (built to 0.6 FSR)	I-2	Industrial at 1.0 FSR	$7.4 million	$5.5 million	marginal	$5.55	minimal
20	Mt. Pleasant Industrial/Office	1 industrial/commercial property in 00 Block of West 6th Avenue (built to 0.6 FSR)	I-1	Office/Production at 3.0 FSR	$4.6 million	$4.5 million	marginal	$5.55	minimal
21	Grandview Boundary Office	1 industrial property in 2800 Block of East 12th Ave (built to 0.5 FSR)	I-2	Office at 3.0 FSR	$7.8 million	$6.2 million	marginal	$14.82	minimal

Source: Coriolis Consulting

6.0 Findings

6.1 Apartment and Mixed-Use Development

1. The DCL rate supportable by apartment and mixed-use development depends on the project location and permitted density.
   - Apartment and mixed-use projects in Downtown Vancouver can support a large increase in the DCL rate (over $100 per square foot).
   - Apartment and mixed-use projects in West Side locations can support a large increase in the DCL rate (between $5 and $50 per square foot).
   - The ability of apartment and mixed-use projects in East Side locations to support an increased DCL rate varies (primarily from zero to $10 per square foot although one case study supports a higher increase). In some locations, apartment and mixed-use projects can support a significant increase in the DCL rate. However, in other areas (such as Kingsway, Joyce Station, and parts of Grandview Woodland), projects cannot support a material increase in the DCL rate.
2. Although the DCL could be increased by a large amount for some sites without affecting the highest and best use of the property (it would still be more valuable as a development site than as a holding property), a large increase in the DCL rate would have a negative impact on the market value of the property. This could create problems for developers who recently acquired a property or for property owners that have obtained financing based on the site's land value, or for property owners who are relying on the value of the property for other reasons.
3. If the DCL rate is increased by too much, it could result in a reduction in the number of development sites that are financially attractive for redevelopment, particularly on the East Side of Vancouver. This would lead to higher apartment unit prices over time. The impact would depend on the amount of the rate increase.
4. If the City needs to increase the DCL rate by more than roughly $3 to $5 per square foot, it should consider different DCL rates for different geographic areas of Vancouver with a lower rate for projects in East Vancouver and a higher rate for projects in Downtown and the West Side.

6.2 Duplex and Townhouse Development

1. The DCL rate supportable by duplex or townhouse development depends on the project location, existing single family lot size, and permitted density.
2. Duplex projects developed at 0.8 FSR cannot support an increase in the DCL (other than in unique circumstances, such as large existing lot sizes).
3. For townhouse development at or below 1.2 FSR:
   - Projects on the West Side can support a significant increase in the DCL rate if the existing single family homes being redeveloped are on larger lots (say 45 feet width or greater). If the lots are smaller (33 feet or so), West Side townhouse projects cannot support any material increase in the DCL.

- Projects on the East Side cannot support any material increase in the DCL.

4. For townhouse development between 1.2 FSR and 1.5 FSR:
   - Projects on the West Side can support a significant increase in the DCL rate (at both small and large existing single family lots).
   - Projects in Grandview-Woodland can support a significant increase in the DCL rate.
   - Projects in other East Side locations cannot support a material increase in the DCL rate.
5. Based on the difference in supportable DCL rates by density, the City should consider different DCL rates for lower density and higher density townhouse projects:
   - Any increase in the DCL rate for duplex and townhouse projects at permitted densities below 1.2 FSR will need to be small. Otherwise, it could result in a reduction in the number of development sites that are financially attractive for redevelopment throughout the City, particularly in East Vancouver. This would lead to upward pressure on townhouse unit prices over time.
   - Townhouse projects over 1.2 FSR could support a higher DCL rate.

6.3 Industrial Development

1. Single storey warehouse, distribution, and manufacturing development is not financially viable under the existing DCL rate, other than on vacant sites.
2. Any significant increase in the industrial DCL rate will negatively affect the viability of industrial development.

6.4 Office Development

1. Office development is only financially viable in limited circumstances:
   - When permitted office densities are high (such as in some Downtown Districts).
   - Where there is a large increase in permitted density due to a rezoning, which typically occurs for Downtown office projects.
   - When the DCL rate is low (such as the I-1 District in Mount Pleasant).
2. A significant increase in the office DCL rate will negatively affect the viability of office development (in the absence of rezoning to allow increased density).

7.0 Evaluation of Draft Proposed DCL Rates

After completing our analysis of supportable DCL rates for the various case study sites, the City provided us with draft proposed DCL rates. The City asked us to comment on the proposed draft rates.

We compared the draft rates to the supportable rates identified in the case study analysis to gauge the likely impact of the draft proposed rates on the financial viability of redevelopment for each case study site.

7.1 Proposed Draft City-wide DCL Rates

Exhibit 8 summarizes the existing and draft proposed City-wide DCL rates by use.

Exhibit 8: Existing and Proposed Calculated City-wide DCL Rates

	Existing DCL Rates per sq. ft.	Proposed DCL Rates per sq. ft.	Proposed Rate Increase
Residential Development			
Residential at or below 1.2 FSR	$3.23	$4.02	$0.79
Residential over 1.2 FSR & at or below 1.5 FSR	$13.91	$8.69	- $5.22
Higher density residential above 1.5 FSR	$13.91	$17.34	$3.43
Non-Residential Development			
Mixed Employment	$5.55	$13.01	$7.46
Industrial	$5.55	$6.92	$1.37
Commercial and Other	$13.91	$17.34	$3.43

Source: City of Vancouver

- The residential development DCL rate applies to residential uses based on the permitted density.
- The commercial DCL rate of $17.34 per square foot would apply to commercial uses, with the exception of commercial development in industrial zoning districts. This space would currently be levied $13.91 per square foot.
- In the IC-1, IC-2, IC-3, I1, I-3 and I-4 zoning districts, the mixed employment rate of $13.01 applies to all floorspace regardless of the use. This is a new DCL category. Currently this space would be subject to the industrial rate of $5.55 per square foot.
- In the I-2, M-1, M-1A, M-1B, M-2, MC-1 and MC-2, the industrial rate of $6.92 per square foot would apply to all space, regardless of use.

7.2 Strata Apartment and Mixed-Use Rates

Exhibit 9 summarizes the impact of the proposed DCL rate on the financial viability of strata apartment and mixed-use redevelopment projects.

The current DCL rate for apartment development is $13.91 per square foot. The proposed draft rate is $17.34 per square foot, an increase in $3.43 per square foot.

Exhibit 9: Impact of Proposed DCL on Financial Viability of Apartment and Mixed-Use Development

Site Number	Plan Area/ Location	Assumed Redevelopment Scenario	Existing DCL Rate psf	Financially Attractive for Development with Existing DCL	Estimated Approximate Total Maximum Supportable DCL Rate psf	Proposed DCL Rate psf	Financially Attractive for Development with Proposed DCL
1	Cambie Corridor Plan	6 Storey Apartment at 2.25 FSR	$13.91	yes	$65	$17.34	yes
2	Cambie Corridor Plan	6 Storey Apartment at 2.0 FSR	$13.91	yes	$32	$17.34	yes
3	Downtown South (DD)	Highrise Apartment at 5.0 FSR	$19.09	yes	$201	$22.52	yes
4	West End Plan	Highrise Mixed Use at 8.75 FSR with 20% social housing	$13.91	yes	$197	$17.34	yes
5	Grandview Woodland Plan	6 Storey Apartment at 2.65 FSR	$13.91	yes	$54	$17.34	yes
7	Grandview Woodland Plan	6 Storey Mixed Use at 3.2 FSR	$13.91	yes	$14	$17.34	marginal
9a	Marpole Plan	4 Storey Apartment at 2.0 FSR	$13.91	yes	$28	$17.34	yes
9b		4 Storey Apartment at 2.0 FSR	$13.91	yes	$19	$17.34	yes
10	Main Street	4 Storey Mixed Use at 2.5 FSR	$13.91	yes	$17	$17.34	yes
11	Kingsway	4 Storey Mixed Use at 2.5 FSR	$13.91	marginal	$7	$17.34	marginal
12	Joyce Station Precinct Plan	4 Storeys at 2.0 FSR	$13.91	marginal	$2	$17.34	marginal
15	Norquay Plan	12 Storey Mixed Use at 3.8 FSR	$13.91	yes	$24	$17.34	yes
16	Norquay Plan	4 Storey Apartment at 2.0 FSR	$13.91	marginal	$7	$17.34	marginal
22	West Broadway	4 Storey Mixed Use at 2.75 FSR	$13.91	yes	$48	$17.34	yes

Source: Coriolis Consulting

We tested a total of 13 strata apartment and mixed-use development case study sites. Out of the 13 sites, 9 sites can support the proposed draft DCL rate so there is no impact on the viability of redeveloping these sites.

Of the other 4 sites, 3 would already have difficulty supporting the existing DCL rate, so the increased DCL would only change the financial viability of one of the case study sites. For these 4 case study sites, an increase in the DCL to the draft proposed rate will result in one of two outcomes:

- Developers will wait for prices to increase to the point where development becomes financially attractive.
- Developers will proceed with development but achieve a slightly lower profit margin than they would have achieved under the current DCL rate.

Exhibit 10 summarizes the estimated profit margin which would be achieved at these 4 case study sites under the proposed draft DCL rate. Although the profit margin is lower than a developer would typically target (15% of overall project costs), it is likely still sufficient for some developers to proceed.

Exhibit 10 also summarizes the sales price per square foot which would be needed to support the proposed draft DCL rate at each site (i.e. result in a 15% profit margin). Strata unit sales prices will need to rise between 1% and 4% to support the proposed draft DCL rate. Based on average annual growth in strata apartment prices in East Vancouver over the past three years, this represents between one and five months of price appreciation.[4]

Exhibit 10: Achievable Profit Margin and Required Sales Prices Needed to Support the Proposed DCL

Site Number	Plan Area	Assumed Redevelopment Scenario	Estimated Profit Margin at Proposed DCL Rate and Current Prices	Current Sales Price psf*	Sales Price psf Needed to Achieve Standard Financial Viability	% Sales Price Increase
7	Grandview Woodland Plan	6 storey mixed-use at 3.2 FSR	14.5%	$700	$704	0.6%
11	Kingsway	4 storey mixed-use at 2.5 FSR	12.7%	$700	$719	2.7%
12	Joyce Station Precinct Plan	4 storey apartment at 2.0 FSR	11.2%	$675	$700	3.7%
16	Norquay Plan	4 storey mixed-use at 2.75 FSR	12.5%	$700	$716	2.3%

*Sales prices as of December 2016
Source: Coriolis Consulting

Overall, our analysis shows the draft proposed DCL rates will not have a large impact on the financial viability of apartment development in the City.

Downtown and West Side projects can support the proposed DCL rate. The proposed levy may have a negative impact on the viability of apartment development in some East Vancouver locations (such as Joyce Station, Norquay and Kingsway), but we would expect any impacts to be small.

[4] Three-year price appreciation per square foot from January 2014 to January 2017 of 32% per square foot in the East Vancouver apartment market, or an average of 9.7% annually.

7.3 Duplex and Townhouse Rates

Exhibit 11 summarizes the impact of the proposed DCL rate on the financial viability of duplex and townhouse redevelopment.

7.3.1 Duplex and Townhouse Redevelopment Up to 1.2 FSR

The current DCL rate for townhouse development at or below 1.2 FSR is $3.23 per square foot. The proposed rate is $4.02 per square foot, an increase in $0.79 per square foot.

Exhibit 11: Impact of Proposed Townhouse DCL on Financial Viability of Redevelopment

Site Number	Plan Area/ Location	Assumed Redevelopment Scenario	Existing DCL Rate psf	Financially Attractive for Redevelopment Under Existing DCL	Estimated Approximate Maximum Supportable DCL Rate psf	Proposed DCL Rate psf	Financially Attractive for Redevelopment Under Proposed DCL
6a	Grandview Woodland Plan	Townhouses at 1.2 FSR - 33 foot lots	$3.23	marginal	$1	$4.02	marginal
8a	Marpole Plan	Townhouses at 1.2 FSR - 33 foot lots	$3.23	no	($43)	$4.02	no
8b	Marpole Plan	Townhouses at 1.2 FSR - 45 foot lots	$3.23	yes	$57	$4.02	yes
13a	Norquay Plan	Townhouse at 1.2 FSR - 33 foot lots	$3.23	no	($42)	$4.02	no
14a	Norquay Plan	Duplex at 0.8 FSR - 50 foot lots	$3.23	yes	$7	$4.02	yes
14b		Duplex at 0.8 FSR - 33 foot lots	$3.23	no	($72)	$4.02	no

Source: Coriolis Consulting

Our case study analysis shows duplex and townhouse development at 1.2 FSR or less is financially attractive at 2 of the 6 case studies we assessed. Both case studies involve redevelopment of old single family homes on mid to large sized lots. The proposed increase does not change the financial viability of these projects given the estimated ability of these types of sites to support a higher DCL.

For one of the case study sites, the financial viability of development is marginal under both the existing DCL rate and the proposed draft rate. The proposed increase of $0.79 per square foot will not have a material impact on the viability of townhouse development at this site.

The remaining 3 case studies are not financially viable under the existing DCL rate or the draft proposed DCL rate. The existing value of the sites is significantly higher than the redevelopment land value, so these are not viable for development to townhouse under current market conditions.

Overall, the draft proposed increase of $0.79 per square foot will not have a material impact on the pace of duplex or townhouse development at or below 1.2 FSR. This is a small increase relative to the total cost of developing a project.

7.3.2 Townhouse Redevelopment Between 1.2 FSR and 1.5 FSR

The current DCL rate for townhouse redevelopment between 1.2 and 1.5 FSR is $13.91. The proposed rate is $8.69 per square foot, a decrease of $5.22 per square foot.

Exhibit 12: Impact of Proposed Townhouse DCL on Financial Viability of Redevelopment

Site Number	Plan Area/ Location	Assumed Redevelopment Scenario	Existing DCL Rate psf	Financially Attractive for Redevelopment Under Existing DCL	Estimated Approximate Maximum Supportable DCL Rate psf	Proposed DCL Rate psf	Financially Attractive for Redevelopment Under Proposed DCL
6b	Grandview Woodland Plan	Townhouses at 1.3 FSR - 33 foot lots	$13.91	yes	$27	$8.69	yes
8a	Marpole Plan	Townhouses at 1.5 FSR - 33 foot lots	$13.91	yes	$44	$8.69	yes
8b	Marpole Plan	Townhouses at 1.5 FSR- 45 foot lots	$13.91	yes	$111	$8.69	yes
13b	Norquay Plan	Townhouse at 1.5 FSR - 33 foot lots	$13.91	marginal	($20)	$8.69	marginal

Source: Coriolis Consulting

We tested a total of 4 townhouse case study sites at densities over 1.2 FSR (Exhibit 12). Of the 4 sites, 3 sites can support the proposed DCL rate on both small or mid to large size lots, the same as under the existing DCL rates.

The proposed reduction in the DCL rates for townhouse projects between 1.2 and 1.5 FSR will improve the viability of townhouse development.

7.4 Industrial Rates

The current industrial DCL rate of $5.55 per square foot applies to projects developed in all industrial zoning districts.[5] This rate applies to the total floorspace of projects in these zoning district whether it is industrial or non-industrial space (such as office or retail).

The proposed draft DCL rates differ depending on the industrial zoning district:

- The proposed industrial DCL rate of $6.92 per square foot will apply to projects in the I-2, M-1, M-1A, M-1B, M-2, MC-1, MC-2 zoning districts. This is an increase of $1.37 per square foot for projects developed in these districts.
- The proposed mixed employment DCL rate of $13.01 per square foot will apply to projects in the IC-1, IC-2, IC-3, I-1, I-3 and I-4 zoning districts. This is an increase of $7.46 per square foot for projects developed in these areas.

[5] IC-1, IC-2, IC-3, I1, I-3, I-4, M-1, M-1A, M-1B, M-2, MC-1, MC-2.

Exhibit 13 summarizes the impact of the proposed industrial DCL rate on the financial viability of these industrial redevelopment scenarios.

Exhibit 13: Impact of Proposed DCL on Financial Viability of Industrial Redevelopment Scenarios

Site Number	Plan Area/Location	Assumed Redevelopment Scenario	Existing City Wide DCL Rate psf	Financially Attractive for Redevelopment Under Existing DCL	Estimated Approximate Maximum Supportable DCL Rate psf	Proposed DCL Rate psf	Financially Attractive for Redevelopment Under Proposed DCL
19	South Vancouver Industrial	Industrial at 1.0 FSR	$5.55	no	($26)	$6.92	no
20	Mt. Pleasant Industrial/Office	Office/Production at 3.0 FSR	$5.55	marginal	$2	$13.01	no

Source: Coriolis Consulting

Our industrial case study analysis (site 19) shows that the current DCL rate of $5.55 per square foot is not supportable for single storey industrial projects (other than on vacant sites). While the proposed increase of $1.37 per square foot is relatively small, any increase will be difficult for industrial projects to support given the challenging economics associated with industrial redevelopment.

Our mixed employment case study analysis (site 20) shows that

a mixed industrial and office project has difficulty supporting the existing DCL rate and cannot support an increase.

Overall, our analysis shows the proposed DCL rates will make it more challenging to develop new industrial space in the City.

In addition, the new mixed employment category will create situations where similar projects may be subject to very different DCL rates. For example, industrial space in some districts will pay $6.92 per square foot while industrial space in other districts will pay $13.01 per square foot.

Overall, we think that the proposed industrial rates will reduce the number of sites that are attractive for redevelopment to industrial use. In addition, we think that industrial space should be subject to the same rate across all industrial zoning districts. The DCL rate should be based on use, not on zoning district.

7.5 Office Rates

The current DCL rate for office redevelopment is $13.91 per square foot. The proposed rate is $17.34 per square foot, an increase in $3.43 per square foot. However, for office projects located in some of the industrial zoning districts, the mixed employment rate of $13.01 per square foot will apply.[6] This is an increase of $7.46 per square foot from the existing rate of $5.55 per square foot that is applied to projects in these districts.

The new mixed employment category will create situations where similar office projects may be subject to very different DCL rates. For example, an office building in the I-3 District (which allows 100% office) will pay

[6] IC-1, IC-2, IC-3, I1, I-3, I-4 Zoning Districts. These zoning districts allow a large component of office space.

$13.01 per square foot while an office project in a commercial (or CD) zoning district will pay a pay a higher rate.

Exhibit 14: Impact of Proposed DCL on Financial Viability of Office Redevelopment Scenarios

Site Number	Plan Area/Location	Assumed Redevelopment Scenario	Existing City Wide DCL Rate psf	Financially Attractive for Redevelopment Under Existing DCL	Estimated Approximate Maximum Supportable DCL Rate psf	Proposed DCL Rate psf	Financially Attractive for Redevelopment Under Proposed DCL
17	Downtown Office	Office at 7.0 FSR	$13.91	no	($38)	$17.34	no
18	Broadway Uptown Office Precinct	Office at 5.0 FSR	$13.91	no	($25)	$17.34	no
19	South Vancouver Industrial	Industrial at 1.0 FSR	$5.55	no	($26)	$6.92	no
20	Mt. Pleasant Industrial/Office	Office/Production at 3.0 FSR	$5.55	marginal	$2	$13.01	no

Source: Coriolis Consulting

We tested a total of four office case study sites at densities of 3.0 FSR to 7.0 FSR. All four sites have difficulty supporting the existing DCL rate and cannot support an increased rate. However, office projects can support a higher DCL rate when there is an ability to increase permitted density through rezoning. This typically occurs in Downtown.

Overall, we think that the proposed office rates could reduce the number of sites that are attractive for redevelopment to office use, particularly outside of Downtown. In addition, we think that office space should be subject to the same rate across all zoning districts. The DCL rate should be based on use, not on zoning district.

Appendix 1: Financial Analysis of Case Studies

This appendix includes the analysis for each of the 22 case study sites that we analyzed. For each site, this appendix includes the following:

- A summary of the estimated value supported by the existing use of the property (i.e., value as a single family house or as an income producing investment property).
- A detailed land residual analysis (proforma) that is used to determine the land value supported by redevelopment under the existing DCL rate. This proforma is also used to estimate the maximum DCL that can be supported by the site (the DCL rate that would result in the land value matching the value supported by the existing use).

Site 1 - Cambie Corridor Plan, North End of the Corridor

Site 1 is located in the 5300 Block of Cambie. It consists of three adjacent older single family homes with a combined site size of 24,766 square feet. We analyzed the viability of redevelopment to strata apartment at 2.25 FSR, as permitted under the Cambie Corridor Plan.

Existing Value

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $11.8 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $14.1 million.

Estimated Land Value Supported by Strata Apartment at 2.25 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to concrete strata apartment at 2.25 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $17.1 million which is $3.0 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $51 per square foot, or a total DCL of $65 per square foot.

Site 1 – Cambie Corridor Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	24,766	sq.ft.				
	203	feet of frontage				
Existing Base Density	0.75	FSR				
Increased Density 1	1.50	FSR				
Density with Bonuses	2.25	FSR				
Storage	0.07		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	2.32	FSR				
Total Gross floorspace	57,476	gross sq.ft.				
Market Strata Residential floorspace	57,476	gross square feet				
Net saleable space	48,855	sq.ft. or	85%	of gross area		
Average Gross unit size	1,306	sq.ft. gross				
Average Net unit size	1,110	sq.ft.				
Number of units	44	units or	191	per hectare		
Underground/structured parking stalls provided	48	stalls	19,200	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,150	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
Fixed Rate CAC (on increased density)	$60.94	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$45,000					
Site Servicing	$92,835	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$325					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.75	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on		50%	of land cost	
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$8,969,000					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$28,091,357	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$56,182,714
Less commissions and sales costs	$1,685,481
Net residential sales revenue	$54,497,232
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$2,263,860
Allowance for Demolition of Existing Buildings	$45,000
Site Servicing	$92,835
Connection fees	$50,000
Hard construction costs	$18,679,675
Soft costs	$1,886,751
Project Management	$694,834
Residential Marketing	$1,685,481
Post Construction Holding Costs	$33,000
Contingency on hard and soft costs	$893,600
Regional Levy	$25,960
DCLs - residential	$799,490
Less property tax allowance during development	$95,089
Construction financing	$898,688
Financing fees/costs	$265,193
Total Project Costs Before Land Related	$28,552,456
Allowance for Developer's Profit	$7,326,226
Residual to Land and Land Carry	**$18,618,550**
Less financing on land during construction and approvals	$994,929
Less property purchase tax	$506,709
Residual Land Value	**$17,116,913**
Residual Value per sq.ft. of gross buildable floorspace	**$298**
Residual Value per sq.ft. of zoned FSR	**$307**
Residual Value per sq.ft. of site	**$691**
Existing Value (with Assembly Premium)	$14,116,620
Increase in Value	$3,000,293
Max supportable DCL increase per sq. ft.	**$51**
Max total supportable DCL (including existing DCL)	**$65**

Site 2 - Cambie Corridor Plan, South End of the Corridor

Site 2 is located in the 6800 Block of Cambie. It consists of two adjacent older single family homes with a combined site size of 15,600 square feet. We analyzed the viability of redevelopment to strata apartment at 2.0 FSR, as permitted under the Cambie Corridor Plan.

Existing Value

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $7.4 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $8.9 million.

Estimated Land Value Supported by Strata Apartment at 2.0 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to concrete strata apartment at 2.0 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $9.5 million which is $0.6 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $18 per square foot, or a total DCL of $32 per square foot.

Site 2 – Cambie Corridor Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	15,600	sq.ft.				
	120	feet of frontage				
Existing Base Density	0.70	FSR				
Increased Density 1	1.30	FSR				
Density with Bonuses	2.00	FSR				
Storage	0.06		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	2.06	FSR				
Total Gross floorspace	32,196	gross sq.ft.				
Market Strata Residential floorspace	32,196	gross square feet				
Net saleable space	27,366	sq.ft. or	85%	of gross area		
Average Gross unit size	1,288	sq.ft. gross				
Average Net unit size	1,095	sq.ft.				
Number of units	25	units or	172	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	28	stalls or	1.1	per unit		
Underground/structured parking stalls provided	28	stalls	11,200	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,150	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
Fixed Rate CAC (on increased density)	$60.94	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$30,000					
Site Servicing	$54,878	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Construction Costs						
Hard Cost Used in Analysis	$325					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.75	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$9,482,400					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$15,735,646	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$31,471,291
Less commissions and sales costs	$944,139
Net residential sales revenue	$30,527,152
Total Value Net of Commissions	$30,527,152
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$1,235,863
Allowance for Demolition of Existing Buildings	$30,000
Site Servicing	$54,878
Connection fees	$50,000
Hard construction costs	$10,463,601
Soft costs	$1,059,848
Project Management	$391,116
Residential Marketing	$944,139
Post Construction Holding Costs	$18,750
Contingency on hard and soft costs	$502,187
Regional Levy	$14,750
DCLs - residential	$447,842
Less property tax allowance during development	$67,379
Construction financing	$506,079
Financing fees/costs	$149,338
Total Project Costs Before Land Related	$16,078,769
Allowance for Developer's Profit	$4,103,856
Residual to Land and Land Carry	**$10,344,527**
Less financing on land during construction and approvals	$552,786
Less property purchase tax	$271,752
Residual Land Value	**$9,519,989**
Residual Value per sq.ft. of gross buildable floorspace	**$296**
Residual Value per sq.ft. of zoned FSR	**$305**
Residual Value per sq.ft. of site	**$610**
Existing Value (with Assembly Premium)	$8,892,000
Increase in Value	$627,989
Max supportable DCL increase per sq. ft.	**$18**
Max total supportable DCL (including existing DCL)	**$32**

Site 3 - Downtown Development Plan, Downtown South

Site 3 is located in the 1200 Block of Homer. It consists of five adjacent commercial properties with a combined site size of 24,000 square feet. We analyzed the viability of redevelopment to highrise apartment at 5.0 FSR, as permitted under the Downtown Official Development Plan.

<u>Existing Value</u>

Based on the capitalized income value of the properties, we estimate that the site has a value of about $24.1 million.

<u>Estimated Land Value Supported by Highrise Strata Apartment at 5.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to concrete highrise apartment at 5.0 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $47.6 million which is $23.5 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $187 per square foot, or a total DCL of $201 per square foot.

Site 3 – Downtown South Highrise Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	24,000	sq.ft.				
	200	feet of frontage				
Existing Base Density	5.00	FSR				
Residential Density Before Exclusions	5.00	FSR				
Storage	0.17		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	5.17	FSR				
Total Gross floorspace	123,983	gross sq.ft.				
Market Strata Residential floorspace	123,983	gross square feet				
Net saleable space	105,385	sq.ft. or	85%	of gross area		
Average Gross unit size	1,240	sq.ft. gross				
Average Net unit size	1,054	sq.ft.				
Number of units	100	units or	448	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	110	stalls or	1.1	per unit		
Underground/structured parking stalls provided	110	stalls	44,000	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,300	per sq.ft. of net saleable residential space				
Construction Costs						
Allowance for Demolition of Existing Buildings	$300,000					
Site Servicing	$91,463	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$344					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$19.09	per sq.ft. of floorspace				
Commercial DCLs	$19.09	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	3.00	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on		50%	of land cost	
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	0.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$31,681,300					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$68,500,484	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$137,000,969
Less commissions and sales costs	$4,110,029
Net residential sales revenue	$132,890,940
Total Value Net of Commissions	$132,890,940
Project Costs	
Allowance for Demolition of Existing Buildings	$300,000
Site Servicing	$91,463
Connection fees	$50,000
Hard construction costs	$42,694,833
Soft costs	$4,313,630
Project Management	$1,423,498
Residential Marketing	$4,110,029
Post Construction Holding Costs	$75,000
Contingency on hard and soft costs	$1,857,046
Regional Levy	$59,000
DCLs - residential	$2,366,831
Less property tax allowance during development	$533,992
Construction financing	$3,255,487
Financing fees/costs	$573,101
Total Project Costs Before Land Related	$61,703,911
Allowance for Developer's Profit	$17,864,926
Residual to Land and Land Carry	**$53,322,103**
Less financing on land during construction and approvals	$4,265,768
Less property purchase tax	$1,449,690
Residual Land Value	**$47,606,644**
Residual Value per sq.ft. of gross buildable floorspace	**$384**
Residual Value per sq.ft. of zoned FSR	**$397**
Residual Value per sq.ft. of site	**$1,984**
Existing Income Producing Value	$24,111,307
Increase in Value	$23,495,338
Max supportable DCL increase per sq. ft.	**$187**
Max total supportable DCL (including existing DCL)	**$201**

Site 4 – West End Community Plan

Site 4 is located in the 1500 Block of Robson. It consists of one commercial property with a site size of 17,292 square feet. We analyzed the viability of redevelopment to highrise mixed-use at 8.75 FSR with 20% social housing, as permitted under existing zoning.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $24.9 million.

Estimated Land Value Supported by Highrise Mixed-use at 8.75 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to concrete highrise mixed-use at 8.75 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $50.1 million which is $25.2 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $183 per square foot, or a total DCL of $197 per square foot.

Site 4 – West End Highrise Mixed-use Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	17,292	sq.ft.				
	132	feet of frontage				
Existing Base Density	2.60	FSR				
Increased Density	4.40	FSR				
Heritage Density Transfer	0.70	FSR				
Density with Bonuses	7.70	FSR				
Assumed Commercial Density	1.20	FSR				
Residential Density Before Exclusions	6.50	FSR				
Storage	0.21		39.8	sf per unit		
Effective Residential Density After Bonuses and Exclusions	6.71	FSR				
Total Effective Gross Density After Bonuses and Exclusions	7.91	FSR				
Total Gross floorspace	136,733	gross sq.ft.				
Commercial floorspace	20,750	sq.ft.				
Retail	20,750	sq.ft.				
Market Strata Residential floorspace	115,982	gross square feet				
Net saleable space	98,585	sq.ft. or	85%	of gross area		
Average Gross unit size	1,289	sq.ft. gross				
Average Net unit size	1,095	sq.ft.				
Number of units	90	units or	560	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	99	stalls or	1.1	per unit		
Total Retail Parking Stalls	17					
Total Parking Stalls	116	stalls				
Underground/structured parking stalls provided	116	stalls	46,400	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,300	per sq.ft. of net saleable residential space				
Retail Revenue and Value						
Average Retail Lease Rate for Retail Space	$60.00	per sq. ft. net				
Capitalization Rate for Retail Space	4.00%					
Value of Retail Space on Lease Up	$1,425	per sq. ft. of leasable area, with	5.00%	allowance for vacancy		
Office Revenue and Value						
Average Office Lease Rate for Retail Space	$25.00	per sq. ft. net				
Capitalization Rate for Office Space	4.50%					
Value of Office Space on Lease Up	$528	per sq. ft. of leasable area, with	5.00%	allowance for vacancy		
Pre-Construction Costs						
Heritage Density	$100.00	psf				
Construction Costs						
Allowance for Demolition of Existing Buildings	$200,000					
Site Servicing	$60,366	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$336					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	2.00	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Commissions on commercial sale	2.0%	of commercial value				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	17.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$52,357,900					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$78,864,991	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$128,160,662
Less commissions and sales costs	$3,844,820
Net residential sales revenue	$124,315,842
Retail Value	$29,569,320
Total Commercial Value	$29,569,320
Commission on Commercial Sale	$591,386
Net commercial value	$28,977,934
Total Value Net of Commissions	$153,293,776
Project Costs	
Heritage Density	$1,210,440
Allowance for Demolition of Existing Buildings	$200,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$45,947,342
Soft costs	$4,625,771
Project Management	$1,562,818
Residential Marketing	$3,844,820
Leasing commissions on commercial space	$211,654
Post Construction Holding Costs	$67,500
Contingency on hard and soft costs	$2,022,325
Regional Levy	$53,100
Regional Levy - Commercial	$9,192
DCLs - residential	$1,613,317
DCCs - commercial	$288,638
Less property tax allowance during development	$628,438
Construction financing	$2,339,840
Financing fees/costs	$606,896
Total Project Costs Before Land Related	$65,342,456
Allowance for Developer's Profit	$20,567,990
Social Housing Floorspace	33,287
Social Housing Cost (All-in) PSF	$375
Total Cost of Social Housing	$12,482,663
Residual to Land and Land Carry	**$54,900,668**
Less financing on land during construction and approvals	$3,225,414
Less property purchase tax	$1,528,258
Residual Land Value After Social Housing	**$50,146,996**
Residual Value per sq.ft. of gross buildable floorspace	**$367**
Residual Value per sq.ft. of zoned FSR	**$377**
Residual Value per sq.ft. of site	**$2,900**
Existing Income Producing Value	$24,858,288
Increase in Value	$25,288,708
Max supportable DCL increase per sq. ft.	**$183**
Max total supportable DCL (including existing DCL)	**$197**

Site 5 – Grandview Woodland Plan

Site 5 is located in the 2200 Block of East Broadway. It consists of four adjacent older single family dwellings with a site size of 16,434 square feet. We analyzed the viability of redevelopment to strata apartment at 2.65 FSR, as permitted under the Grandview Woodland Plan.

Existing Value

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.1 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.1 million.

Estimated Land Value Supported by 6 Storey Strata Apartment at 2.65 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to 6 storey woodframe strata apartment at 2.65 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $8.0 million which is $1.9 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $40 per square foot, or a total DCL of $54 per square foot.

Site 5 – Grandview Woodland 6 Storey Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	16,434	sq.ft.				
	132	feet of frontage				
Existing Base Density	0.70	FSR				
Increased Density 1	1.95	FSR				
Density with Bonuses	2.65	FSR				
Assumed Commercial Density	0.00	FSR				
Residential Density Before Exclusions	2.65	FSR				
Storage	0.11		39.8	sf per unit		
Effective Residential Density After Bonuses and Exclusions	2.76	FSR				
Total Effective Gross Density After Bonuses and Exclusions	2.76	FSR				
Total Gross floorspace	45,342	gross sq.ft.				
Market Strata Residential floorspace	45,342	gross square feet				
Net saleable space	38,541	sq.ft. or	85%	of gross area		
Average Gross unit size	1,008	sq.ft. gross				
Average Net unit size	856	sq.ft.				
Number of units	45	units or	295	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	50	stalls or	1.1	per unit		
Total Parking Stalls	50	stalls				
Underground/structured parking stalls provided	50	stalls	20,000	square feet		
Strata Revenue and Value						
Average Sales Price Per Sq. Ft.	$725	per sq.ft. of net saleable residential space				
Parking Stall(s)	$0	per stall				
Overall Average Sales Price Per Sq. Ft.	$725	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
Fixed Rate CAC (on increased density)	$20.00	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$60,366	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Construction Costs						
Market Strata Residential Area	$175	per gross sq.ft. of residential area				
Cost Per Underground Parking Stall	$40,000	per underground parking stall				
Cost Per Surface Parking Stall	$5,000	per at grade stall				
Overall Costs Per Square Foot	$219	per gross sq.ft.				
Hard Cost Used in Analysis	$219					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	0.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$5,092,100					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$13,971,112	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$27,942,223
Less commissions and sales costs	$838,267
Net residential sales revenue	$27,103,956
Total Value Net of Commissions	$27,103,956
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$640,926
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$9,934,911
Soft costs	$1,010,528
Project Management	$356,992
Residential Marketing	$838,267
Post Construction Holding Costs	$33,750
Contingency on hard and soft costs	$458,001
Regional Levy	$26,550
DCLs - residential	$630,712
Less property tax allowance during development	$38,234
Construction financing	$401,688
Financing fees/costs	$137,662
Total Project Costs Before Land Related	$14,821,586
Allowance for Developer's Profit	$3,643,666
Residual to Land and Land Carry	**$8,638,705**
Less financing on land during construction and approvals	$415,738
Less property purchase tax	$224,689
Residual Land Value	**$7,998,278**
Residual Value per sq.ft. of gross buildable floorspace	**$176**
Residual Value per sq.ft. of zoned FSR	**$184**
Residual Value per sq.ft. of site	**$487**
Existing Value (with Assembly Premium)	$6,110,520
Increase in Value	$1,887,758
Max supportable DCL increase per sq. ft.	**$40**
Max total supportable DCL (including existing DCL)	**$54**

Site 6a – Grandview Woodland Plan

Site 6a is located in the 2200 Block of Nanaimo. It consists of four adjacent older single family dwellings with a site size of 16,935 square feet. We analyzed the viability of redevelopment to townhouse development at 1.2 FSR, as permitted under the Grandview Woodland Plan.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.3 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.3 million.

Estimated Land Value Supported by Townhouse Development at 1.2 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.2 FSR. As shown in the proforma, the estimated land value supported by townhouse use with the current DCL rate is about $6.3 million which is similar to the existing value.

At this density, the existing DCL of $3.23 is not supported, and there is no capacity to increase the DCL.

Site 6a – Grandview Woodland Townhouse Development at 1.2 FSR

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	16,935	sq.ft.				
	129	feet of frontage				
Existing Base Density	0.70	FSR				
Increased Density 1	0.50	FSR				
Density with Bonuses	1.20	FSR				
Storage	0.04		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.24	FSR				
Total Gross floorspace	20,919	gross sq.ft.				
Market Strata Residential floorspace	20,919	gross square feet				
Net saleable space	20,919	sq.ft. or	100%	of gross area		
Average Gross unit size	1,395	sq.ft. gross				
Average Net unit size	1,395	sq.ft.				
Number of units	15	units or	95	per hectare		
Total Parking Stalls	15	stalls				
Underground/structured parking stalls provided	15	stalls	6,000	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$725	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$3.00	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$58,994	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$199					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	2.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$5,288,900					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$7,583,289	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$15,166,577
Less commissions and sales costs	$454,997
Net residential sales revenue	$14,711,580
Total Value Net of Commissions	$14,711,580
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$25,403
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$58,994
Connection fees	$50,000
Hard construction costs	$4,156,301
Soft costs	$432,529
Project Management	$147,787
Residential Marketing	$303,332
Post Construction Holding Costs	$11,250
Contingency on hard and soft costs	$187,096
Regional Levy - Townhouse	$12,390
DCLs - residential	$67,570
Less property tax allowance during development	$28,746
Construction financing	$159,874
Financing fees/costs	$54,790
Total Project Costs Before Land Related	$5,899,060
Allowance for Developer's Profit	$1,977,722
Residual to Land and Land Carry	**$6,834,798**
Less financing on land during construction and approvals	$328,925
Less property purchase tax	$173,176
Residual Land Value	**$6,332,697**
Residual Value per sq.ft. of gross buildable floorspace	**$303**
Residual Value per sq.ft. of zoned FSR	**$312**
Residual Value per sq.ft. of site	**$374**
Existing Value (with Assembly Premium)	$6,346,680
Increase in Value	-$13,983
Max supportable DCL increase per sq. ft.	**-$2**
Max total supportable DCL (including existing DCL)	**$1**

Site 6b – Grandview Woodland Plan

Site 6b is located in the 2200 Block of Nanaimo. It consists of four adjacent older single family dwellings with a site size of 16,935 square feet. We analyzed the viability of redevelopment to townhouse development at 1.3 FSR.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.3 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.3 million.

Estimated Land Value Supported by Townhouse Development at 1.3 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.3 FSR. As shown in the proforma, the estimated land value supported by townhouse use with the current DCL rate is about $6.7 million which is $0.4 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $13 per square foot, or a total DCL of $27 per square foot.

Site 6b – Grandview Woodland Townhouse Development at 1.3 FSR

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***						
Site and Building Size						
Site Size	16,935	sq.ft.				
	129	feet of frontage				
Existing Base Density	0.70	FSR				
Increased Density 1	0.60	FSR				
Density with Bonuses	1.30	FSR				
Residential Density Before Exclusions	1.30	FSR				
Storage	0.04		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.34	FSR				
Total Gross floorspace	22,653	gross sq.ft.				
Market Strata Residential floorspace	22,653	gross square feet				
Net saleable space	22,653	sq.ft. or	100%	of gross area		
Average Gross unit size	1,416	sq.ft. gross				
Average Net unit size	1,416	sq.ft.				
Number of units	16	units or	102	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	16	stalls or	1.0	per unit		
Underground/structured parking stalls provided	16	stalls	6,400	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$725	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$3.00	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$58,994	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Construction Costs						
Hard Cost Used in Analysis	$198					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	2.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$5,288,900					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$8,211,620	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$16,423,240
Less commissions and sales costs	$492,697
Net residential sales revenue	$15,930,542
Total Value Net of Commissions	$15,930,542
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$30,483
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$58,994
Connection fees	$50,000
Hard construction costs	$4,490,967
Soft costs	$465,996
Project Management	$158,983
Residential Marketing	$328,465
Post Construction Holding Costs	$12,000
Contingency on hard and soft costs	$201,456
Regional Levy - Townhouse	$13,216
DCLs - residential	$315,100
Less property tax allowance during development	$29,741
Construction financing	$178,830
Financing fees/costs	$61,287
Total Project Costs Before Land Related	$6,598,516
Allowance for Developer's Profit	**$2,141,590**
Residual to Land and Land Carry	**$7,190,436**
Less financing on land during construction and approvals	$346,040
Less property purchase tax	$183,332
Residual Land Value	**$6,661,064**
Residual Value per sq.ft. of gross buildable floorspace	**$294**
Residual Value per sq.ft. of zoned FSR	**$303**
Residual Value per sq.ft. of site	**$393**
Existing Value (with Assembly Premium)	$6,346,680
Increase in Value	$314,384
Max supportable DCL increase per sq. ft.	**$13**
Max total supportable DCL (including existing DCL)	**$27**

Site 7 – Grandview Woodland Plan

Site 7 is located in the 1600 Block of Nanaimo. It consists of one commercial property with a site size of 14,042 square feet. We analyzed the viability of redevelopment to 6 storey mixed-use at 3.2 FSR, as permitted under the Grandview Woodland Plan.

<u>Existing Value</u>

Based on the capitalized income value of the property, we estimate that the site has a value of about $2.98 million

<u>Estimated Land Value Supported by 6 Storey Mixed-use at 3.2 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to a 6 storey strata apartment with commercial at grade at a density of 3.2 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $3.05 million which is only $70,000 higher than the existing value.

At this density, only the current DCL rate of $13.91 can be supported. No increase in the DCL can be supported.

Site 7 – Grandview Woodland Mixed-use Development

Site Size	14,042	sq.ft.				
	119	feet of frontage				
Existing Base Density	1.20	FSR				
Increased Density 1	2.00	FSR				
Density with Bonuses	3.20	FSR				
Assumed Commercial Density	0.35	FSR				
Residential Density Before Exclusions	2.85	FSR				
Storage	0.13		39.8	sf per unit		
Effective Residential Density After Bonuses and Exclusions	2.98	FSR				
Total Effective Gross Density After Bonuses and Exclusions	3.33	FSR				
Total Gross floorspace	46,727	gross sq.ft.				
Commercial floorspace	4,915	sq.ft.				
Retail	4,915	sq.ft.				
Market Strata Residential floorspace	41,812	gross square feet				
Net saleable space	35,540	sq.ft. or	85%	of gross area		
Average Gross unit size	929	sq.ft. gross				
Average Net unit size	790	sq.ft.				
Number of units	45	units or	345	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	50	stalls or	1.1	per unit		
Total Retail Parking Stalls	6					
Underground/structured parking stalls provided	56	stalls	22,400	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$700	per sq.ft. of net saleable residential space				
Retail Revenue and Value						
Average Retail Lease Rate for Retail Space	$27.50	per sq. ft. net				
Capitalization Rate for Retail Space	5.00%					
Value of Retail Space on Lease Up	$523	per sq. ft. of leasable area, with	5.00%	allowance for vacancy		
Pre-Construction Costs						
Fixed Rate CAC (on increased density)	$60.00	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$100,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$50,000					
Site Servicing	$54,421	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$229					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$75.00	per sq.ft. of floorspace				
Commercial DCLs	$75.00	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Commissions on commercial sale	2.0%	of commercial value				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	17.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$3,852,600					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$13,723,020	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$24,878,110
Less commissions and sales costs	$746,343
Net residential sales revenue	$24,131,767
Retail Value	$2,567,931
Total Commercial Value	$2,567,931
Commission on Commercial Sale	$51,359
Net commercial value	$2,516,572
Total Value Net of Commissions	$26,648,339
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$1,685,040
Allowance for Demolition of Existing Buildings	$50,000
Site Servicing	$54,421
Connection fees	$50,000
Hard construction costs	$10,687,472
Soft costs	$1,084,189
Project Management	$412,624
Residential Marketing	$746,343
Leasing commissions on commercial space	$22,976
Post Construction Holding Costs	$33,750
Contingency on hard and soft costs	$522,439
Regional Levy	$26,550
Regional Levy - Commercial	$2,177
DCLs - residential	$3,135,896
DCCs - commercial	$368,603
Less property tax allowance during development	$45,972
Construction financing	$536,385
Financing fees/costs	$183,823
Total Project Costs Before Land Related	$19,791,660
Allowance for Developer's Profit	$3,578,964
Residual to Land and Land Carry	**$3,277,715**
Less financing on land during construction and approvals	$157,740
Less property purchase tax	$71,599
Residual Land Value	**$3,048,376**
Residual Value per sq.ft. of gross buildable floorspace	**$65**
Residual Value per sq.ft. of zoned FSR	**$68**
Residual Value per sq.ft. of site	**$217**
Existing Income Producing Value	$2,978,000
Increase in Value	$70,376
Max supportable DCL increase per sq. ft.	**$0**
Max total supportable DCL (including existing DCL)	**$14**

Site 8a – Marpole Community Plan

Site 8a is located in the 8000 Block of Shaughnessy Street. It consists of four adjacent older single family dwellings on 33 foot lots and a total site size of 16,031 square feet. We analyzed the viability of redevelopment to townhouse development at 1.2 and 1.5 FSR.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $8.2 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $9.8 million.

Estimated Land Value Supported by Townhouse Development at 1.2 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.2 FSR. As shown in the proforma, the estimated land value supported by townhouse use at a density of 1.2 FSR with the current DCL rate is about $8.9 million which is $0.8 million less than the existing value. At this density, the existing DCL of $3.23 is not supported, and there is no capacity to increase the DCL.

Estimated Land Value Supported by Townhouse Development at 1.5 FSR

We also tested the maximum value the DCL can be supported at a density of 1.5 FSR. As shown in the proforma, the estimated land value supported by townhouse use at a density of 1.5 FSR with the current DCL rate is about $10.6 million which is $0.8 million higher than the existing value. Based on the higher density, the maximum amount the DCL can be increased is $30 per square foot, or a total DCL of $44 per square foot.

Site 8a – Marpole Community Plan Townhouse Development at 1.2 FSR – 33 foot lots

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***						
Site and Building Size						
Site Size	16,031	sq.ft.				
	132	feet of frontage				
Existing Base Density	0.75	FSR				
Increased Density 1	0.45	FSR				
Density with Bonuses	1.20	FSR				
Residential Density Before Exclusions	1.20	FSR				
Storage	0.03		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.23	FSR				
Total Gross floorspace	19,755	gross sq.ft.				
Market Strata Residential floorspace	19,755	gross square feet				
Net saleable space	19,755	sq.ft. or	100%	of gross area		
Average Gross unit size	1,520	sq.ft. gross				
Average Net unit size	1,520	sq.ft.				
Number of units	13	units or	87	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	26	stalls or	2.0	per unit		
Underground/structured parking stalls provided	26	stalls	10,400	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,000	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$10.78	psf				
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$60,366	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$253					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Commissions on commercial sale	0.0%	of commercial value				
Marketing on residential	2.0%	of gross strata market residential revenue				
Marketing/TI on commercial space	$0	psf				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$8,190,600					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$9,877,721	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$19,755,441
Less commissions and sales costs	$592,663
Net residential sales revenue	$19,162,778
Total Value Net of Commissions	$19,162,778
Project Costs	
Fixed Rate CAC	$77,742
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$4,991,088
Soft costs	$516,145
Project Management	$172,660
Residential Marketing	$395,109
Post Construction Holding Costs	$9,750
Contingency on hard and soft costs	$221,650
Regional Levy - Townhouse	$10,738
DCLs - residential	$63,810
Less property tax allowance during development	$41,564
Construction financing	$187,611
Financing fees/costs	$64,296
Total Project Costs Before Land Related	$6,922,530
Allowance for Developer's Profit	**$2,576,110**
Residual to Land and Land Carry	**$9,664,138**
Less financing on land during construction and approvals	$465,087
Less property purchase tax	$253,972
Residual Land Value	**$8,945,080**
Residual Value per sq.ft. of gross buildable floorspace	**$453**
Residual Value per sq.ft. of zoned FSR	**$465**
Residual Value per sq.ft. of site	**$558**
Existing Value (with Assembly Premium)	$9,828,720
Increase in Value	-$883,640
Max supportable DCL increase per sq. ft.	**-$46**
Max total supportable DCL (including existing DCL)	**-$43**

Site 8a – Marpole Community Plan Townhouse Development at 1.5 FSR – 33 foot lots

Major Assumptions *(shading indicates figures that are inputs; unshaded cells are formulas)*

Site and Building Size						
Site Size	16,031	sq.ft.				
	132	feet of frontage				
Existing Base Density	0.75	FSR				
Increased Density 1	0.45	FSR				
Increased Density 2	0.30	FSR				
Density with Bonuses	1.50	FSR				
Residential Density Before Exclusions	1.50	FSR				
Storage	0.05		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.55	FSR				
Total Gross floorspace	24,844	gross sq.ft.				
Market Strata Residential floorspace	24,844	gross square feet				
Net saleable space	24,844	sq.ft. or	100%	of gross area		
Average Gross unit size	1,242	sq.ft. gross				
Average Net unit size	1,242	sq.ft.				
Number of units	20	units or	134	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	40	stalls or	2.0	per unit		
Underground/structured parking stalls provided	40	stalls	16,000	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,000	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$10.78	psf				
DB payment on Tier 2	$59.48	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$50,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$60,366	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$264					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	2.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$8,190,600					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$12,421,828	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$24,843,655
Less commissions and sales costs	$745,310
Net residential sales revenue	$24,098,346
Total Value Net of Commissions	$24,098,346
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$50,000
Fixed Rate CAC	$363,807
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$6,568,731
Soft costs	$673,910
Project Management	$236,094
Residential Marketing	$496,873
Post Construction Holding Costs	$15,000
Contingency on hard and soft costs	$300,117
Regional Levy - Townhouse	$16,520
DCLs - residential	$80,245
Less property tax allowance during development	$45,590
Construction financing	$254,820
Financing fees/costs	$87,329
Total Project Costs Before Land Related	$9,402,402
Allowance for Developer's Profit	$3,239,613
Residual to Land and Land Carry	**$11,456,331**
Less financing on land during construction and approvals	$551,336
Less property purchase tax	$305,150
Residual Land Value	**$10,599,845**
Residual Value per sq.ft. of gross buildable floorspace	**$427**
Residual Value per sq.ft. of zoned FSR	**$441**
Residual Value per sq.ft. of site	**$661**
Existing Value (with Assembly Premium)	$9,828,720
Increase in Value	$771,125
Max supportable DCL increase per sq. ft.	**$30**
Max total supportable DCL (including existing DCL)	**$44**

Site 8b – Marpole Community Plan

Site 8b is located in the 8300 block of French Street. It consists of two adjacent older single family dwellings on 45 foot lots and a total site size of 9,646 square feet. We analyzed the viability of redevelopment to townhouse development at 1.2 and 1.5 FSR.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $3.9 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $4.7 million.

Estimated Land Value Supported by Townhouse Development at 1.2 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.2 FSR. As shown in the proforma, the estimated land value supported by townhouse use at a density of 1.2 FSR with the current DCL rate is about $5.4 million which is $0.7 million higher than the existing value. Based on this, the maximum value the DCL can be increased is $53 per square foot, or a total DCL of $57 per square foot.

Estimated Land Value Supported by Townhouse Development at 1.5 FSR

We also tested the maximum value the DCL can be supported at a density of 1.5 FSR. As shown in the proforma, the estimated land value supported by townhouse use at a density of 1.5 FSR with the current DCL rate is about $6.2 million which is $1.5 million higher than the existing value. Based on the higher density, the maximum amount the DCL can be increased is $97 per square foot, or a total DCL of $111 per square foot.

Site 8b – Marpole Community Plan Townhouse Development at 1.2 FSR – 45 foot lots

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size					
Site Size	9,646	sq.ft.			
	90	feet of frontage			
Existing Base Density	0.75	FSR			
Increased Density 1	0.45	FSR			
Density with Bonuses	1.20	FSR			
Residential Density Before Exclusions	1.20	FSR			
Storage	0.03		39.8	sf per unit	
Total Effective Gross Density After Bonuses and Exclusions	1.23	FSR			
Total Gross floorspace	11,894	gross sq.ft.			
Market Strata Residential floorspace	11,894	gross square feet			
Net saleable space	11,894	sq.ft. or	100%	of gross area	
Average Gross unit size	1,487	sq.ft. gross			
Average Net unit size	1,487	sq.ft.			
Number of units	8	units or	89	per hectare	
Total Market Strata Unit Parking Stalls (including visitors)	16	stalls or	2.0	per unit	
Total Parking Stalls	16	stalls			
Underground/structured parking stalls provided	16	stalls	6,400	square feet	
Surface parking stalls	0	stalls			
Strata Revenue and Value					
Overall Average Sales Price Per Sq. Ft.	$1,000	per sq.ft. of net saleable residential space			
Pre-Construction Costs					
DB payment on Tier 1	$10.78	psf			
Construction Costs					
Allowance for Demolition of Existing Buildings	$30,000				
Site Servicing	$41,159	or	$1,500	per metre of frontage	
Connection fees	$50,000				
Hard Cost Used in Analysis	$254				
Soft costs/professional fees (excluding management)	10.0%	of above			
Project Management	3.0%	of above			
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs			
Local Government Levies					
Regional Levy - Townhouse	$826	per market unit			
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace			
Residential DCLs	$3.23	per sq.ft. of floorspace			
Commercial DCLs	$13.91	per sq.ft. of floorspace			
Financing Assumptions					
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period	
		and a total loan of	75%	on costs	
Financing fees	1.25%	of financed construction costs			
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost	
Marketing and Commissions					
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue			
Marketing on residential	2.0%	of gross strata market residential revenue			
Property Taxes					
Tax Rate (res)	0.31657%	of assessed value			
Tax Rate (comm)	1.386%	of assessed value			
Current assessment (Year 1 of analysis)	$3,926,300				
Assumed assessment after 1 year of construction (Year 2 of analysis)	$5,946,761	(50% of completed project value)			
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue	

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$11,893,522
Less commissions and sales costs	$356,806
Net residential sales revenue	$11,536,717
Total Value Net of Commissions	$11,536,717
Project Costs	
Fixed Rate CAC	$46,776
Allowance for Demolition of Existing Buildings	$30,000
Site Servicing	$41,159
Connection fees	$50,000
Hard construction costs	$3,018,704
Soft costs	$313,986
Project Management	$105,019
Residential Marketing	$237,870
Post Construction Holding Costs	$6,000
Contingency on hard and soft costs	$134,733
Regional Levy - Townhouse	$6,608
DCLs - residential	$38,416
Less property tax allowance during development	$21,842
Construction financing	$113,938
Financing fees/costs	$39,047
Total Project Costs Before Land Related	$4,204,098
Allowance for Developer's Profit	$1,550,915
Residual to Land and Land Carry	**$5,781,703**
Less financing on land during construction and approvals	$278,244
Less property purchase tax	$143,104
Residual Land Value	**$5,360,355**
Residual Value per sq.ft. of gross buildable floorspace	**$451**
Residual Value per sq.ft. of zoned FSR	**$463**
Residual Value per sq.ft. of site	**$556**
Existing Value (with Assembly Premium)	$4,711,560
Increase in Value	$648,795
Max supportable DCL increase per sq. ft.	**$53**
Max total supportable DCL (including existing DCL)	**$57**

Site 8b – Marpole Community Plan Townhouse Development at 1.5 FSR – 45 foot lots

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	9,646	sq.ft.				
	90	feet of frontage				
Existing Base Density	0.75	FSR				
Increased Density 1	0.45	FSR				
Increased Density 2	0.30	FSR				
Residential Density Before Exclusions	1.50	FSR				
Storage	0.05		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.55	FSR				
Total Gross floorspace	14,947	gross sq.ft.				
Market Strata Residential floorspace	14,947	gross square feet				
Net saleable space	14,947	sq.ft. or	100%	of gross area		
Average Gross unit size	1,246	sq.ft. gross				
Average Net unit size	1,246	sq.ft.				
Number of units	12	units or	134	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	24	stalls or	2.0	per unit		
Underground/structured parking stalls provided	24	stalls	9,600	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$1,000	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$10.78	psf				
DB payment on Tier 2	$59.48	psf				
Rezoning Application Fee	$43,000					
Allowance for Rezoning Costs	$50,000					
Construction Costs						
Allowance for Demolition of Existing Buildings	$30,000					
Site Servicing	$41,159	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$264					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on		50%	of land cost	
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	2.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$3,926,300					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$7,473,279	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$14,946,558
Less commissions and sales costs	$448,397
Net residential sales revenue	$14,498,162
Total Value Net of Commissions	$14,498,162
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$50,000
Fixed Rate CAC	$218,895
Allowance for Demolition of Existing Buildings	$30,000
Site Servicing	$41,159
Connection fees	$50,000
Hard construction costs	$3,949,312
Soft costs	$407,047
Project Management	$143,682
Residential Marketing	$298,931
Post Construction Holding Costs	$9,000
Contingency on hard and soft costs	$181,931
Regional Levy - Townhouse	$9,912
DCLs - residential	$207,907
Less property tax allowance during development	$24,258
Construction financing	$159,329
Financing fees/costs	$54,603
Total Project Costs Before Land Related	$5,878,966
Allowance for Developer's Profit	$1,949,031
Residual to Land and Land Carry	**$6,670,165**
Less financing on land during construction and approvals	$321,002
Less property purchase tax	$168,475
Residual Land Value	**$6,180,688**
Residual Value per sq.ft. of gross buildable floorspace	**$414**
Residual Value per sq.ft. of zoned FSR	**$427**
Residual Value per sq.ft. of site	**$641**
Existing Value (with Assembly Premium)	$4,711,560
Increase in Value	$1,469,128
Max supportable DCL increase per sq. ft.	**$97**
Max total supportable DCL (including existing DCL)	**$111**

Site 9a – Marpole Community Plan

Site 9a is located in the 7800 Block of Granville. It consists of three adjacent older single family dwellings on 50 foot lots with a site size of 15,613 square feet. We analyzed the viability of redevelopment to 4 storey strata apartment at 2.0 FSR, as permitted under the Marpole Community Plan.

<u>Existing Value</u>

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $6.8 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $8.1 million.

<u>Estimated Land Value Supported by Strata Apartment at 2.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to woodframe strata apartment at 2.0 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $8.6 million which is $0.5 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $14 per square foot, or a total DCL of $28 per square foot.

Site 9a – Marpole Community Plan Apartment Development – 50 foot lots

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size					
Site Size	15,613	sq.ft.			
	150	feet of frontage			
Existing Base Density	0.75	FSR			
Increased Density 1	0.45	FSR			
Increased Density 2	0.80	FSR			
Residential Density Before Exclusions	2.00	FSR			
Storage	0.07		39.8	sf per unit	
Effective Residential Density After Bonuses and Exclusions	2.07	FSR			
Total Gross floorspace	32,380	gross sq.ft.			
Market Strata Residential floorspace	32,380	gross square feet			
Net saleable space	27,523	sq.ft. or	85%	of gross area	
Average Gross unit size	1,117	sq.ft. gross			
Average Net unit size	949	sq.ft.			
Number of units	29	units or	200	per hectare	
Total Market Strata Unit Parking Stalls (including visitors)	32	stalls or	1.1	per unit	
Underground/structured parking stalls provided	32	stalls	12,800	square feet	
Strata Revenue and Value					
Overall Average Sales Price Per Sq. Ft.	$900	per sq.ft. of net saleable residential space			
Pre-Construction Costs					
DB payment on Tier 1	$10.78	psf			
DB payment on Tier 2	$59.46	psf			
Public Art	$0.00				
Construction Costs					
Allowance for Demolition of Existing Buildings	$45,000				
Site Servicing	$68,598	or	$1,500	per metre of frontage	
Connection fees	$50,000				
Hard Cost Used in Analysis	$230				
Soft costs/professional fees (excluding management)	10.0%	of above			
Project Management	3.0%	of above			
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs			
Local Government Levies					
Regional Levy	$590	per market unit			
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace			
Residential DCLs	$13.91	per sq.ft. of floorspace			
Commercial DCLs	$13.91	per sq.ft. of floorspace			
Financing Assumptions					
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period	
		and a total loan of	75%	on costs	
Financing fees	1.25%	of financed construction costs			
Financing on Land Acquisition	5.0%	during construction on		50% of land cost	
Marketing and Commissions					
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue			
Marketing on residential	3.0%	of gross strata market residential revenue			
Property Taxes					
Tax Rate (res)	0.31657%	of assessed value			
Tax Rate (comm)	1.386%	of assessed value			
Current assessment (Year 1 of analysis)	$6,769,600				
Assumed assessment after 1 year of construction (Year 2 of analysis)	$12,385,352	(50% of completed project value)			
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue	

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$24,770,704
Less commissions and sales costs	$743,121
Net residential sales revenue	$24,027,583
Total Value Net of Commissions	$24,027,583
Project Costs	
Density Bonus Payment	$818,316
Allowance for Demolition of Existing Buildings	$45,000
Site Servicing	$68,598
Connection fees	$50,000
Hard construction costs	$7,432,201
Soft costs	$759,580
Project Management	$275,211
Residential Marketing	$743,121
Post Construction Holding Costs	$21,750
Contingency on hard and soft costs	$357,482
Regional Levy	$17,110
DCLs - residential	$450,406
Less property tax allowance during development	$41,034
Construction financing	$311,620
Financing fees/costs	$106,795
Total Project Costs Before Land Related	$11,498,223
Allowance for Developer's Profit	$3,230,100
Residual to Land and Land Carry	**$9,299,260**
Less financing on land during construction and approvals	$447,527
Less property purchase tax	$243,552
Residual Land Value	**$8,608,181**
Residual Value per sq.ft. of gross buildable floorspace	**$266**
Residual Value per sq.ft. of zoned FSR	**$276**
Residual Value per sq.ft. of site	**$551**
Existing Value (with Assembly Premium)	$8,123,520
Increase in Value	$484,661
Max supportable DCL increase per sq. ft.	**$14**
Max total supportable DCL (including existing DCL)	**$28**

Site 9b – Marpole Community Plan

Site 9b is located in the 400 Block of West 63rd. It consists of three adjacent older single family dwellings on 54 foot lots with a site size of 19,830 square feet. We analyzed the viability of redevelopment to strata apartment at 2.0 FSR, as permitted under the Marpole Community Plan.

Existing Value

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $9.7 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $10.7 million.

Estimated Land Value Supported by Strata Apartment at 2.0 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to woodframe strata apartment at 2.0 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $11 million which is $0.3 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $5 per square foot, or a total DCL of $19 per square foot.

Site 9b – Marpole Community Plan Apartment Development – 54 foot lots

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	19,830	sq.ft.				
	162	feet of frontage				
Existing Base Density	0.75	FSR				
Increased Density 1	0.45	FSR				
Increased Density 2	0.80	FSR				
Density with Bonuses	2.00	FSR				
Storage	0.07		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	2.07	FSR				
Total Gross floorspace	41,134	gross sq.ft.				
Market Strata Residential floorspace	41,134	gross square feet				
Net saleable space	34,964	sq.ft. or	85%	of gross area		
Average Gross unit size	1,112	sq.ft. gross				
Average Net unit size	945	sq.ft.				
Number of units	37	units or	201	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	41	stalls or	1.1	per unit		
Underground/structured parking stalls provided	41	stalls	16,400	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$900	per sq.ft. of net saleable residential space				
Retail Revenue and Value						
Pre-Construction Costs						
DB payment on Tier 1	$10.78	psf				
DB payment on Tier 2	$59.46	psf				
Construction Costs						
Allowance for Demolition of Existing Buildings	$45,000					
Site Servicing	$74,040	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Construction Costs						
Hard Cost Used in Analysis	$230					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$9,727,200					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$15,733,635	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$31,467,271
Less commissions and sales costs	$944,018
Total Value Net of Commissions	$30,523,253
Project Costs	
Fixed Rate CAC	$1,039,375
Allowance for Demolition of Existing Buildings	$45,000
Site Servicing	$74,040
Connection fees	$50,000
Hard construction costs	$9,455,401
Soft costs	$962,444
Project Management	$348,788
Residential Marketing	$944,018
Post Construction Holding Costs	$27,750
Contingency on hard and soft costs	$453,139
Regional Levy	$21,830
DCLs - residential	$572,170
Less property tax allowance during development	$55,697
Construction financing	$395,146
Financing fees/costs	$135,420
Total Project Costs Before Land Related	$14,580,216
Allowance for Developer's Profit	$4,103,332
Residual to Land and Land Carry	**$11,839,704**
Less financing on land during construction and approvals	$569,786
Less property purchase tax	$316,098
Residual Land Value	**$10,953,821**
Residual Value per sq.ft. of gross buildable floorspace	**$266**
Residual Value per sq.ft. of zoned FSR	**$276**
Residual Value per sq.ft. of site	**$552**
Existing Value (with Assembly Premium)	$10,708,216
Increase in Value	$245,605
Max supportable DCL increase per sq. ft.	**$5**
Max total supportable DCL (including existing DCL)	**$19**

Site 10 – Main Street Corridor

Site 10 is located in the 4100 Block of Main Street. It consists of three commercial properties with a site size of 10,170 square feet. We analyzed the viability of redevelopment to 4 storey mixed-use at 2.5 FSR, as permitted under the existing C-2 zoning.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $7.6 million.

Estimated Land Value Supported by 4 Storey Mixed-use at 2.5 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to 4 storey mixed-use at a density of 2.5 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $7.7 million which is $0.1 million higher than the existing value.

Based on this, the maximum amount the DCL can be increased is $3 per square foot, or a total DCL of $17 per square foot.

Site 10 – Main Street Mixed-use Development

Major Assumptions *(shading indicates figures that are inputs; unshaded cells are formulas)*

Site and Building Size						
Site Size	10,170	sq.ft.				
	100	feet of frontage				
Existing Base Density	2.50	FSR				
Density with Bonuses	2.50	FSR				
Assumed Commercial Density	0.35	FSR				
Residential Density Before Exclusions	2.15	FSR				
Storage	0.09		39.8	sf per unit		
Effective Residential Density After Bonuses and Exclusions	2.24	FSR				
Total Effective Gross Density After Bonuses and Exclusions	2.59	FSR				
Total Gross floorspace	26,301	gross sq.ft.				
Commercial floorspace	3,560	sq.ft.				
Retail	3,560	sq.ft.				
Market Strata Residential floorspace	22,742	gross square feet				
Net saleable space	19,330	sq.ft. or	85%	of gross area		
Average Gross unit size	1,034	sq.ft. gross				
Average Net unit size	879	sq.ft.				
Number of units	22	units or	233	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	24	stalls or	1.1	per unit		
Total Retail Parking Stalls	4					
Total Parking Stalls	28	stalls				
Underground/structured parking stalls provided	28	stalls	11,200	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$875	per sq.ft. of net saleable residential space				
Retail Revenue and Value						
Average Retail Lease Rate for Retail Space	$38.00	per sq. ft. net				
Capitalization Rate for Retail Space	4.00%					
Value of Retail Space on Lease Up	$903	per sq. ft. of leasable area, with	5.00%	allowance for vacancy		
Construction Costs						
Allowance for Demolition of Existing Buildings	$100,000					
Site Servicing	$45,732	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$229					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Commissions on commercial sale	2.0%	of commercial value				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	17.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$8,156,200					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$10,063,298	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Project Costs	
Allowance for Demolition of Existing Buildings	$100,000
Site Servicing	$45,732
Connection fees	$50,000
Hard construction costs	$6,032,193
Soft costs	$622,792
Project Management	$205,522
Residential Marketing	$507,424
Leasing commissions on commercial space	$22,994
Post Construction Holding Costs	$16,500
Contingency on hard and soft costs	$266,111
Regional Levy	$12,980
Regional Levy - Commercial	$1,577
DCLs - residential	$316,337
DCCs - commercial	$49,513
Less property tax allowance during development	$60,841
Construction financing	$233,733
Financing fees/costs	$80,102
Total Project Costs Before Land Related	$8,624,351
Allowance for Developer's Profit	$2,624,508
Residual to Land and Land Carry	**$8,306,063**
Less financing on land during construction and approvals	$399,729
Less property purchase tax	$215,190
Residual Land Value	**$7,691,144**
Residual Value per sq.ft. of gross buildable floorspace	**$292**
Residual Value per sq.ft. of zoned FSR	**$303**
Residual Value per sq.ft. of site	**$756**
Existing Income Producing Value	$7,580,000
Increase in Value	$111,144
Max supportable DCL increase per sq. ft.	**$3**
Max total supportable DCL (including existing DCL)	**$17**

Site 11 – Kingsway Corridor

Site 11 is located in the 2500 Block of Kingsway Corridor. It consists of three commercial properties with a site size of 17,012 square feet. We analyzed the viability of redevelopment to 4 storey mixed-use at 2.5 FSR, as permitted under the existing C-2 zoning.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $8.7 million.

Estimated Land Value Supported by 4 Storey Mixed-use at 2.5 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to 4 storey mixed-use at a density of 2.5 FSR. As shown in the proforma, the estimated land value supported by the proposed use at the current DCL rate is about $8.4 million which is $0.3 million less than the existing value.

At this density, the existing DCL of $13.91 per square foot is not supported, and there is no capacity to increase the DCL.

Site 11 – Kingsway Corridor Mixed-use Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***						
Site and Building Size						
Site Size	17,012	sq.ft.				
	165	feet of frontage				
Existing Base Density	2.50	FSR				
Density with Bonuses	2.50	FSR				
Assumed Commercial Density	0.35	FSR				
Residential Density Before Exclusions	2.15	FSR				
Storage	0.09		39.8	sf per unit		
Effective Residential Density After Bonuses and Exclusions	2.24	FSR				
Total Effective Gross Density After Bonuses and Exclusions	2.59	FSR				
Total Gross floorspace	44,122	gross sq.ft.				
Commercial floorspace	5,954	sq.ft.				
Retail	5,954	sq.ft.				
Market Strata Residential floorspace	38,168	gross square feet				
Net saleable space	32,443	sq.ft. or	85%	of gross area		
Average Gross unit size	954	sq.ft. gross				
Average Net unit size	811	sq.ft.				
Number of units	40	units or	253	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	44	stalls or	1.1	per unit		
Total Retail Parking Stalls	8					
Total Parking Stalls	52	stalls				
Underground/structured parking stalls provided	52	stalls	20,800	square feet		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$700	per sq.ft. of net saleable residential space				
Retail Revenue and Value						
Average Retail Lease Rate for Retail Space	$35.00	per sq. ft. net				
Capitalization Rate for Retail Space	4.00%					
Value of Retail Space on Lease Up	$831	per sq. ft. of leasable area, with	5.00%	allowance for vacancy		
Construction Costs						
Allowance for Demolition of Existing Buildings	$100,000					
Site Servicing	$75,457	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$230					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Commissions on commercial sale	2.0%	of commercial value				
Marketing on residential	3.0%	of gross strata market residential revenue				
Leasing commissions on commercial	17.0%	of Year 1 income				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$9,346,800					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$13,829,573	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$22,709,862
Less commissions and sales costs	$681,296
Net residential sales revenue	$22,028,566
Retail Value	$4,949,283
Total Commercial Value	$4,949,283
Commission on Commercial Sale	$98,986
Net commercial value	$4,850,298
Total Value Net of Commissions	$26,878,864
Project Costs	
Allowance for Demolition of Existing Buildings	$100,000
Site Servicing	$75,457
Connection fees	$50,000
Hard construction costs	$10,128,797
Soft costs	$1,035,425
Project Management	$341,690
Residential Marketing	$681,296
Leasing commissions on commercial space	$35,426
Post Construction Holding Costs	$30,000
Contingency on hard and soft costs	$436,733
Regional Levy	$23,600
Regional Levy - Commercial	$2,638
DCLs - residential	$530,915
DCCs - commercial	$82,820
Less property tax allowance during development	$74,953
Construction financing	$383,337
Financing fees/costs	$131,373
Total Project Costs Before Land Related	$14,144,461
Allowance for Developer's Profit	$3,606,753
Residual to Land and Land Carry	**$9,127,650**
Less financing on land during construction and approvals	$439,268
Less property purchase tax	$238,651
Residual Land Value	**$8,449,731**
Residual Value per sq.ft. of gross buildable floorspace	**$192**
Residual Value per sq.ft. of zoned FSR	**$199**
Residual Value per sq.ft. of site	**$497**
Existing Income Producing Value	$8,697,500
Increase in Value	-$247,769
Max supportable DCL increase per sq. ft.	**-$7**
Max total supportable DCL (including existing DCL)	**$7**

Site 12 – Joyce Station Precinct Plan

Site 12 is located in the 3300 Block of Clive Avenue. It consists of four adjacent older single family dwellings with a site size of 17,146 square feet. We analyzed the viability of redevelopment to 4 storey strata apartment at 2.0 FSR, as permitted under the Joyce Station Precinct Plan.

Existing Value

Based on a combination of recent sales of similar houses in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.7 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.8 million.

Estimated Land Value Supported by 4 Storey Strata Apartment at 2.0 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to 4 storey woodframe strata apartment at 2.0 FSR. As shown in the proforma, the estimated land value supported by apartment use with the current DCL rate is about $6.4 million which is $0.4 million less than the existing value.

At this density, the existing DCL of $13.91 per square foot is not supported, and there is no capacity to increase the DCL.

Site 12 – Joyce Station Precinct Plan Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***					
Site and Building Size					
Site Size	17,146	sq.ft.			
	132	feet of frontage			
Existing Base Density	0.70	FSR			
Increased Density 1	1.30	FSR			
Density with Bonuses	2.00	FSR			
Residential Density Before Exclusions	2.00	FSR			
Storage	0.09		39.8	sf per unit	
Total Effective Gross Density After Bonuses and Exclusions	2.09	FSR			
Total Gross floorspace	35,766	gross sq.ft.			
Market Strata Residential floorspace	35,766	gross square feet			
Net saleable space	30,401	sq.ft. or	85%	of gross area	
Average Gross unit size	967	sq.ft. gross			
Average Net unit size	822	sq.ft.			
Number of units	37	units or	232	per hectare	
Total Parking Stalls	41	stalls			
Underground/structured parking stalls provided	41	stalls	16,400	square feet	
Surface parking stalls	0	stalls			
Strata Revenue and Value					
Overall Average Sales Price Per Sq. Ft.	$675	per sq.ft. of net saleable residential space			
Pre-Construction Costs					
DB payment on Tier 1	$3.00	psf			
DB payment on Tier 2	$3.00	psf			
Construction Costs					
Allowance for Demolition of Existing Buildings	$60,000				
Site Servicing	$60,457	or	$1,500	per metre of frontage	
Connection fees	$50,000				
Hard Cost Used in Analysis	$201				
Soft costs/professional fees (excluding management)	10.0%	of above			
Project Management	3.0%	of above			
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs			
Local Government Levies					
Regional Levy	$590	per market unit			
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace			
Residential DCLs	$13.91	per sq.ft. of floorspace			
Commercial DCLs	$13.91	per sq.ft. of floorspace			
Financing Assumptions					
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period	
		and a total loan of	75%	on costs	
Financing fees	1.25%	of financed construction costs			
Financing on Land Acquisition	5.0%	during construction on		50%	of land cost
Marketing and Commissions					
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue			
Marketing on residential	3.0%	of gross strata market residential revenue			
Property Taxes					
Tax Rate (res)	0.31657%	of assessed value			
Tax Rate (comm)	1.386%	of assessed value			
Current assessment (Year 1 of analysis)	$5,683,400				
Assumed assessment after 1 year of construction (Year 2 of analysis)	$10,260,494	(50% of completed project value)			
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue	

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$20,520,988
Less commissions and sales costs	$615,630
Net residential sales revenue	$19,905,358
Total Value Net of Commissions	$19,905,358
Project Costs	
Fixed Rate CAC	$66,871
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,457
Connection fees	$50,000
Hard construction costs	$7,183,796
Soft costs	$735,425
Project Management	$244,696
Residential Marketing	$615,630
Post Construction Holding Costs	$27,750
Contingency on hard and soft costs	$316,562
Regional Levy	$21,830
DCLs - residential	$497,511
Less property tax allowance during development	$34,232
Construction financing	$278,853
Financing fees/costs	$95,565
Total Project Costs Before Land Related	$10,289,179
Allowance for Developer's Profit	$2,675,937
Residual to Land and Land Carry	**$6,940,242**
Less financing on land during construction and approvals	$333,999
Less property purchase tax	$176,187
Residual Land Value	**$6,430,056**
Residual Value per sq.ft. of gross buildable floorspace	**$180**
Residual Value per sq.ft. of zoned FSR	**$188**
Residual Value per sq.ft. of site	**$375**
Existing Value (with Assembly Premium)	$6,820,080
Increase in Value	-$390,024
Max supportable DCL increase per sq. ft.	**-$12**
Max total supportable DCL (including existing DCL)	**$2**

Site 13a – Norquay Plan

Site 13a is located in the 2600 Block of Ward Street. It consists of four adjacent older single family dwellings and a total site size of 13,464 square feet. We analyzed the viability of redevelopment to townhouse development at 1.2 FSR.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.1 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.1 million.

Estimated Land Value Supported by Townhouse Development at 1.2 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.2 FSR. As shown in the proforma, the estimated land value supported by townhouse use with the current DCL rate is about $5.4 million which is $0.7 million less than the existing value.

At this density, the existing DCL of $3.23 per square foot is not supported, and there is no capacity to increase the DCL.

Site 13a – Norquay Plan Townhouse Development – 1.2 FSR

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	13,464	sq.ft.				
	132	feet of frontage				
Existing Base Density	1.20	FSR				
Residential Density Before Exclusions	1.20	FSR				
Storage	0.03		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	1.23	FSR				
Total Gross floorspace	16,595	gross sq.ft.				
Market Strata Residential floorspace	16,595	gross square feet				
Net saleable space	16,595	sq.ft. or	100%	of gross area		
Average Gross unit size	1,509	sq.ft. gross				
Average Net unit size	1,509	sq.ft.				
Number of units	11	units or	88	per hectare		
Total Parking Stalls	7	stalls				
Surface parking stalls	7	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$700	per sq.ft. of net saleable residential space				
Construction Costs						
Allowance for Demolition of Existing Buildings	$60,000					
Site Servicing	$60,366	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$172					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.25	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost		
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	2.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$5,080,400					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$5,808,217	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$11,616,434
Less commissions and sales costs	$348,493
Net residential sales revenue	$11,267,941
Total Value Net of Commissions	$11,267,941
Project Costs	
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$2,856,134
Soft costs	$302,650
Project Management	$99,874
Residential Marketing	$232,329
Post Construction Holding Costs	$8,250
Contingency on hard and soft costs	$128,436
Regional Levy - Townhouse	$9,086
DCLs - residential	$53,602
Less property tax allowance during development	$20,680
Construction financing	$90,970
Financing fees/costs	$37,241
Total Project Costs Before Land Related	$4,009,618
Allowance for Developer's Profit	$1,514,783
Residual to Land and Land Carry	**$5,743,540**
Less financing on land during construction and approvals	$245,895
Less property purchase tax	$142,929
Residual Land Value	**$5,354,716**
Residual Value per sq.ft. of gross buildable floorspace	**$323**
Residual Value per sq.ft. of zoned FSR	**$331**
Residual Value per sq.ft. of site	**$398**
Existing Value (with Assembly Premium)	$6,096,480
Increase in Value	-$741,764
Max supportable DCL increase per sq. ft.	**-$46**
Max total supportable DCL (including existing DCL)	**-$32**

Site 13b – Norquay Plan

Site 13b is located in the 2600 Block of Ward Street. It consists of four adjacent older single family dwellings and a total site size of 13,464 square feet. We analyzed the viability of redevelopment to townhouse development at 1.5 FSR.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $5.1 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $6.1 million.

Estimated Land Value Supported by Townhouse Development at 1.5 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to townhouse development at 1.5 FSR. As shown in the proforma, the estimated land value supported by townhouse use with the current DCL rate is about $5.7 million which is $0.4 million less than the existing value.

At this density, the existing DCL of $3.23 per square foot is not supported, and there is no capacity to increase the DCL.

Site 13b – Norquay Plan Townhouse Development – 1.5 FSR

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size				
Site Size	13,464	sq.ft.		
	132	feet of frontage		
Existing Base Density	1.20	FSR		
Increased Density 1	0.30	FSR		
Density with Bonuses	1.50	FSR		
Residential Density Before Exclusions	1.50	FSR		
Storage	0.05		39.8	sf per unit
Total Effective Gross Density After Bonuses and Exclusions	1.55	FSR		
Total Gross floorspace	20,913	gross sq.ft.		
Market Strata Residential floorspace	20,913	gross square feet		
Net saleable space	20,913	sq.ft. or	100%	of gross area
Average Gross unit size	1,162	sq.ft. gross		
Average Net unit size	1,162	sq.ft.		
Number of units	18	units or	144	per hectare
Total Market Strata Unit Parking Stalls (including visitors)	12	stalls or	0.65	per unit
Underground/structured parking stalls provided	12	stalls	4,800	square feet
Surface parking stalls	0	stalls		
Strata Revenue and Value				
Overall Average Sales Price Per Sq. Ft.	$700	per sq.ft. of net saleable residential space		
Pre-Construction Costs				
DB payment on Tier 2	$3.00	psf		
Rezoning Application Fee	$43,000			
Allowance for Rezoning Costs	$50,000			
Construction Costs				
Allowance for Demolition of Existing Buildings	$60,000			
Site Servicing	$60,366	or	$1,500	per metre of frontage
Connection fees	$50,000			
Hard Cost Used in Analysis	$203			
Soft costs/professional fees (excluding management)	10.0%	of above		
Project Management	3.0%	of above		
Post Construction Holding Costs	$500	per unit per month on	50%	of units 6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs		
Local Government Levies				
Regional Levy - Townhouse	$826	per market unit		
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace		
Residential DCLs	$13.91	per sq.ft. of floorspace		
Commercial DCLs	$13.91	per sq.ft. of floorspace		
Financing Assumptions				
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period
		and a total loan of	75%	on costs
Financing fees	1.25%	of financed construction costs		
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost
Marketing and Commissions				
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue		
Marketing on residential	2.0%	of gross strata market residential revenue		
Property Taxes				
Tax Rate (res)	0.31657%	of assessed value		
Tax Rate (comm)	1.386%	of assessed value		
Current assessment (Year 1 of analysis)	$5,080,400			
Assumed assessment after 1 year of construction (Year 2 of analysis)	$7,319,515	(50% of completed project value)		
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$14,639,030
Less commissions and sales costs	$439,171
Net residential sales revenue	$14,199,859
Total Value Net of Commissions	$14,199,859
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$50,000
Allowance for Demolition of Existing Buildings	$60,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$4,244,322
Soft costs	$441,469
Project Management	$148,475
Residential Marketing	$292,781
Post Construction Holding Costs	$13,500
Contingency on hard and soft costs	$187,632
Regional Levy - Townhouse	$14,868
DCLs - residential	$290,898
Less property tax allowance during development	$27,668
Construction financing	$166,640
Financing fees/costs	$57,109
Total Project Costs Before Land Related	$6,148,728
Allowance for Developer's Profit	$1,908,930
Residual to Land and Land Carry	**$6,142,202**
Less financing on land during construction and approvals	$295,593
Less property purchase tax	$153,398
Residual Land Value	**$5,693,210**
Residual Value per sq.ft. of gross buildable floorspace	**$272**
Residual Value per sq.ft. of zoned FSR	**$282**
Residual Value per sq.ft. of site	**$423**
Existing Value (with Assembly Premium)	$6,096,480
Increase in Value	-$403,270
Max supportable DCL increase per sq. ft.	-$20
Max total supportable DCL (including existing DCL)	-$7

Site 14a – Norquay Plan

Site 14a is located in the 1600 Block of East 21st Ave. It consists of one older single family dwelling on a 50 foot lot and a total site size of 6,039 square feet. We analyzed the viability of redevelopment to duplex development at 0.8 FSR, as permitted under the Norquay Plan.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $1.9 million.

Estimated Land Value Supported by Duplex Development at 0.8 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to duplex development at 0.8 FSR. As shown in the proforma, the estimated land value supported by duplex use with the current DCL rate is about $1.9 million which is similar to the existing value.

Based on this, the maximum amount the DCL can be increased is $3 per square foot, or a total DCL of $7 per square foot.

Site 14a – Norquay Plan Townhouse Development - 50 foot lot

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size						
Site Size	6,039	sq.ft.				
	50	feet of frontage				
Existing Base Density	0.80	FSR				
Total Effective Gross Density After Bonuses and Exclusions	0.80	FSR				
Total Gross floorspace	4,831	gross sq.ft.				
Market Strata Residential floorspace	4,831	gross square feet				
Net saleable space	4,831	sq.ft. or	100%	of gross area		
Average Gross unit size	2,416	sq.ft. gross				
Average Net unit size	2,416	sq.ft.				
Number of units	2	units or	36	per hectare		
Underground/structured parking stalls provided	0	stalls	0	square feet		
Surface parking stalls	2	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$900	per sq.ft. of net saleable residential space				
Construction Costs						
Allowance for Demolition of Existing Buildings	$20,000					
Site Servicing	$22,637	or	$1,500	per metre of frontage		
Connection fees	$20,000					
Hard Cost Used in Analysis	$262					
Soft costs/professional fees (excluding management)	5.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.00	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	5.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$1,877,700					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$2,174,040	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$4,348,080
Less commissions and sales costs	$217,404
Net residential sales revenue	$4,130,676
Total Value Net of Commissions	$4,130,676
Project Costs	
Allowance for Demolition of Existing Buildings	$20,000
Site Servicing	$22,637
Connection fees	$20,000
Hard construction costs	$1,266,112
Soft costs	$66,437
Project Management	$41,856
Post Construction Holding Costs	$1,500
Contingency on hard and soft costs	$50,349
Regional Levy - Townhouse	$1,652
DCLs - residential	$15,605
Less property tax allowance during development	$5,944
Construction financing	$28,352
Financing fees/costs	$14,442
Total Project Costs Before Land Related	$1,554,886
Allowance for Developer's Profit	$566,990
Residual to Land and Land Carry	**$2,008,801**
Less financing on land during construction and approvals	$75,330
Less property purchase tax	$36,004
Residual Land Value	**$1,897,467**
Residual Value per sq.ft. of gross buildable floorspace	**$393**
Residual Value per sq.ft. of zoned FSR	**$393**
Residual Value per sq.ft. of site	**$314**
Existing Value (with Assembly Premium)	$1,877,700
Increase in Value	$19,767
Max supportable DCL increase per sq. ft.	**$3**
Max total supportable DCL (including existing DCL)	**$7**

Site 14b – Norquay Plan

Site 14b is located in the 1200 Block of East 26th Ave. It consists of one older single family dwelling on a 33 foot lot and a total site size of 4,571 square feet. We analyzed the viability of redevelopment to duplex development at 0.8 FSR, as permitted under the Norquay Plan.

Existing Value

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $1.7 million.

Estimated Land Value Supported by Duplex Development at 0.8 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to duplex development at 0.8 FSR. As shown in the proforma, the estimated land value supported by duplex use with the current DCL rate is about $1.4 million which is $0.3 million less than the existing value.

At this density, the existing DCL of $3.23 per square foot is not supported, and there is no capacity to increase the DCL.

Site 14b – Norquay Plan Townhouse Development - 33 foot lot

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***						
Site and Building Size						
Site Size	4,571	sq.ft.				
	33	feet of frontage				
Existing Base Density	0.80	FSR				
Total Effective Gross Density After Bonuses and Exclusions	0.80	FSR				
Total Gross floorspace	3,656	gross sq.ft.				
Market Strata Residential floorspace	3,656	gross square feet				
Net saleable space	3,656	sq.ft. or	100%	of gross area		
Average Gross unit size	1,828	sq.ft. gross				
Average Net unit size	1,828	sq.ft.				
Number of units	2	units or	47	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	2	stalls or	1.0	per unit		
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$900	per sq.ft. of net saleable residential space				
Construction Costs						
Allowance for Demolition of Existing Buildings	$20,000					
Site Servicing	$15,091	or	$1,500	per metre of frontage		
Connection fees	$20,000					
Hard Cost Used in Analysis	$263					
Soft costs/professional fees (excluding management)	5.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy - Townhouse	$826	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$3.23	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.00	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	5.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$1,703,000					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$1,645,380	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$3,290,760
Less commissions and sales costs	$164,538
Net residential sales revenue	$3,126,222
Total Value Net of Commissions	$3,126,222
Project Costs	
Allowance for Demolition of Existing Buildings	$20,000
Site Servicing	$15,091
Connection fees	$20,000
Hard construction costs	$960,664
Soft costs	$50,788
Project Management	$31,996
Post Construction Holding Costs	$1,500
Contingency on hard and soft costs	$38,501
Regional Levy - Townhouse	$1,652
DCLs - residential	$11,810
Less property tax allowance during development	$5,391
Construction financing	$21,701
Financing fees/costs	$11,054
Total Project Costs Before Land Related	$1,190,149
Allowance for Developer's Profit	$429,115
Residual to Land and Land Carry	**$1,506,958**
Less financing on land during construction and approvals	$56,511
Less property purchase tax	$21,513
Residual Land Value	**$1,428,933**
Residual Value per sq.ft. of gross buildable floorspace	**$391**
Residual Value per sq.ft. of zoned FSR	**$391**
Residual Value per sq.ft. of site	**$313**
Existing Value (with Assembly Premium)	$1,703,000
Increase in Value	-$274,067
Max supportable DCL increase per sq. ft.	**-$76**
Max total supportable DCL (including existing DCL)	**-$72**

Site 15 – Norquay Plan

Site 15 is located in the 2500 Block of Kingsway. It consists of three commercial properties with a site size of 17,012 square feet. We analyzed the viability of redevelopment to 12 storey mixed-use at 3.8 FSR, as permitted under the Norquay Plan.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $8.7 million.

Estimated Land Value Supported by 12 Storey Mixed-use at 3.8 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to highrise mixed-use at 3.8 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $9.5 million which is $0.8 million higher than the existing value.

Based on this, the maximum value the DCL can be increased is $10 per square foot, or a total DCL of over $24 per square foot.

Site 15 – Norquay Plan Mixed-use Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***

Site and Building Size				
Site Size	17,012	sq.ft.		
	165	feet of frontage		
Existing Base Density	2.50	FSR		
Increased Density 1	1.30	FSR		
Density with Bonuses	3.80	FSR		
Assumed Commercial Density	0.35	FSR		
Residential Density Before Exclusions	3.45	FSR		
Storage	0.15		39.8	sf per unit
Total Effective Gross Density After Bonuses and Exclusions	3.95	FSR		
Total Gross floorspace	67,193	gross sq.ft.		
Commercial floorspace	5,954	sq.ft.		
Retail	5,954	sq.ft.		
Market Strata Residential floorspace	61,239	gross square feet		
Net saleable space	52,053	sq.ft. or	85%	of gross area
Average Gross unit size	957	sq.ft. gross		
Average Net unit size	813	sq.ft.		
Number of units	64	units or	405	per hectare
Total Market Strata Unit Parking Stalls (including visitors)	70	stalls or	1.1	per unit
Underground/structured parking stalls provided	70	stalls	28,000	square feet
Strata Revenue and Value				
Overall Average Sales Price Per Sq. Ft.	$750	per sq.ft. of net saleable residential space		
Retail Revenue and Value				
Average Retail Lease Rate for Retail Space	$35.00	per sq. ft. net		
Capitalization Rate for Retail Space	4.00%			
Value of Retail Space on Lease Up	$831	per sq. ft. of leasable area, with	5.00%	allowance for vacancy
Pre-Construction Costs				
Fixed Rate CAC (on increased density)	$11.08	psf		
Rezoning Application Fee	$43,000			
Allowance for Rezoning Costs	$100,000			
Construction Costs				
Allowance for Demolition of Existing Buildings	$100,000			
Site Servicing	$75,457	or	$1,500	per metre of frontage
Connection fees	$50,000			
Hard Cost Used in Analysis	$286			
Soft costs/professional fees (excluding management)	10.0%	of above		
Project Management	3.0%	of above		
Post Construction Holding Costs	$500	per unit per month on	50%	of units 6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs		
Local Government Levies				
Regional Levy	$590	per market unit		
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace		
Residential DCLs	$13.91	per sq.ft. of floorspace		
Commercial DCLs	$13.91	per sq.ft. of floorspace		
Financing Assumptions				
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.75	year construction period
		and a total loan of	75%	on costs
Financing fees	1.25%	of financed construction costs		
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost
Marketing and Commissions				
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue		
Commissions on commercial sale	2.0%	of commercial value		
Marketing on residential	3.0%	of gross strata market residential revenue		
Leasing commissions on commercial	17.0%	of Year 1 income		
Property Taxes				
Tax Rate (res)	0.31657%	of assessed value		
Tax Rate (comm)	1.386%	of assessed value		
Current assessment (Year 1 of analysis)	$9,346,800			
Assumed assessment after 1 year of construction (Year 2 of analysis)	$21,994,462	(50% of completed project value)		
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$39,039,641
Less commissions and sales costs	$1,171,189
Net residential sales revenue	$37,868,452
Retail Value	$4,949,283
Total Commercial Value	$4,949,283
Commission on Commercial Sale	$98,986
Net commercial value	$4,850,298
Total Value Net of Commissions	$42,718,749
Project Costs	
Rezoning Application Fee	$43,000
Allowance for Rezoning Costs	$100,000
Fixed Rate CAC	$245,034
Allowance for Demolition of Existing Buildings	$100,000
Site Servicing	$75,457
Connection fees	$50,000
Hard construction costs	$19,216,702
Soft costs	$1,944,216
Project Management	$653,232
Residential Marketing	$1,171,189
Leasing commissions on commercial space	$35,426
Post Construction Holding Costs	$48,000
Contingency on hard and soft costs	$827,374
Regional Levy	$37,760
Regional Levy - Commercial	$2,638
DCLs - residential	$851,830
DCCs - commercial	$82,820
Less property tax allowance during development	$106,306
Construction financing	$839,704
Financing fees/costs	$247,788
Total Project Costs Before Land Related	$26,678,477
Allowance for Developer's Profit	$5,736,156
Residual to Land and Land Carry	**$10,304,117**
Less financing on land during construction and approvals	$550,626
Less property purchase tax	$270,605
Residual Land Value	**$9,482,886**
Residual Value per sq.ft. of gross buildable floorspace	**$141**
Residual Value per sq.ft. of zoned FSR	**$147**
Residual Value per sq.ft. of site	**$557**
Existing Income Producing Value or C2 land value	$8,697,500
Increase in Value	$785,386
Max supportable DCL increase per sq. ft.	**$10**
Max total supportable DCL (including existing DCL)	**$24**

Site 16 – Norquay Plan

Site 16 is located in the 2600 Block of Duke Street. It consists of three adjacent older single family dwellings with a site size of 10,715 square feet. We analyzed the viability of redevelopment to 4 storey strata apartment at 2.0 FSR, as permitted under the Norquay Plan.

<u>Existing Value</u>

Based on a combination of recent sales of similar homes in the neighbourhood and 2017 property assessments, we estimate that this site has a value of about $3.6 million. After including a 20% assembly cost allowance, the minimum cost to the developer would be about $4.27 million.

<u>Estimated Land Value Supported by 4 Storey Apartment at 2.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to woodframe strata apartment at 2.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $4.14 million which is $0.13 million less than the existing value.

At this density, the existing DCL of $13.91 per square foot is not supported, and there is no capacity to increase the DCL.

Site 16 – Norquay Plan Apartment Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***						
Site and Building Size						
Site Size	10,715	sq.ft.				
	99	feet of frontage				
Existing Base Density	0.70	FSR				
Increased Density 1	1.30	FSR				
Density with Bonuses	2.00	FSR				
Storage	0.09		39.8	sf per unit		
Total Effective Gross Density After Bonuses and Exclusions	2.09	FSR				
Total Gross floorspace	22,386	gross sq.ft.				
Market Strata Residential floorspace	22,386	gross square feet				
Net saleable space	19,028	sq.ft. or	85%	of gross area		
Average Gross unit size	933	sq.ft. gross				
Average Net unit size	793	sq.ft.				
Number of units	24	units or	241	per hectare		
Total Market Strata Unit Parking Stalls (including visitors)	26	stalls or	1.1	per unit		
Underground/structured parking stalls provided	26	stalls	10,400	square feet		
Surface parking stalls	0	stalls				
Strata Revenue and Value						
Overall Average Sales Price Per Sq. Ft.	$700	per sq.ft. of net saleable residential space				
Pre-Construction Costs						
DB payment on Tier 1	$16.62	psf				
DB payment on Tier 2	$16.62	psf				
Construction Costs						
Allowance for Demolition of Existing Buildings	$45,000					
Site Servicing	$45,274	or	$1,500	per metre of frontage		
Connection fees	$50,000					
Hard Cost Used in Analysis	$201					
Soft costs/professional fees (excluding management)	10.0%	of above				
Project Management	3.0%	of above				
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6	months
Contingency on hard and soft costs	3.5%	of hard and soft costs				
Local Government Levies						
Regional Levy	$590	per market unit				
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace				
Residential DCLs	$13.91	per sq.ft. of floorspace				
Commercial DCLs	$13.91	per sq.ft. of floorspace				
Financing Assumptions						
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period		
		and a total loan of	75%	on costs		
Financing fees	1.25%	of financed construction costs				
Financing on Land Acquisition	5.0%	during construction on			50%	of land cost
Marketing and Commissions						
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue				
Marketing on residential	3.0%	of gross strata market residential revenue				
Property Taxes						
Tax Rate (res)	0.31657%	of assessed value				
Tax Rate (comm)	1.386%	of assessed value				
Current assessment (Year 1 of analysis)	$3,555,900					
Assumed assessment after 1 year of construction (Year 2 of analysis)	$6,659,855	(50% of completed project value)				
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue		

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$13,319,710
Less commissions and sales costs	$399,591
Net residential sales revenue	$12,920,118
Total Value Net of Commissions	$12,920,118
Project Costs	
Fixed Rate CAC	$231,510
Allowance for Demolition of Existing Buildings	$45,000
Site Servicing	$45,274
Connection fees	$50,000
Hard construction costs	$4,509,840
Soft costs	$465,011
Project Management	$160,399
Residential Marketing	$399,591
Post Construction Holding Costs	$18,000
Contingency on hard and soft costs	$207,362
Regional Levy	$14,160
DCLs - residential	$311,390
Less property tax allowance during development	$21,798
Construction financing	$182,231
Financing fees/costs	$62,452
Total Project Costs Before Land Related	$6,724,021
Allowance for Developer's Profit	**$1,736,890**
Residual to Land and Land Carry	**$4,459,207**
Less financing on land during construction and approvals	$214,599
Less property purchase tax	$105,338
Residual Land Value	**$4,139,270**
Residual Value per sq.ft. of gross buildable floorspace	**$185**
Residual Value per sq.ft. of zoned FSR	**$193**
Residual Value per sq.ft. of site	**$386**
Existing Value (with Assembly Premium)	$4,267,080
Increase in Value	-$127,810
Max supportable DCL increase per sq. ft.	**-$7**
Max total supportable DCL (including existing DCL)	**$7**

Site 17 – Downtown Development Plan

Site 17 is located at the intersection of Dunsmuir and Seymour. It consists of three commercial properties with a site size of 12,000 square feet. We analyzed the viability of redevelopment to office development at 7.0 FSR, as permitted under the Downtown Development Plan.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $17.6 million.

Estimated Land Value Supported by Office Development at 7.0 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to office development at 7.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $13.4 million which is $4.2 million less than the existing value.

At this density, the existing DCL of $13.91 per square foot is not supported, and there is no capacity to increase the DCL.

Site 17 – Downtown Office Development

Assumptions						
Site and Building Size Assumptions:						
Assumed Site Size	12,000	or	0.3	acre		
FSR	7.00					
Project Size	84,000					
Gross Office Area	79,800	sq. ft.	6.65	FSR		
Gross Retail	4,200	sq. ft.	0.35	FSR		
Rentable Area (Office)	75,810	sq. ft. or	95%	of gross area		
Rentable Area (Retail)	3,990	sq. ft. or	95%	of gross area		
Parking	54	1 per 145 m2				
Total Stalls	54					
Underground/structured Parking Stalls	54					
Surface Parking Stalls	0					
Revenue and Value Assumptions:						
Average Net Lease Rate (Office)	$35.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Average Net Lease Rate (Retail)	$35.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Operating Costs (Office)	$18.00	per sq.ft. of rentable area				
Operating Costs (Retail)	$18.00	per sq.ft. of rentable area				
Annual Vacancy Allowance	5.0%					
Assumed Net Parking Revenue	$170	per stall per month				
Capitalization Rate	4.00%					
Profit Allowance	13.0%	of value or	15.0%	of costs		
Cost Assumptions:						
Demolition Allowance	$100,000					
Site Servicing (sidewalks, landscaping, etc)	$45,732					
Building Construction Costs (to base building office)	$300	per sq.ft.				
Building Construction Costs (to base building retail)	$300	per sq.ft.				
Parking Construction Costs	$50,000	per stall (assuming underground)				
Parking Construction Costs	$5,000	per stall (assuming at grade)				
Base Building Hard Construction Costs	$332	per sq.ft. buildable (including parking)				
Allowance to finish common areas	$50	per sq.ft. of common area				
Fit-up Allowance Office	$50	per rentable square foot				
Fit-up Allowance Retail	$25	per rentable square foot				
Soft Costs (including project management)	15%	of hard costs				
Contingency	3.5%	of hard and soft costs				
City of Vancouver DCL	$13.91	per sq. ft. of floorspace				
Metro Vancouver DCL	$0.443	per sq. ft. of floorspace				
Interim Financing	5.0%	on 50% of all costs assuming a		2.50	year construction period	
Share of Construction Costs Financed	75.0%					
Share of Land Costs Financed	50.0%					
Property Taxes During Development	1.386%	applied to land value in Year 1		$15,158,700		
		applied to 50% of gross value of building in Year 2, which is:				$34,543,875
Upfront Leasing Commissions	17%	of Year 1 revenue				
Marketing	$500,000					
Lease-up period after construction complete	6	months, or		0.5 years		
Assumed up-front vacancy cost during lease-up	$53.00	per sq.ft. (i.e. lease revenue+operating costs) on			50%	of space during lease-up
Sales Commission	2%					

Analysis	
Lease Revenue	$2,653,350
Recovered Operating Costs	$1,436,400
Parking Income	$110,160
Total Gross Revenue	$4,199,910
Less Operating Costs	$1,436,400
Net Operating Income	$2,763,510
Capitalized Value	$69,087,750
Less Commission	$1,381,755
Net Proceeds	$67,705,995
Total Value per sq.ft. buildable	**$806**
Demolition Allowance	$100,000
Site Servicing	$45,732
Hard Construction (including parking)	$27,888,000
Allowance to finish common areas	$210,000
Fit-Up	$4,095,000
Upfront Leasing Commissions	$451,070
Marketing	$500,000
Upfront Vacancy Cost during Lease-up	$1,057,350
Soft Costs (including project management)	$4,183,200
Contingency	$1,122,492
City of Vancouver DCL	$1,168,440
Metro Vancouver DCL	$37,212
Property Taxes during Development	$928,472
Interim Financing	$1,958,764
Total Costs Before Land and Profit	$43,745,731
Total Costs per sq.ft. buildable	**$521**
Profit:	$9,009,043
Land Residual:	
Land Residual Before Holding Costs	$14,951,221
Less interim financing on land	$1,009,207
Less property taxes during approvals	$105,073
Less property transfer tax	$396,260
Residual Land Value	$13,440,681
Value per sq.ft. buildable	**$160**
Value per sq.ft. of site area	**$1,120**
Existing Value	$17,640,875
Increase in Value	-$4,200,194
Max supportable DCL increase per sq. ft.	**-$52**
Max total supportable DCL (including existing DCL)	**-$38**

Site 18 – Broadway Uptown Office Precinct

Site 18 is located in the 600 block of West Broadway. It consists of one commercial property with a site size of 23,093 square feet. We analyzed the viability of redevelopment to office at 5.0 FSR.

<u>Existing Value</u>

Based on the capitalized income value of the property, we estimate that the site has a value of about $23.9 million.

<u>Estimated Land Value Supported by Office Development at 5.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to office development at 5.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $19.5 million which is $4.4 million less than the existing value.

Based on this, the existing DCL rate of $13.91 per square foot is not supported, and there is no capacity to increase the DCL.

Site 18 – Broadway Uptown Office Precinct

Assumptions						
Site and Building Size Assumptions:						
Assumed Site Size	23,093	or	0.5	acre		
FSR	5.00					
Project Size	115,465					
Gross Office Area	107,382	sq. ft.	4.65	FSR		
Gross Retail	8,083	sq. ft.	0.35	FSR		
Rentable Area (Office)	102,013	sq. ft. or	95%	of gross area		
Rentable Area (Retail)	8,083	sq. ft. or	100%	of gross area		
Parking	3	1		per 100 m2 for first 300 m2		
	209	1		per 50 m2 for remainder		
Total Stalls	212					
Underground/structured Parking Stalls	212					
Revenue and Value Assumptions:						
Average Net Lease Rate (Office)	$32.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Average Net Lease Rate (Retail)	$55.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Operating Costs (Office)	$15.00	per sq.ft. of rentable area				
Operating Costs (Retail)	$15.00	per sq.ft. of rentable area				
Annual Vacancy Allowance	5.0%					
Assumed Net Parking Revenue	$128	per stall per month				
Capitalization Rate	4.25%					
Profit Allowance	13.0%	of value or	15.0%	of costs		
Rezoning application fee	$43,000					
Rezoning costs	$250,000					
Public art	$1.98	psf				
Cost Assumptions:						
Demolition Allowance	$200,000					
Site Servicing (sidewalks, landscaping, etc)	$88,007					
Building Construction Costs (to base building office)	$230	per sq.ft.				
Building Construction Costs (to base building retail)	$230	per sq.ft.				
Parking Construction Costs	$40,000	per stall (assuming underground)				
Parking Construction Costs	$5,000	per stall (assuming at grade)				
Base Building Hard Construction Costs	$303	per sq.ft. buildable (including parking)				
Allowance to finish common areas	$50	per sq.ft. of common area				
Fit-up Allowance Office	$50	per rentable square foot				
Fit-up Allowance Retail	$25	per rentable square foot				
Soft Costs (including project management)	15%	of hard costs				
Contingency	3.5%	of hard and soft costs				
City of Vancouver DCL	$13.91	per sq. ft. of floorspace				
Layered DCL	$0.00	per sq. ft. of floorspace				
Metro Vancouver DCL	$0.443	per sq. ft. of floorspace				
Interim Financing	5.0%	on 50% of all costs assuming a		2.00	year construction period	
Share of Construction Costs Financed	75.0%					
Share of Land Costs Financed	50.0%					
Property Taxes During Development	1.386%	applied to land value in Year 1		$36,706,800		
		applied to 50% of gross value of building in Year 2, which is:				$45,197,841
Upfront Leasing Commissions	17%	of Year 1 revenue				
Marketing	$250,000					
Lease-up period after construction complete	6	months, or	0.5	years		
Assumed up-front vacancy cost during lease-up	$47.00	per sq.ft. (i.e. lease revenue+operating costs) on			50%	of space during lease-up

Analysis	
Lease Revenue	$3,523,518
Recovered Operating Costs	$1,645,376
Parking Income	$324,360
Total Gross Revenue	$5,493,255
Less Operating Costs	$1,651,438
Net Operating Income	$3,841,816
Capitalized Value	$90,395,682
Less Commission	$1,807,914
Net Proceeds	$88,587,768
Total Value per sq.ft. buildable	**$767**
Rezoning application fee	$43,000
Rezoning costs	$250,000
Public art	$228,621
Demolition Allowance	$200,000
Site Servicing	$88,007
Hard Construction (including parking)	$34,985,895
Allowance to finish common areas	$288,663
Fit-Up	$5,571,186
Upfront Leasing Commissions	$598,998
Marketing	$250,000
Upfront Vacancy Cost during Lease-up	$1,288,878
Soft Costs (including project management)	$5,247,884
Contingency	$1,408,182
City of Vancouver DCL	$1,606,118
Metro Vancouver DCL	$51,151
Property Taxes during Development	$1,135,449
Interim Financing	$1,996,576
Total Costs Before Land and Profit	$55,238,608
Total Costs per sq.ft. buildable	**$478**
Profit:	$11,787,597
Land Residual:	
Land Residual Before Holding Costs	$21,561,563
Less interim financing on land	$1,212,838
Less property taxes during approvals	$254,434
Less property transfer tax	$588,462
Residual Land Value	$19,505,829
Value per sq.ft. buildable	**$169**
Value per sq.ft. of site area	**$845**
Existing Value	$23,873,500
Increase in Value	-$4,367,671
Max supportable DCL increase per sq. ft.	**-$39**
Max total supportable DCL (including existing DCL)	**-$25**

Site 19 – South Vancouver Industrial

Site 19 is located in the 8700 Block of Ash Street. It consists of one industrial property with a site size of 62,291 square feet. We analyzed the viability of redevelopment to industrial at 1.0 FSR, which is supported by the current I-2 zoning.

<u>Existing Value</u>

Based on the capitalized income value of the property, we estimate that the site has a value of about $7.4 million.

<u>Estimated Land Value Supported by Industrial Development at 1.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to industrial development at 1.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $5.5 million which is $1.9 million less than the existing value.

Based on this, the existing DCL rate of $5.55 per square foot is not supported, and there is no capacity to increase the DCL.

Site 19 – South Vancouver Industrial

Assumptions						
Site and Building Size Assumptions:						
Assumed Site Size	62,291	or	1.4	acre		
FSR	1.00					
Project Size	62,291					
Gross Office Area	20,556	sq. ft.				
Gross Industrial Area	41,735	sq. ft.				
Rentable Area (Office)	20,556	sq. ft. or	100%	of gross area		
Rentable Area (Industrial)	41,735	sq. ft. or	100%	of gross area		
Parking (Office)	1	stall per	100	sq. m. for the first 300 sq.m., then 1 per additional 50 sq.m		
Parking (Industrial)	1	stall per	93	square metres of gross area		
Total Stalls	74					
Surface Parking Stalls	74					
Revenue and Value Assumptions:						
Average Net Lease Rate (Office)	$17.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Average Net Lease Rate (Industrial)	$14.00	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Operating Costs (Office)	$5.00	per sq.ft. of rentable area				
Operating Costs (Industrial)	$5.00	per sq.ft. of rentable area				
Annual Vacancy Allowance	2.0%					
Capitalization Rate	4.50%					
Profit Allowance	13.0%	of value or	15.0%	of costs		
Cost Assumptions:						
Demolition Allowance	$400,000					
Site Servicing (sidewalks, landscaping, etc)	$237,389					
Building Construction Costs (to base building office)	$150	per sq.ft.				
Building Construction Costs (to base building industrial)	$110	per sq.ft.				
Parking Construction Costs	$40,000	per stall (assuming underground)				
Parking Construction Costs	$5,000	per stall (assuming at grade)				
Base Building Hard Construction Costs	$129	per sq.ft. buildable (including parking)				
Soft Costs (including project management)	15%	of hard costs				
Contingency	3.5%	of hard and soft costs				
City of Vancouver DCL	$5.55	per sq. ft. floorspace				
Metro Vancouver DCL	$0.443	per sq. ft. of floorspace				
Interim Financing	5.0%	on 50% of all costs assuming a		1.25	year construction period	
Share of Construction Costs Financed	75.0%					
Share of Land Costs Financed	50.0%					
Property Taxes During Development	1.44%	applied to land value in Year 1		$4,940,900		
		applied to 50% of gross value of building in Year 2, which is:				$10,098,202
Upfront Leasing Commissions	17%	of Year 1 revenue				
Marketing	$50,000					
Lease-up period after construction complete	6	months, or	0.5	years		
Assumed up-front vacancy cost during lease-up	$19.00	per sq.ft. (i.e. lease revenue+operating costs) on			25%	of space during lease-up
Sales Commission	2%					

Analysis	
Lease Revenue	$915,067
Recovered Operating Costs	$305,226
Less Operating Costs	$311,455
Net Operating Income	$908,838
Capitalized Value	$20,196,403
Less Commission	$403,928
Net Proceeds	$19,792,475
Total Value per sq.ft. buildable	**$318**
Demolition Allowance	$400,000
Site Servicing	$237,389
Hard Construction (including parking)	$8,035,539
Upfront Leasing Commissions	$155,561
Marketing	$50,000
Upfront Vacancy Cost during Lease-up	$147,941
Soft Costs (including project management)	$1,205,331
Contingency	$323,430
City of Vancouver DCL	$345,715
Metro Vancouver DCL	$27,595
Property Taxes during Development	$107,435
Interim Financing	$258,655
Total Costs Before Land and Profit	$11,294,592
Total Costs per sq.ft. buildable	**$181**
Profit:	$2,633,611
Land Residual:	
Land Residual Before Holding Costs	$5,864,272
Less interim financing on land	$230,906
Less property taxes during approvals	$35,552
Less property transfer tax	$147,001
Residual Land Value	$5,450,813
Value per sq.ft. buildable	**$88**
Value per sq.ft. of site area	**$88**
Existing Value	$7,372,421
Increase in Value	-$1,921,608
Max supportable DCL increase per sq. ft.	**-$32**
Max total supportable DCL (including existing DCL)	**-$26**

Site 20 – Mount Pleasant Industrial/Office

Site 20 is located in the 00 Block of West 6th Avenue. It consists of one industrial/commercial property with a site size of 13,237 square feet. We analyzed the viability of redevelopment to office/production space, which is permitted under the I-1 zoning.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $4.6 million.

Estimated Land Value Supported by Industrial/Office Development at 3.0 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to office and industrial development at 3.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $4.5 million which is $0.1 million less than the existing value.

Based on this, the existing DCL rate of $5.55 per square foot is not supported, and there is no capacity to increase the DCL.

Site 20 – Mount Pleasant Industrial/Office

Assumptions					
Site and Building Size Assumptions:					
Assumed Site Size	13,237	or	0.3	acre	
FSR	3.00				
Project Size	39,711				
Gross Office Area	26,474	sq. ft.	2.0	FSR	
Gross Production/Showroom/Industrial Area	13,237	sq. ft.	1.0	FSR	
Rentable Area (Office)	25,150	sq. ft. or	95%	of gross area	
Rentable Area (Industrial)	12,575	sq. ft. or	95%	of gross area	
Parking	2		1	per 145 m2 up to 290 m2	
	49		1	per 70 m2 over 290 m2	
Total Stalls	51				
Underground/structured Parking Stalls	51				
Revenue and Value Assumptions:					
Average Net Lease Rate (Office)	$30.00	per sq.ft. of rentable area assuming landlord provides fit up allowance			
Average Net Lease Rate (Industrial)	$25.00	per sq.ft. of rentable area assuming landlord provides fit up allowance			
Operating Costs (Office)	$11.00	per sq.ft. of rentable area			
Operating Costs (Industrial)	$11.00	per sq.ft. of rentable area			
Annual Vacancy Allowance	5.0%				
Assumed Net Parking Revenue	$128	per stall per month			
Capitalization Rate	4.25%				
Profit Allowance	13.0%	of value or	15.0%	of costs	
Cost Assumptions:					
Demolition Allowance	$100,000				
Site Servicing (sidewalks, landscaping, etc)	$50,446				
Building Construction Costs (to base building office)	$230	per sq.ft.			
Building Construction Costs (to base building industrial)	$230	per sq.ft.			
Parking Construction Costs	$40,000	per stall (assuming underground)			
Parking Construction Costs	$5,000	per stall (assuming at grade)			
Base Building Hard Construction Costs	$281	per sq.ft. buildable (including parking)			
Allowance to finish common areas	$50	per sq.ft. of common area			
Fit-up Allowance Office	$50	per rentable square foot			
Fit-up Allowance Industrial	$20	per rentable square foot			
Soft Costs (including project management)	15%	of hard costs			
Contingency	3.5%	of hard and soft costs			
City of Vancouver DCL	$5.55	per sq.ft. of floorspace			
Layered DCL	$0.00	per sq.ft. of floorspace			
Metro Vancouver DCL	$0.443	per sq. ft. of floorspace			
Interim Financing	5.0%	on 50% of all costs assuming a	2.00	year construction period	
Share of Construction Costs Financed	75.0%				
Share of Land Costs Financed	50.0%				
Property Taxes During Development	1.386%	applied to land value in Year 1	$8,827,900		
		applied to 50% of gross value of building in Year 2, which is:			$12,864,393
Upfront Leasing Commissions	17%	of Year 1 revenue			
Marketing	$100,000				
Lease-up period after construction complete	6	months, or	0.5	years	
Assumed up-front vacancy cost during lease-up	$41.00	per sq.ft. (i.e. lease revenue+operating costs) on	50%	of space during lease-up	
Sales Commission	2%				

Analysis	
Lease Revenue	$1,015,443
Recovered Operating Costs	$414,980
Parking Income	$78,030
Total Gross Revenue	$1,508,453
Less Operating Costs	$414,980
Net Operating Income	$1,093,473
Capitalized Value	$25,728,785
Less Commission	$514,576
Net Proceeds	$25,214,209
Total Value per sq.ft. buildable	**$635**
Demolition Allowance	$100,000
Site Servicing	$50,446
Hard Construction (including parking)	$11,158,791
Allowance to finish common areas	$99,278
Fit-Up	$1,588,440
Upfront Leasing Commissions	$172,625
Marketing	$100,000
Upfront Vacancy Cost during Lease-up	$386,686
Soft Costs (including project management)	$1,673,819
Contingency	$449,141
City of Vancouver DCL	$220,396
Metro Vancouver DCL	$17,592
Property Taxes during Development	$300,722
Interim Financing	$611,923
Total Costs Before Land and Profit	$16,929,858
Total Costs per sq.ft. buildable	**$426**
Profit:	$3,355,034
Land Residual:	
Land Residual Before Holding Costs	$4,929,318
Less interim financing on land	$277,274
Less property taxes during approvals	$61,191
Less property transfer tax	$117,561
Residual Land Value	$4,473,292
Value per sq.ft. buildable	**$113**
Value per sq.ft. of site area	**$338**
Existing Value	$4,570,500
Increase in Value	-$97,208
Max supportable DCL increase per sq. ft.	**-$4**
Max total supportable DCL (including existing DCL)	**$2**

Site 21 – Grandview Boundary Office Development

Site 21 is located in the 2800 Block of East 12th Avenue. It consists of one industrial property with a site size of 61,158 square feet. We analyzed the viability of redevelopment to office, which is supported in the Grandview Boundary Mixed Employment Area.

<u>Existing Value</u>

Based on the capitalized income value of the property, we estimate that the site has a value of about $7.81 million.

<u>Estimated Land Value Supported by Grandview Boundary Office at 3.0 FSR</u>

The following proforma shows our estimate of the site's value if rezoned and redeveloped to office development at 3.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $6.27 million which is $1.54 million lower than the existing value.

Based on this, the existing DCL rate of $14.82 per square foot is not supported, and there is no capacity to increase the DCL.

Site 21 – Grandview Boundary Office Development

Assumptions

Site and Building Size Assumptions:						
Assumed Site Size	61,158	or	1.4	acre		
FSR	3.00					
Project Size	183,475					
Gross Office Area	162,069	sq. ft.	2.65	FSR		
Gross Retail	0	sq. ft.	0.00	FSR		
Rentable Area (Office)	153,966	sq. ft. or	95%	of gross area		
Parking	3		1	per 100 m2 for first 300 m2		
	335		1	per 50 m2 for remainder		
Total Stalls	338					
Underground/structured Parking Stalls	338					
Revenue and Value Assumptions:						
Average Net Lease Rate (Office)	$28.50	per sq.ft. of rentable area assuming landlord provides fit up allowance				
Operating Costs (Office)	$15.00	per sq.ft. of rentable area				
Operating Costs (Retail)	$15.00	per sq.ft. of rentable area				
Annual Vacancy Allowance	5.0%					
Assumed Net Parking Revenue	$128	per stall per month				
Capitalization Rate	4.75%					
Profit Allowance	13.0%	of value or	15.0%	of costs		
Rezoning application fee	$43,000					
Rezoning costs	$250,000					
Public art	$1.98	psf				
Cost Assumptions:						
Demolition Allowance	$250,000					
Site Servicing (sidewalks, landscaping, etc)	$233,073					
Building Construction Costs (to base building office)	$230	per sq.ft.				
Building Construction Costs (to base building retail)	$230	per sq.ft.				
Parking Construction Costs	$35,000	per stall (assuming structured parking)				
Parking Construction Costs	$5,000	per stall (assuming at grade)				
Base Building Hard Construction Costs	$268	per sq.ft. buildable (including parking)				
Allowance to finish common areas	$50	per sq.ft. of common area				
Fit-up Allowance Office	$50	per rentable square foot				
Fit-up Allowance Retail	$25	per rentable square foot				
Soft Costs (including project management)	15%	of hard costs				
Contingency	3.5%	of hard and soft costs				
City of Vancouver DCL	$13.91	per sq. ft. of floorspace				
Layered DCL	$0.91	per sq. ft. of floorspace				
Metro Vancouver DCL	$0.443	per sq. ft. of floorspace				
Interim Financing	5.0%	on 50% of all costs assuming a		1.75	year construction period	
Share of Construction Costs Financed	75.0%					
Share of Land Costs Financed	50.0%					
Property Taxes During Development	1.386%	applied to land value in Year 1		$8,473,200		
		applied to 50% of gross value of building in Year 2, which is:				$49,323,852
Upfront Leasing Commissions	17%	of Year 1 revenue				
Marketing	$250,000					
Lease-up period after construction complete	6	months, or	0.5	years		
Assumed up-front vacancy cost during lease-up	$43.50	per sq.ft. (i.e. lease revenue+operating costs) on			50%	of space during lease-up
Sales Commission	2%					

Analysis	
Lease Revenue	$4,168,626
Recovered Operating Costs	$2,309,488
Parking Income	$517,140
Total Gross Revenue	$6,995,254
Less Operating Costs	$2,309,488
Net Operating Income	$4,685,766
Capitalized Value	$98,647,703
Less Commission	$1,972,954
Net Proceeds	$96,674,749
Total Value per sq.ft. buildable	**$527**
Rezoning application fee	$43,000
Rezoning costs	$250,000
Public art	$363,280
Demolition Allowance	$250,000
Site Servicing	$233,073
Hard Construction (including parking)	$49,171,225
Allowance to finish common areas	$458,687
Fit-Up	$8,103,467
Upfront Leasing Commissions	$708,666
Marketing	$250,000
Upfront Vacancy Cost during Lease-up	$1,895,523
Soft Costs (including project management)	$7,375,684
Contingency	$1,979,142
City of Vancouver DCL	$2,552,133
Layered DCL	$166,962
Metro Vancouver DCL	$81,279
Property Taxes during Development	$630,299
Interim Financing	$2,444,939
Total Costs Before Land and Profit	$76,957,359
Total Costs per sq.ft. buildable	**$419**
Profit:	$12,863,661
Land Residual:	
Land Residual Before Holding Costs	$6,853,730
Less interim financing on land	$346,970
Less property taxes during approvals	$58,732
Less property transfer tax	$173,203
Residual Land Value	$6,274,825
Value per sq.ft. buildable	**$34**
Value per sq.ft. of site area	**$103**
Existing Value	$7,816,695
Increase in Value	-$1,541,870
Max supportable DCL increase per sq. ft.	**-$10**
Max total supportable DCL (including existing DCL)	**$4**

Site 22 – West Broadway Mixed-use Development

Site 22 is located in the 3200 Block of West Broadway. It consists of one commercial property with a site size of 15,180 square feet. We analyzed the viability of redevelopment to mixed-use development, which is supported by the C-2C1 zoning.

Existing Value

Based on the capitalized income value of the property, we estimate that the site has a value of about $11.6 million.

Estimated Land Value Supported by Mixed-use Development at 2.75 FSR

The following proforma shows our estimate of the site's value if rezoned and redeveloped to mixed-use development at 2.75 FSR. As shown in the proforma, the estimated land value supported by the proposed use with the current DCL rate is about $13.1 million which is $1.5 million higher than the existing value.

Based on this, an increase in the DCL of $34 per square foot is supported at the site, or a total DCL of $48 per square foot.

Site 22 – West Broadway Mixed-use Development

Major Assumptions ***(shading indicates figures that are inputs; unshaded cells are formulas)***					
Site and Building Size					
Site Size	15,180	sq.ft.			
	132	feet of frontage			
Existing Base Density	2.75	FSR			
Total Effective Gross Density After Bonuses and Exclusions	2.85	FSR			
Total Gross floorspace	43,258	gross sq.ft.			
Commercial floorspace	5,313	sq.ft.			
Retail	5,313	sq.ft.			
Market Strata Residential floorspace	37,945	gross square feet			
Net saleable space	32,254	sq.ft. or	85%	of gross area	
Average Gross unit size	999	sq.ft. gross			
Average Net unit size	849	sq.ft.			
Number of units	38	units or	269	per hectare	
Total Market Strata Unit Parking Stalls (including visitors)	42	stalls or	1.1	per unit	
Total Retail Parking Stalls	7				
Total Parking Stalls	49	stalls			
Underground/structured parking stalls provided	49	stalls	19,600	square feet	
Strata Revenue and Value					
Overall Average Sales Price Per Sq. Ft.	$900	per sq.ft. of net saleable residential space			
Retail Revenue and Value					
Average Retail Lease Rate for Retail Space	$45.00	per sq. ft. net			
Capitalization Rate for Retail Space	4.00%				
Value of Retail Space on Lease Up	$1,069	per sq. ft. of leasable area, with	5.00%	allowance for vacancy	
Construction Costs					
Allowance for Demolition of Existing Buildings	$100,000				
Site Servicing	$60,366	or	$1,500	per metre of frontage	
Connection fees	$50,000				
Hard Cost Used in Analysis	$246				
Soft costs/professional fees (excluding management)	10.0%	of above			
Project Management	3.0%	of above			
Post Construction Holding Costs	$500	per unit per month on	50%	of units	6 months
Contingency on hard and soft costs	3.5%	of hard and soft costs			
Local Government Levies					
Regional Levy	$590	per market unit			
Regional Levy - Commercial	$0.443	per sq.ft. of floorspace			
Residential DCLs	$13.91	per sq.ft. of floorspace			
Commercial DCLs	$13.91	per sq.ft. of floorspace			
Financing Assumptions					
Financing rate on construction costs	5.0%	on 50% of costs, assuming a	1.50	year construction period	
		and a total loan of	75%	on costs	
Financing fees	1.25%	of financed construction costs			
Financing on Land Acquisition	5.0%	during construction on	50%	of land cost	
Marketing and Commissions					
Commissions/sales costs on residential	3.0%	of gross strata market residential revenue			
Commissions on commercial sale	2.0%	of commercial value			
Marketing on residential	3.0%	of gross strata market residential revenue			
Leasing commissions on commercial	17.0%	of Year 1 income			
Property Taxes					
Tax Rate (res)	0.31657%	of assessed value			
Tax Rate (comm)	1.386%	of assessed value			
Current assessment (Year 1 of analysis)	$21,535,600				
Assumed assessment after 1 year of construction (Year 2 of analysis)	$17,353,271	(50% of completed project value)			
Allowance for Developer's Profit	15.0%	of total costs or	13.0%	of gross revenue	

Analysis	
Revenue	
Gross Market Residential Sales Revenue	$29,028,273
Less commissions and sales costs	$870,848
Net residential sales revenue	$28,157,425
Retail Value	$5,678,269
Total Commercial Value	$5,678,269
Commission on Commercial Sale	$113,565
Net commercial value	$5,564,703
Total Value Net of Commissions	$33,722,129
Project Costs	
Allowance for Demolition of Existing Buildings	$100,000
Site Servicing	$60,366
Connection fees	$50,000
Hard construction costs	$10,636,627
Soft costs	$1,084,699
Project Management	$357,951
Residential Marketing	$870,848
Leasing commissions on commercial space	$40,644
Post Construction Holding Costs	$28,500
Contingency on hard and soft costs	$463,037
Regional Levy	$22,420
Regional Levy - Commercial	$2,354
DCLs - residential	$527,821
DCCs - commercial	$73,904
Less property tax allowance during development	$135,336
Construction financing	$406,533
Financing fees/costs	$139,322
Total Project Costs Before Land Related	$15,000,363
Allowance for Developer's Profit	$4,525,733
Residual to Land and Land Carry	**$14,196,033**
Less financing on land during construction and approvals	$683,184
Less property purchase tax	$383,385
Residual Land Value	**$13,129,463**
Residual Value per sq.ft. of gross buildable floorspace	**$304**
Residual Value per sq.ft. of zoned FSR	**$315**
Residual Value per sq.ft. of site	**$865**
Existing Income Producing Value	$11,605,200
Increase in Value	$1,524,263
Max supportable DCL increase per sq. ft.	**$34**
Max total supportable DCL (including existing DCL)	**$48**