CAC Policy and Housing Affordability: Review for the City of Vancouver





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Preface

In June 2014, the City of Vancouver retained Coriolis Consulting Corp. to provide an independent evaluation of whether there was any evidence that the City's practice of obtaining Community Amenity Contributions had a negative impact on the pace of new housing construction or the price of housing.

That report concluded that there was no evidence to indicate that Community Amenity Contributions negatively affected the housing market.

In 2019, the City is conducting a comprehensive review of its Community Amenity Contribution policies and procedures. As part of this review, the City asked the team of Coriolis and Wollenberg Munro Consulting Inc. to update the 2014 report.

The Metro Vancouver housing market has changed in some significant ways over the last five years. The City of Vancouver and the Province of BC introduced new taxes intended to reduce some forms of investment in residential real estate and the federal government changed the rules for mortgage qualification; following these actions, the single detached and strata residential markets started to cool in 2018. Meanwhile, rents have continued to increase so several measures - including a reduction in allowable rent increases, new rental tenure zoning, new regulations related to renovations, and new provincial and federal funding - have been implemented to help reduce pressure on residential rents. The full impact of these changes has not yet played out in the marketplace.

Housing markets are complex and it is challenging to isolate the impact of one factor, particularly when the market is shifting. This report uses a combination of empirical market evidence and urban land economics theory to revisit the question of whether there is any evidence to suggest that Community Amenity Contributions have had a negative impact on housing affordability in Vancouver.

Summary

Introduction

The City of Vancouver approves a substantial amount of new residential and commercial development across the city every year. This growth requires new infrastructure and amenities, to meet the needs of new residents and businesses and to address the impacts of new development on the community. The City expects new development to pay a share of these costs.

One of the tools the City uses to obtain amenities from development projects is Community Amenity Contributions (CACs). When property is rezoned, to allow an increase in development potential, the City seeks a contribution in the form of on-site amenities, cash-in-lieu, or affordable housing. However, concern is sometimes expressed that the cost of these CACs could lead to higher housing prices. The City retained Coriolis Consulting Corp. and Wollenberg Munro Consulting Inc. to see if there is any evidence that CACs have directly or indirectly contributed to rising prices in the City of Vancouver.

The Financial Impact of CACs

Faced with a CAC, developers cannot just add the cost to their asking prices. Housing prices are set by overall supply and demand in the marketplace, so developers cannot unilaterally increase price on individual projects unless they are prepared to achieve a slower rate of sales. Increased costs, including CACs, reduce the amount developers can pay for redevelopment sites. Rather than settle for reduced profit or transfer the cost forward to home buyers, developers try to transfer it back to land owners selling their land into the development market. It is the response of land owners to this downward pressure on land price that determines the impact of CACs. If fewer land owners put land into the market (because they don't see enough incentive to sell), the pace of new development can fall. Slower development in the face of strong demand puts upward pressure on the price of all housing.

However, the City only seeks CACs when property is rezoned. The CAC is an added project cost, but the rezoning creates new land value by allowing a larger development opportunity. The impact of CACs, then, comes down to what happens to the increased land value created by rezoning. If the CAC takes up all of the increased land value, developers and land owners will have insufficient incentive to participate in the redevelopment process. If less new development happens, housing prices would increase. But if the CAC is calibrated appropriately so that the land value gain is shared among stakeholders, there is the possibility of a win-win-win: land owners reap an increase in the value of property, developers find it rewarding to seek rezoning and develop projects, and the community obtains new amenities.

On one hand, if CACs are too high, not enough development can happen, but on the other hand, without the benefits provided by CACs, the pace of rezoning might be reduced due to community opposition. The key to sound CAC policy is to find the optimal mix of incentive for land owners, earnings for developers, new housing construction, and community benefits. Vancouver's CAC policy objective is to find this balance.



Market Evidence

Housing prices are high and have risen dramatically over the last decade, although price growth has slowed recently. The question is whether CACs have contributed to price growth. Here are some relevant facts related to the pace of development, the capacity for new development, and the City's CAC policy:

- Over the last 25 years, Vancouver had 37% of total regional apartment construction, averaging about 3,600 units per year. In comparison, Surrey and Burnaby combined achieved 2,200 units per year.
- A large share of new apartment development in the city of Vancouver occurs on land that is already zoned and for which no CAC is paid.
- Over the last 5 years, the City has increased the total zoned capacity for housing faster than the new capacity is being used.
- The City has sufficient capacity in existing zoning and approved community plans to accommodate over 20 years of supply at the recent pace of residential development.
- CACs per unit are generally below the market value of the extra density provided by rezoning, meaning that a portion of the land value gain is available to land owners and developers as incentive to participate in redevelopment.
- New units in projects that paid CACs are selling for similar prices as units in projects that did not pay CACs. There is no empirical evidence that CACs are added onto housing prices.

Conclusions

There is no compelling evidence that CACs have constrained the pace of apartment development in Vancouver or contributed to increasing housing prices. The city absorbs about one third of all new apartment units in the region, which is remarkable considering the large number of high-density urban nodes under development across Metro Vancouver. Nor is there evidence that the implementation of the City's CAC policy has constrained the pace of rezoning, which is important because the City must ensure a steady supply of development land to avoid adding upward pressure on prices. Rezonings are adding development capacity faster than the pace of new unit construction and the city has capacity for more than 20 years of development. CAC rates generally leave considerable financial incentive for land owners and developers.

Housing prices are high and have been rising in Vancouver because there is strong demand from many sources including local households wanting affordable homes, affluent households shifting into apartments from single detached units, and non-local buyers. The City's CAC policy is not restricting development. In fact, CACs have been associated with a large increase in the city's capacity for new development, have paid for amenities that otherwise would have been funded by property taxes, and in some cases have contributed to creating affordable housing units. CACs are not the cause of rising housing prices in the city of Vancouver.



1.0 Introduction

Metro Vancouver's population is projected to increase by about one million people by 2050. These people will require approximately 450,000 new dwelling units, which works out to an average of about 15,000 units per year. In addition, employment growth will require new retail, office, and industrial floorspace. This growth requires infrastructure and amenities to meet the needs of new residents and businesses and to address the impacts of new development on the communities that are absorbing new development and increased density.

The city of Vancouver will accommodate a large share of total regional growth in population and employment, so the City must pay for the capital cost of new infrastructure and community facilities. The City is also trying to facilitate the creation of more housing supply, including more affordable rental housing.

Some capital expenditures, which benefit existing residents as well as meeting the needs of growth, are paid by the broader community through property taxes. For infrastructure and amenities that are mainly required to serve the residents of new development or to address the impacts of new development, the City expects new projects to pay a share of the cost. This is common across Metro Vancouver (and elsewhere in North America) and has been part of the development approvals process in BC municipalities for decades.

One of the tools the City uses to pay for the costs of growth and help create affordable rental housing is Community Amenity Contributions (CACs). When the City rezones land to allow a change in use or increased density, the City creates new capacity for development, particularly new housing supply which helps address the affordability challenge in this region. This new development generates the need for amenities, but because rezoning also adds value to land it creates the financial capacity to contribute to the cost of the amenities.

When seeking contributions for amenities from developers, it is essential to make sure that development projects remain financially attractive. After all, the objective of CACs is to help meet the needs of an increasing population occupying a growing housing stock, not to impede development. There is a need for balance.

Metro Vancouver has a serious housing affordability challenge, both for ownership and rental. While housing prices have cooled somewhat in late 2018 and early 2019, this downturn follows a long period of rapid sales price growth that has pushed prices out of reach for many households. Rent rates have also risen significantly, faster than the rate of inflation and "CACs are negotiated contributions from developers who recognize that when a property is rezoned to a higher density, the increased population can create the need for more community amenities and services. By sharing the benefits made possible by increased development rights and land value, property developers, through CACs, can help make sure that Vancouver remains a great place to live".

 City of Vancouver, "Rezoning & Community Amenity Contributions: Negotiating for a More Livable City".

"The right balance ensures that developers make a fair profit for the risk they take, the housing supply continues to grow (which contributes to affordability), and our neighbourhoods maintain the high standard of livability that our city is internationally renowned for."

- City of Vancouver, "Rezoning & Community Amenity Contributions: Negotiating for a More Livable City".

faster than household income. All levels of government are taking action to address housing affordability, but the situation remains challenging for many households. In this context, local governments are scrutinized to see how they are helping or hindering housing affordability. Because local governments, including the City of Vancouver, expect new development to contribute to the cost of new services and amenities, the question is

often asked whether these costs push up the price of housing or impede the pace of new development, thereby exacerbating the affordability problem.

The City aims to achieve a balance between the goals of facilitating a steady stream of new housing supply, helping address affordability, and providing the infrastructure and facilities required to meet the needs of a growing community. Periodic checks are needed to ensure that this balance is being achieved. Therefore, the City wants to know if there is any evidence that its practice of obtaining Community Amenity Contributions has come at the expense of constrained development activity or has caused, directly or indirectly, upward pressure on housing sales prices or rents.

"It is important that local governments recognize the relationship between CACs and housing affordability and make efforts to balance the opportunity to obtain public benefits, such as community amenities, with the goal of helping families secure affordable housing."

 Ministry of Community, Sport, and Cultural Development, "Community Amenity Contributions: Balancing Community Planning, Public Benefits, and Housing Affordability." March 2014, Page 3.

The City retained the team of Coriolis Consulting Corp. and Wollenberg Munro Consulting Inc. (WMCI) to provide an independent evaluation of whether there is any evidence indicating that CACs have had a negative impact on the pace of new housing construction or the price of housing in Vancouver.

Coriolis and WMCI are Vancouver-based consulting firms specializing in market and financial analysis for urban development projects, urban planning, and urban development policy.



2.0 Scope

This review looks for empirical evidence that CACs can be linked to increased housing sales prices and rents in the City of Vancouver. The review first explains how CACs work and their potential effect on urban land markets and new development, in order to indicate what kind of evidence should be examined to see if CACs have affected prices. Next, relevant available statistical indicators are examined to see if there are signs that CACs have added to the affordability problem. This review also considers whether the procedural aspects of the CAC system have any negative effects on the housing market.



3.0 Planning, Urban Development, and Zoning: The Context for CACs

As the core of an exceptionally attractive urban region that attracts new residents, jobs, and investment, the City of Vancouver is under great pressure to accommodate new housing and commercial development. This pressure for urban growth causes challenges in planning the future of neighbourhoods and financing the construction of community infrastructure.

The city has little vacant land, so creating more capacity for housing and businesses means increasing density through redevelopment of existing uses. Higher density can make communities more livable and sustainable, adds to housing choice, and is supportive of public transit. However, densification can have negative impacts too, so the City must try to respect neighbourhood values and address the concerns of existing communities when approving new development. Densification challenges the City to figure out how best to pay for the infrastructure and amenities that are necessary to meet the needs of a growing population and to address the impacts of growth.

Not accommodating new development would certainly reduce the need for new community infrastructure, but restricting the supply of new housing in the face of strong demand would push up prices even more, making the regional housing affordability situation worse than it already is. The creation of a steady supply of additional housing units in the region is one means of moderating the increase in housing prices and accommodating population growth in an attractive region where the mountains, the sea, the US border, and agricultural lands constrain the urban land base.

To respond to these challenges, the City of Vancouver has over the last several decades taken an approach to managing growth that can be summarized as follows:

- 1. The City accepts the need to accommodate urban development to provide more housing and job space. Like the other municipalities in Metro Vancouver, the City supports the Regional Growth Strategy and accepts a share of total regional development. The City creates the new capacity for this urban development by adopting area plans and rezoning land.
- 2. The City focuses new development in locations that are well-served with public transit and well-suited to become neighbourhood centres with shopping, open space, schools, and other amenities.
- The City uses an approach to funding new community infrastructure and amenities that relies on various revenue sources, including property taxes and mechanisms to allocate some of the costs to new urban development.

This approach has resulted in a large increase in development capacity through rezonings, a large share of the total amount of urban development in the region, and significant contributions toward community infrastructure and amenities from new development.

Vancouver is not alone in looking to new urban development to shoulder some of the load to create new amenities. Many municipalities in BC (in North America, for that matter) have been struggling with the need to fund infrastructure to accommodate increased population and employment. Local governments have few alternatives to fund the capital cost of community-building. They can raise property taxes, although there is strong pressure from existing residents and businesses to avoid tax increases, especially when the need for infrastructure and amenities is caused by new development. So, many municipalities have looked for ways other than property tax to pay some of the costs of growth and, in particular, they have looked for means by which new urban development can contribute.

Municipal law and municipal development approvals processes in BC have evolved over the years to incorporate the idea that it is reasonable for new urban development to contribute to the cost of community



infrastructure and amenities. The City of Vancouver has a special piece of legislation (the Vancouver Charter) that defines its municipal powers, but it is similar in concept to the powers granted to other BC municipalities via the Local Government Act and the Community Charter. The City has five main ways to obtain contributions for community infrastructure and amenities from private urban development projects:

1. Adjacent Works	The City can require a new development project to pay for upgrades to roads, sidewalks, and services adjacent to the site.
2. Park Dedication	The City can obtain park land from a site that is being subdivided. In Vancouver this only happens occasionally, when a very large site (usually formerly industrial or large commercial) is rezoned and subdivided.
3. DCL	The City can charge a levy (called a Development Cost Levy, or DCL) on all new urban development to pay for general infrastructure upgrading. However, the DCL can only be used to pay for a limited array of items: park land acquisition and park development, child care facilities, replacement affordable housing, and engineering infrastructure (roads, water, sewer, drainage). ¹ One good feature of DCLs is that they apply to all development, whether or not rezoning is required. One major limitation of DCLs is that they cannot be used to pay for libraries, community centres, fire halls, public art, transit facilities, heritage building preservation, civic facilities such as galleries or theatres, or many other amenities that are part of a complete, livable community.
4. Density Bonus Zoning	The City can use density bonus zoning to permit developers to build more floor space in exchange for amenities and affordable housing needed by the community. Density bonus zones define an outright (base) density with no density bonus contribution and extra density, up to a limit set in a zone, that is permitted with a financial contribution towards amenities and affordable housing. The contribution rate is set out in the zone. Amenities can be community centres, libraries, parks, childcare centres, affordable housing, or other amenities needed by the community.
5. CAC	The City seeks community amenities, affordable housing, infrastructure, or cash- in-lieu when rezoning property to change its use or increase its allowable density. These are called Community Amenity Contributions or CACs. CACs can only be achieved when property is being rezoned, but they have the advantage of being applicable to a wider range of amenities and infrastructure than DCLs.

CACs are only sought when property is proposed for rezoning. The City considers whether the new development will create a need for new amenities or infrastructure that cannot be fully funded by DCLs and it considers whether the project will have impacts that should be addressed. As appropriate, the City then negotiates with the developer to try to reach agreement on a package of public benefits that the developer will provide if the rezoning is approved. In some cases the negotiations are site-specific, and in some cases the negotiations are site-specific, and in some cases the negotiations are within the context of targets that have been defined by the City for a whole neighbourhood.



¹ In other BC municipalities this levy is called a Development Cost Charge, or DCC, and it is applicable to a smaller range of items including park land acquisition, roads, water, sewer, and drainage.

For CACs to be an effective and constructive means of obtaining amenities, several important conditions ought to exist:

- Rezoning (whether a change in use and/or an increase in density) should be based on sound community planning; the change in use should be consistent with broad City policy and planning objectives and the change in density (often with an increase in height) should be appropriate in terms of urban design, transportation, engineering, and neighbourhood character considerations.
- The extra density available via rezoning must be regarded as marketable and profitable by developers or redevelopment will not happen.
- The CAC system must be consistent with applicable laws.
- New development projects, after rezoning and the payment of any CACs, must be financially attractive from the perspective of unit buyers or renters, the developer, and whoever is selling the land to the developer in the first place. If the developer cannot make a profit or the land owner cannot achieve a sufficient price for land, new development projects will not happen.



4.0 CACs and Urban Land Economics

In order to understand whether, or under what circumstances, CACs could affect housing prices, it is necessary to understand how the payment of a CAC becomes integrated into the financial performance of a development project and how, in turn, this could affect the housing market.

We can consider three possible consequences of adding the cost of a CAC to new residential development:

- 1. Buyers (or renters) have to pay more for units to cover the extra cost.
- 2. Developers achieve lower profits, which could reduce the number of projects completed.
- 3. Developers offer less for development sites. If this causes fewer land owners to be willing to sell their land, the overall pace of development will slow.

All of these look plausible at first glance, but only one stands up under scrutiny.

4.1 Do Unit Buyers or Renters Pay More to Cover the CAC?

The idea that developers just add the cost of a CAC to unit sales prices or rents seems like a possible outcome, but this is a deceptively simplistic way to look at it. In reality, developers do not price new units by just adding up the costs and then adding a profit margin. If this were true, why would developers worry about managing any of their costs? A housing unit on a site that needed soil remediation would be priced higher than the same unit across the street on a clean site. A housing unit in a project that had a cost overrun due to a mistake would be priced higher than the same unit in a better-managed project. It is true that developers can add features and therefore costs that create value (better kitchens for example), but costs that do not add value for buyers cannot simply be tacked on to the price without risking a significant decrease in the pace of sales.

If developers could arbitrarily add thousands of dollars to the price of new units (because of something like a CAC), why aren't they doing it already and making more money? They can't because the market is competitive. Prices are set in the market based on the ability of purchasers to pay (demand) and the amount of new product developers create (supply). As stated in the Province's CAC guide, "Developers know that they cannot simply raise their asking prices when faced with additional costs; that the selling price is set by the market"².

It is worth looking at some demonstrations of how market price and construction cost are not directly linked:

- Housing prices in Metro Vancouver have been rising faster than construction costs. For example, the Greater Vancouver Apartment Housing Price Index published by the Canadian Real Estate Association grew by about 12% per year during 2012 to 2017. During approximately the same period, the Apartment Building Construction Cost Index for the Vancouver Census Metropolitan Area published by Statistics Canada increased by about 3% per year. There are small differences in the time period and the geographic area for these two data sets, but it is clear that price growth has significantly outpaced cost increases. Something other than rising cost has been driving price.
- Housing sales prices and rents are significantly higher on average in Vancouver than they are in communities to the east, such as Surrey. While some construction costs are higher in Vancouver, total



² "Community Amenity Contributions: Balancing Community Planning, Public Benefits and Housing Affordability", Ministry of Community, Sport, and Cultural Development, March 2014, page 15.

cost difference is much less than the difference in price. Something other than cost difference drives the price differences across the region: areas experiencing the greatest demand have the highest housing prices.

Suppose a developer completes a new strata apartment project for a total cost (including land, construction, marketing, municipal charges, and a typical allowance for profit) of \$700 per square foot. Now suppose that new units in the same area are selling for \$800 per square foot. Does the developer sell for the "cost" of \$700 or the prevailing market price of \$800?

These illustrations ought to create some skepticism about the premise that a cost, such as a CAC, is just passed on to buyers or renters in the form of higher prices.

For further evidence that CACs do not drive price, it is possible to look at actual development project pricing. Exhibits 1A and 1B show the sales prices achieved in generally similar concrete apartment projects on the west side and east side that were selling in 2014 at the time the first version of this report was prepared, including projects that paid a CAC and projects that did not (because they did not require rezoning). All the units in the two sub-areas are in the same general price band and the weighted average sales prices are almost identical for CAC and non-CAC projects.

Exhibit 2 shows the same kind of information for west side concrete projects selling as of early 2019. The range of prices is very similar for the projects that paid a CAC and those that did not, although there is a wide spread which indicates that many factors go into the determination of project pricing. However, the weighted average sales price for the west side concrete apartment projects is about the same for projects that paid a CAC as it is for those that did not.

This evidence is not in itself conclusive, because there are many factors that go into the pricing of units in any single project, but the figures do not show an obvious pattern of higher prices for projects that paid a CAC.

This leaves the question of whether strata prices in these projects would have been lower without CACs. This is unlikely because in almost all cases the CAC paid for new density is less than the true market value of the density. So, units built using CAC-paid density could in theory be delivered to the market at a lower price than units that paid full market value for density (by paying full market value for development land), but this never happens; developers sell all units at market price.



	Project Name	Address	# of Units	Total CAC (rounded)	Blended Average Sales Price per sq.ft.
Developed under existing	Arbutus Ridge	3131 Arbutus St	49	\$0	\$870
zoning and did not pay a	Pinnacle Living	2080 W Broadway	134	\$0	\$759
CAC	Musee	1690 West 8th Ave	56	\$0	\$725
	Kits 360	1777 W 7th Ave	250	\$0	\$732
	Weighted average sales	\$758			
Developed through	6th & Fir	1565 W 6th Ave	47	\$1,576,000	\$830
rezoning and paid a CAC	Empire at QE	4599 Cambie St	175	\$6,500,000	\$795
	Prelude	6311 Cambie St	52	\$2,200,000	\$710
	Forty-Nine West	6399 Cambie St	63	\$2,664,000	\$750
	Weighted average sales	s price per sq.ft. for these projects			\$781

Exhibit 1A - West Side Concrete Multi-family Examples as of 2014

Exhibit 1B - East Side Concrete Multi-family Residential Examples as of 2014

	Project Name	Address	# of Units	Total CAC (rounded)	Blended Average Sales Price per sq.ft.
Developed under existing	Collection 45	133 East 8 Ave	45	\$0	\$650
zoning and did not pay a	South Creek Landing	2211 Cambie St	15	\$0	\$860
CAC	Shine	289 E 6th Ave	93	\$0	\$620
	Weighted average sales pr	\$666			
Developed through	Opsal	1775 Quebec St	173	\$7,136,000	\$690
rezoning and paid a CAC	Meccannica	108 E 1st Ave	165	\$1,460,000	\$670
	The Residences at West	1751 Manitoba St	\$19,484,000	\$642	
	Weighted average sales pr	\$658			

Exhibit 2 - West Side Concrete Multi-family Examples as of 2019

	Project Name	Address	# of Units	Total CAC (rounded)	Blended Average Sales Price per sq.ft.
Developed under existing	Mirabel ^a	1345 Davie St	149	\$0	\$1,850
zoning and did not pay a	The Granville	2301 Granville St	41	\$0	\$1,760
CAC	Heather & Seventeenth	711 W 17 th Ave	16	\$0	\$1,594
	McKinnon	6333 West Boulevard	40	\$0	\$1,385
	The Jervis ^a	1177 Jervis St	58	\$0	\$1,305
	Sterling	2102 W 48 th Ave	37	\$0	\$1,200
	West 7 th	2239 W 7 th Ave	17	\$0	\$1,142
	West Five	1819 W 5 th Ave	24	\$0	\$887
	Weighted average sales pl	\$1,539			
Developed through	Cardero	1575 W Georgia	119	\$14,562,000	\$1,760
rezoning and paid a CAC	Coco Oakridge	5733 Alberta St & 376-392 W 41st Ave	57	\$2,510,000	\$1,535
	The Smithe	225 Smithe St	95	\$12,051,000	\$1,516
	Winston at South Oak	8242 Oak St	43	\$2,303,000	\$1,491
	Hawthorne	4976-5010 Cambie St	44	\$2,287,000	\$1,276
	Cambie Sixty Two	7790 Cambie St	20	\$935,000	\$1,270
	Henry	5355 Cambie St	48	\$1,763,000	\$1,235
	The Regent	563-571 W King Edward St	66	\$1,949,000	\$1,061
	Weighted average sales pl	rice per sq.ft. for these projects			\$1,489

Source for Exhibits 1A, 1B, and 2: City of Vancouver. Projects were actively selling or recently sold out as the date of the analysis. All projects are concrete mid-rise or high-rise. The weighted average sales price was calculated by multiplying the average sales price per sq.ft. and the total residential floorspace per project, summing these figures for each category, and then dividing the sum by the total residential floorspace for projects in the category. Note a: Mirabel and The Jervis are inclusionary housing projects that also include a social housing (rental) component, but the sales prices are for the market units.



4.2 Do Developer Profit Margins Fall?

The second possible outcome is that developers absorb the cost of CACs and accept lower profit margins. Examining the performance of development projects over the long term indicates that this does not happen. Developers require a threshold profit margin (usually expressed as a percentage of selling price or a percentage of cost) in order to make it worth taking the risk of developing a new project and in order to demonstrate to prospective lenders that the project is financially viable. As stated in the Provincial guide: "The cost of development has increased significantly over time...there is no evidence to show that such cost increases have reduced developer profit. In fact, developer profit margins have remained remarkably stable over time."³ If the financial performance of a potential development project is too weak to support the profit target (relative to the associated risk), the developer will simply not do the project.

So, if developers cannot unilaterally raise selling prices or rents above market levels to recover the cost of a CAC and if developers will not accept lower profits, where does the CAC "go"?

The answer is found by understanding how developers figure out how much to pay for land.

When planning a new project, developers estimate the revenue they will receive from selling the completed new product. Then they deduct all construction costs (including labour, building materials, professional services, financing costs, and known municipal charges or amenity contributions). Then they deduct the amount they target for profit, because they are not interested in projects that will not support their profit expectation. What remains is the maximum amount they can afford to pay for land. If a cost goes up (whether the cost of concrete or the cost of a municipal payment such as a DCL or CAC), the effect is to reduce the

amount a developer is able to offer to buy a development site.

So, the primary impact of a new cost, such as the payment of a CAC, is to lower the bid price for development sites.⁴ The important question, then, is what do land owners do when faced with this situation?

The primary impact of a new cost, such as the payment of a CAC, is to lower the bid price for development sites. The important question, then, is what do land owners do when faced with this situation?

4.3 Do Land Owners Withhold Sites From the Market?

In considering the impact of reduced bid prices for redevelopment sites, it is important to understand that land is fundamentally different from other forms of capital. Labour can shift to other occupations or job markets and materials can be moved to other locations in response to local market price changes, but land can't move; its value is totally dependent on where it is and what it can be used for.

³ "Community Amenity Contributions: Balancing Community Planning, Public Benefits and Housing Affordability", Ministry of Community, Sport, and Cultural Development, March 2014, page 14.

⁴ This idea of downward pressure on the bid price for development sites sometimes invites the response "then why have land values continued to go up, even though CACs and DCLs and other costs have been rising?". The answer is that there is a difference between downward pressure and an absolute decline. Downward pressure can mean that prices are still rising, but not as much as they otherwise would have. If house prices continue to rise, then land values continue to rise. However, if some costs are also increasing then the rate of growth in land value can be less than the rate of growth in house prices.

There are three possible outcomes for any given site when there is downward pressure on the amount developers can offer for land:

- The land owner decides not to sell the site. If land owners see insufficient incentive to sell, the consequence is that there could be less land available to developers, so the overall pace of new development could fall. In the face of strong housing demand, turning down the tap on the flow of new units will lead to increases in housing prices, not just for new units but for all stock. Any increased cost imposed by local government that puts downward pressure on the ability of developers to buy land has a risk of reducing the availability of land for development. The aim of CAC policy should be to make sure that developers, after paying for additional density, can still bid enough for sites that the flow of land to the development market is maintained.
- The second possibility is that users or investors who want to hold the property in its present use can pay more than developers can now pay to buy the site for redevelopment. This is usually true of properties with new valuable improvements, because developers can't afford to buy newer buildings just to demolish them. It can also be true of single detached homes or older properties that generate strong income. Many of the older low density commercial buildings along main shopping streets in the city remain in their current form, even though they are already zoned for higher density, because the retail rents are so high that investors are willing to pay more to buy and hold the property (for income) than developers can afford to pay as a redevelopment site. At any given time in the city, there is a mix of sites that are holding properties and sites that are redevelopment candidates. An increase in development cost can shift this mix, reducing the number of available development sites, which reduces the flow of new units, which indirectly pushes up housing prices.
- The third possibility is that even if a new cost reduces the amount developers can pay for a site, they can still pay enough to convince the land owner to sell and enough to outbid investors who want to buy holding properties.

Which of these is most likely? If zoning stays the same, a significant development cost increase could mean developers bid less for land, resulting in reduced land availability for new projects, which would over time result in higher overall prices in the housing market. But CACs are only obtained when property is rezoned; *rezoning adds new land value* and *increases the capacity for development*.

CACs are only obtained when property is rezoned; rezoning adds new land value and increases the capacity for residential development.

4.4 What Happens to the New Land Value Created by Rezoning?

To understand the impact of CACs, then, it comes down to understanding what happens to the new land value that is created by rezoning and the impact this has on the various players in the urban development process. There are three groups who might expect to benefit from the new land value created by rezoning:

- Land owners may think this increased value is theirs because they believe that owning property means owning all future gains in development potential including rezoning. They may be unwilling to sell their land unless they get some of the lift in value from rezoning.
- Developers may think they earn this increased land value because they pay the cost of achieving the rezoning (fees, consultants, time), they absorb risk (not all rezonings are approved), and they have the vision/expertise to implement the redevelopment. Note that there is a difference between the gain in land



value from a rezoning and the profit earned by doing a development. Regardless of what happens to the increased land value, developers will still earn the profit on developing the new project on the rezoned land. CACs should not reduce the profit (such that a developer building 100 units on an already-zoned site and a developer building 100 units on a similar site needing rezoning should end up earning similar profits), but developers may think that they should also receive a portion of the land value gain because of the added risk and cost of rezoning.

 The municipality (as a corporate entity and as a community) may perceive that rezoning adds development capacity that puts new loads on existing services, so some of the value gain created by rezoning should fund new amenities to meet the needs of the increased population. There may also be a concern that rezonings are not acceptable to the broader community and might not be approved if politically unpopular, unless some community benefits result.

Land owners, developers, and municipalities all have a claim on the increased value created by zoning. The allocation of this value among the three parties will affect, for any given site, whether rezoning and redevelopment are likely to proceed.

If all the benefits of rezoning accrue to only one or two of these three parties, redevelopment is less likely to happen. It is possible to achieve a win-win-win where rezoning gives land owners an incentive to sell their property into the development market, developers see an incentive to seek more density (and thereby add more housing stock), and the local government achieves amenities, infrastructure, or affordable housing.

4.5 Case Study

The following example illustrates how a rezoning and CAC might play out in an area where rezoning is anticipated. This "case study" is hypothetical and not associated with an actual project. The case study does not use numbers, because the values (for new units, for land, for CACs) vary widely across the city. The case illustrates in conceptual terms how CACs are incorporated into the economics of development.

The example is presented in three parts:

- Part 1 describes an existing property and the redevelopment potential under the proposed rezoning.
- Part 2 shows how the financial performance of the redevelopment of the site is viewed by the developer considering acquiring the site.
- Part 3 shows the potential allocation of the additional land value that results from the rezoning.



CASE STUDY PART 1: SITUATION

This hypothetical case study assumes the following situation:

- An existing older single family home was purchased several years ago by the current owner. The house has increased considerably in value since the original purchase, even without any consideration of rezoning.
- The lot is zoned for single family residential use.
- The lot is in an area identified in a City Plan as suitable for multifamily residential at increased density, subject to rezoning. The City Plan includes a policy to seek CACs from sites being rezoned.
- The current owner is willing to sell, but intends to buy a home of similar value in another location so needs a financial incentive to sell.

The graphic shows that the current owner has made money, due to the strong growth in single family house prices. But to move into a similar quality home, the owner needs to put all of this money back into the new property. To have an incentive to sell, therefore, the owner needs to receive the full current market value **plus** the cost of moving, the cost of fees and taxes associated with buying and selling, the cost of any upgrades that are needed to make the new home comfortable, and presumably some incentive to make the whole process worthwhile.

This owner would not move without being paid materially more than the current market value of the house. If the owner does not see sufficient incentive, and does not sell, this potential redevelopment site is not available to developers.





CASE STUDY PART 2: FINANCIAL ANALYSIS OF REDEVELOPMENT

The next step is to look at the financial performance of the redevelopment project (with rezoning) from the perspective of the developer.

The developer estimates the total revenue from the sale of the new apartment units in the project. The developer then deducts from this total an allowance for profit, deducts marketing costs, and deducts all of the construction costs for creating the project (including all labour, materials, consultant costs, fees and permits, insurance, property taxes during construction, service connections and so on).

The amount left over is the maximum total the developer can pay for land and related costs (the land value after rezoning). In this case, the land is worth considerably more under the new zoning than it is worth as a single family house under existing zoning. The *difference* between this rezoned value and the market value of the property under existing zoning is the additional land value that is generated by rezoning. This is the amount (shown in the diagonal hatch in the graphic) available to be allocated among the land owner, the developer, and the municipality (in the form of CACs).





CASE STUDY PART 3: ALLOCATION OF INCREASED LAND VALUE

Part 3 shows how the increased land value (in diagonal hatch) that results from rezoning can be allocated among the stakeholders:

- The developer needs to recover the cost of the rezoning.
- The CAC policy calls for a contribution to public benefits, which might be amenities, affordable housing, or a combination. The cost of the CAC comes out of the increased land value.
- This leaves a portion of the increased value available for some combination of paying a premium for the property (i.e. the incentive that entices the existing land owner to sell and move somewhere else) and providing additional developer profit. In a competitive development market, developers competing for sites will generally bid up prices to the maximum that still allows them to make a typical profit, so it is likely that much of this would go to the land owner. So, the land owner receives the current market value of the lot *plus* a share of the extra value resulting from rezoning.

Note that there are some things that the CAC does *not* do in this example:

- The CAC does not reduce developer profit. Part 2 of the case study shows that the developer budgets a profit before deciding how much to pay for the land. Part 3 shows that there is potential to increase this profit, depending on how much of a premium is paid to buy the site.
- The CAC does not take any of the increase in the value of the property as a single detached home since it was purchased. That gain all goes to the land owner. In addition, the land owner has the opportunity to gain a premium by obtaining part of the land value lift due to the rezoning.
- The CAC has no effect on the price of the new units. Prices are determined by the market and not affected by any cost item. The CAC is paid out of the increase in land value from rezoning.





The simple illustrative case study shows that CAC policy creates the possibility for all parties to benefit:

- The land owner has the potential to achieve a premium over the market value of the property based on its current use. The owner can acquire a new home of equal value, cover all of the costs of moving, pay for some renovations, and pocket a significant gain which in this case would be non-taxable as it is the sale of a principal residence.
- The developer has the opportunity to earn profit from the project, recover the costs of the rezoning, and possibly retain some of the increased land value depending on how much incentive must be offered to the land owner.
- The community achieves public benefits that help mitigate the impacts of growth.

However, this outcome would be unachievable under different circumstances:

- If the land owner won't sell, even if offered a substantial premium.
- If the developer expects the lion's share of the extra land value, so the land owner does not have enough incentive to sell.
- If the local government or community expects so much public benefit that there is insufficient incentive for the developer or land owner to participate in redevelopment. This is why CAC policy must strike an appropriate balance in the allocation of the land value gain from rezoning.
- If the community sees insufficient benefit or unacceptable impacts, after considering the CAC, resulting in sufficiently strong and successful opposition to rezoning that the whole issue of financial viability is moot.

Clearly, there is an optimal target for CAC policy: finding the right mix of incentive for land owners, compensation for developers, and community benefits that enables rezoning and new development to proceed at a pace that is not impeded by the CAC policy. This is the balance that is called for in the Provincial guidelines and in the City of Vancouver's policy statements.

There is an optimal target for CAC policy: finding the right mix of incentive for land owners, compensation for developers, and community benefits that does not impede the pace of rezoning and new development.

4.6 Is There Any Way A CAC Could Affect Housing Prices?

The urban land economics perspective outlined in this document suggests it is not likely for the payment of a CAC to affect housing prices, considering that the payment is in exchange for additional density that leads to an increase in housing supply, provided the CAC does not impact the flow of land to the market. Critics of the CAC system suggest that it could be impeding development and thereby contributing to price growth.

Concerns expressed by the development industry include:

• It takes too long to figure out the CAC for a project. If true, this means that it is not paying a CAC per se that affects housing price but that the time it takes to determine the CAC slows the approvals process. Slower approvals means that the pace of new supply is constrained, which can have an impact on price in the face of growing demand. There is certainly a strong case to be made that development approvals in the City of Vancouver are too complex and take too long. Approvals time frames are measured in years, especially when rezoning is involved. Accelerating approvals, without compromising the quality of the process, should be part of a housing affordability strategy. However, the question to be asked here

is whether the CAC component of the approvals process is the reason that the process takes so long. For an increasing share of rezonings in Vancouver, CACs are paid based on target fixed rates that are set in advance, well known, and involve no negotiation. For these projects, CAC timing is not an issue. For projects in which the CAC is negotiated, it takes both parties to reach agreement. If this sometimes takes too long, it is not necessarily true that it is the City dragging its feet. CACs are only one piece of the rezoning process so there is a wide range of issues that can result in time delays in the application process. However, it is in the City's interest to ensure that it does what it can to speed up the process of settling negotiated CACs.

- CACs are too high. CACs in target rate districts are based on extensive analysis to ensure that they are priced appropriately based on the value of additional density in the area. The resulting CAC rates are lower than the actual market value of density. In negotiated CACs, one perspective is that the City and the developer are both involved in settling the rate. If developers believe the rates are too high they have an opportunity to present evidence supporting a lower rate. On the other hand, the higher the CAC the less land lift is available to flow through to land owners as incentive to sell land into the development market. Generally, the City targets about 75% of the lift for CAC, which leaves a considerable premium for land owners. The real test of whether CACs are too high is whether the pace of new development appears to have been constrained by the lack of development property. This is examined in Section 6.0.
- CACs are set based on the highest housing prices and land values in an area. CACs are based on the value of extra density, which is determined by the market price of housing. There is variation in the value of density within areas, because some sites have attributes that will command higher unit values, such as views, location relative to amenities, and location relative to busy streets. When the CAC is negotiated for a given site, the analysis ought to take into account the actual values that the market will support in new development at that location. Developers might counter that if the CAC is pegged based on the upper end of market value they have no flexibility to bring product to the market at a lower price, but the implication is that developers might choose to sell or rent new housing at less than its maximum value. This is possible but unlikely, considering that recent experience shows that new units have been selling and renting at current market values at the time of project completion even though the CAC would have been based on lower market values at the time of zoning adoption.

It is unlikely that the payment of a CAC has directly affected market pricing, unless the design or implementation of the City's CAC policy has materially affected the pace of new development. This is examined in Section 6.0.



5.0 City of Vancouver CAC Policy

The City's current CAC policy can be summarized as follows:

- In several defined neighbourhoods, the City has established a target for the CAC contribution (expressed in terms of \$ per square foot of additional density) it aims to achieve from rezoning. These targets range between \$10 and \$112 per square foot of additional density. The amount is based on an assessment of public benefits required to meet the needs of new residents (and the associated costs) and on the economics of development, which vary widely in the city.
- In some areas, the City has adopted zoning with density bonuses, in which a defined increase in density can be achieved by providing a defined Amenity Share Contribution without the need for rezoning.
- Non-strata commercial rezonings in the Metro core area pay a target rate CAC for extra density.
- In other circumstances, CACs are negotiated on a site-by-site basis. The amount and nature of the CAC depends on site size, site features, proposed development concept, an evaluation of the project's demands on amenities and services, an evaluation of the project's impacts, and market/financial conditions. In most areas, the type of amenity sought by the City is informed by public benefit strategies contained within approved community plans.
- Several types of projects are not expected to pay CACs, including most secured rental rezonings, low density housing, social housing, heritage projects, or public schools.

In the past, the City relied primarily on the site-by-site negotiated process. More recently, in order to speed up the approvals process and make CACs more predictable for developers, the City is making increased use of neighbourhood-specific target CAC rates for smaller developments and using site-by-site negotiations for large, complex rezonings.

This trend toward using defined target rates for a large proportion of rezonings is consistent with the recommendations in the Province's guide, which states that target rates for CACs "…have the advantage of being relatively predictable" and "…provide consistency and a sense of fairness".⁵ The City estimates that 50% of rezonings with CACs are now processed using the target rate CAC approach (this is up from 10% five years ago).

The City's target rates vary because of wide variation in local amenity needs and local market conditions. In setting the target rates, the City considers the cost of new amenities and services required because of the new development. Then the City evaluates the economics of redevelopment to determine whether the required public benefits can be delivered without impeding the viability or pace of redevelopment activity.

The City's CAC policy is consistent with the aims of distributing the benefits of rezoning among landowners, developers, and the community.

⁵ "Community Amenity Contributions: Balancing Community Planning, Public Benefits and Housing Affordability", Ministry of Community, Sport, and Cultural Development, March 2014, page 18.



6.0 CAC Policy and Housing Affordability: Examining the Record

The urban land economics review suggests that the payment of a CAC should not affect housing prices and the CAC system, if appropriately administered, should not materially affect the pace of urban development in the city.

This section looks at the actual record of prices and development to see if there is any evidence that CACs have had a negative impact on the pace of activity.

6.1 Approach

We look at the following indicators:

- We examine trends in housing prices and rents in the city and compare with trends in other parts of Metro Vancouver.
- We review the actual pace of residential development activity and rezoning activity in the city of Vancouver. We only look at apartments because they represent the bulk of the new residential activity in the already-urbanized part of the region and because most rezonings (that pay CACs) mainly involve new capacity for apartment units. The City of Vancouver has little opportunity to increase the supply of single detached units and, in any case, no CAC is sought from single detached homes.
- We examine the capacity for future apartment development in the city to see if there is any evidence that there is a constraint on the market's ability to deliver new product.
- We compare CACs with land values.

6.2 Trends in Housing Prices and Rents

In an evaluation of CACs and housing affordability in Vancouver, it is necessary to distinguish between single detached and apartment housing for two main reasons:

- The city has no physical capacity to create new single detached lots. In fact, the supply of lots is decreasing over the long term, as areas are rezoned and redeveloped to allow higher density housing.
- CACs are not sought from single detached units, even if new lots could be created.

Single detached unit prices have been rising much faster in Vancouver than apartment prices, which is empirical evidence of a basic rule of microeconomics: growing demand and constant (or shrinking) supply result in rising price.

It is interesting to compare trends in single family and apartment prices. The best publicly available, comprehensive, and reliable indicator of long term price trends is the MLS Home Price Index provided by the Real Estate Board of Greater Vancouver. This data source monitors the price of a deemed typical single detached unit and apartment unit over time in most communities in Metro Vancouver and shows the price trend in the form of an index. The index starts at 100 in 2005.

Exhibits 3A and 3B show the index for the period 2005 to 2019, for single detached and apartment units respectively.



Comparing the two exhibits, we can make these observations:

- During 2005 to 2018, regional average single detached prices increased by 2.9 times while regional
 average apartment prices increased by 2.7 times. While these are undeniably steep price gains, which
 explain the urgency about housing affordability, it is notable that local governments in the region do not
 usually charge CACs for single detached homes, supporting the view that other factors are driving price.
- During 2005 to 2018, single detached prices in the city of Vancouver outpaced the regional average, with both the east side and the west side more than tripling in price.
- However, during 2005 to 2018, apartment prices in the west side of Vancouver increased at about the same rate as the regional average even though west side CACs are among the highest in the region (because west side land values are high). Apartment prices in Vancouver's east side increased faster than the west side, even though CACs are lower in the east side, and faster than the regional average.
- During 2005 to 2018, apartment prices grew faster than the regional average in parts of Burnaby, Coquitlam, New Westminster, Pitt Meadows, Port Coquitlam, and Richmond, but slower than the regional average in West Vancouver, parts of Burnaby, and North Vancouver. All of these communities seek CACs (although the rates vary). There is no clear pattern of price changes correlated to whether or not CACs are collected.
- During 2018 to 2019 (so far), after the introduction of new taxes and new mortgage qualification rules, single detached prices fell across the entire region.
- During 2018 to 2019 (so far), apartment prices fell in many parts of the region although up to January they were holding stable in several locations including Coquitlam, New Westminster, Port Coquitlam, and Delta. Prices fell in both the east and west sides of Vancouver, even though the City continues to charge CACs.



Exhibit 3A: Home I	Price ind	зех (нр	I) for De	etached	Homes	in Grea	iter van	couver,	2005 to	2019					
	Jan-05	Jan-06	Jan-07	Jan-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18	Jan-19
Greater Vancouver	100	112.4	127.6	143.1	128.8	154.2	155.3	171.9	166.5	171.8	186.3	235.1	271.9	294.4	267.6
Bowen Island	100	113.2	125.3	136.4	121.3	134.9	120.5	122.1	124.2	122.1	125.9	140.8	180.0	204.1	210.2
Burnaby East	100	114.0	126.6	141.4	125.6	149.9	148.0	162.9	157.7	166.5	173.0	229.2	257.3	283.3	261.1
Burnaby North	100	112.0	127.4	144.5	129.3	154.4	157.1	176.2	172.5	178.9	194.3	249.5	286.4	303.2	273.7
Burnaby South	100	114.5	127.7	140.5	128.9	156.0	158.4	180.8	176.7	186.1	203.1	251.7	313.1	319.3	293.6
Coquitlam	100	111.3	127.4	139.6	128.7	144.4	142.3	150.6	154.2	160.5	172.7	218.5	246.0	284.2	265.2
Ladner	100	111.6	124.1	136.3	129.1	144.4	139.3	147.3	146.3	144.4	160.3	208.9	233.3	245.2	227.4
Maple Ridge	100	108.4	124.3	136.1	122.8	133.4	128.0	131.2	130.7	129.6	137.0	159.3	202.8	237.5	229.2
New Westminster	100	113.3	126.8	140.8	127.8	151.3	151.7	164.0	157.5	163.1	171.0	225.7	255.0	286.5	262.8
North Vancouver	100	111.0	121.7	139.2	121.3	141.7	134.8	150.3	146.5	151.4	164.2	214.5	247.5	261.2	236.5
Pitt Meadows	100	109.4	127.3	138.2	123.4	140.7	132.8	141.2	138.6	138.6	150.3	174.7	217.1	254.9	254.0
Port Coquitlam	100	111.6	126.5	139.4	126.3	142.3	137.6	145.4	145.8	149.9	157.6	204.5	223.1	260.9	251.5
Port Moody	100	112.7	127.9	141.3	129.6	144.0	142.8	146.6	150.0	158.8	170.3	210.2	247.9	276.0	268.6
Richmond	100	113.6	130.0	145.2	136.9	173.0	186.7	200.6	187.9	187.5	207.1	268.6	313.5	339.2	306.4
Tsawwassen	100	113.6	126.2	139.9	123.3	146.5	132.9	147.8	149.9	151.8	163.7	225.2	250.3	271.7	248.1
Vancouver East	100	113.7	129.2	143.9	131.4	158.9	161.6	181.8	180.9	191.9	215.4	272.8	318.4	345.7	315.8
Vancouver West	100	113.3	132.6	158.9	136.4	182.2	188.6	221.6	205.0	220.3	241.4	300.7	351.1	364.3	313.1
West Vancouver	100	113.3	127.5	146.8	120.2	145.0	145.0	170.4	172.8	180.4	197.8	251.5	276.9	292.6	247.6

Exhibit 3A: Home Price Index (HPI) for Detached Homes in Greater Vancouver, 2005 to 2019

Source: MLS Home Price Index, Real Estate Board of Greater Vancouver. The HPI represents the estimated change in the sales price of a benchmark property within each market.

Exhibit 3B: Home Price Index (HPI) for Apartments in Greater Vancouver, 2005 to 2019

							,							
Jan-05	Jan-06	Jan-07	Jan-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18	Jan-19
100	115.7	132.6	148.7	132.2	148.2	145.8	149.3	144.9	150.2	156.2	181.5	201.9	269.0	264.3
100	118.2	142.0	158.8	137.7	152.7	138.9	136.7	139.9	149.7	171.7	189.9	231.2	297.3	285.4
100	113.7	131.6	145.4	129.1	144.8	139.9	139.6	138.6	141.5	146.0	161.0	206.4	264.0	258.9
100	114.8	130.1	145.8	133.6	148.2	150.6	150.3	146.3	154.9	159.4	178.9	221.3	280.0	276.2
100	113.7	133.2	148.6	128.8	142.5	141.0	137.8	135.8	142.2	151.1	175.3	207.6	281.3	282.9
100	111.9	126.9	138.7	137.0	139.1	142.6	147.3	145.0	143.9	146.6	155.4	180.5	204.4	219.6
100	112.5	137.9	150.3	132.2	135.1	137.9	132.6	129.9	132.2	140.6	147.3	179.4	252.1	256.7
100	116.4	138.9	153.5	139.1	149.0	148.0	151.6	150.9	156.5	163.1	181.3	222.4	293.6	297.1
100	112.8	126.7	143.4	124.2	140.1	138.4	138.1	138.4	143.3	148.4	163.5	187.8	230.9	224.4
100	112.5	137.9	150.3	132.2	134.4	134.7	128.2	138.4	152.6	156.2	167.5	208.7	292.8	296.8
100	114.2	137.2	152.8	138.3	145.6	138.5	137.9	131.1	130.6	143.9	160.8	196.3	270.1	274.3
100	117.8	128.0	140.2	126.6	135.8	129.0	125.8	128.1	133.1	140.6	164.0	205.6	267.8	262.3
100	114.4	130.6	145.3	131.1	150.6	143.7	149.7	141.9	145.9	152.7	178.8	208.5	277.7	274.5
100	111.9	126.9	138.7	137.0	139.1	137.3	138.3	138.2	134.3	134.6	143.3	171.0	194.2	209.8
100	118.9	139.4	159.2	145.5	161.7	159.1	163.3	165.2	170.1	174.5	206.2	242.1	304.7	292.7
100	117.2	131.8	148.7	129.4	149.7	147.0	154.0	148.9	156.1	161.4	194.8	216.2	263.6	254.2
100	111.4	129.5	146.7	123.0	134.1	132.4	131.8	133.0	129.1	146.7	181.5	199.1	238.9	224.6
	100 100 100 100 100 100 100 100 100 100	100 115.7 100 118.2 100 113.7 100 114.8 100 113.7 100 113.7 100 113.7 100 112.5 100 112.5 100 112.5 100 112.5 100 112.5 100 112.5 100 112.5 100 114.2 100 117.8 100 111.9 100 111.9 100 111.9 100 111.9 100 111.9 100 111.9 100 111.9 100 117.2	100115.7132.6100118.2142.0100113.7131.6100113.7133.2100113.7133.2100111.9126.9100112.5137.9100112.8126.7100112.5137.9100112.5137.9100114.2137.2100117.8128.0100114.4130.6100111.9126.9100118.9139.4100117.2131.8	100115.7132.6148.7100118.2142.0158.8100113.7131.6145.4100114.8130.1145.8100113.7133.2148.6100111.9126.9138.7100112.5137.9150.3100116.4138.9153.5100112.5137.9150.3100112.5137.9150.3100114.2137.2152.8100117.8128.0140.2100111.9126.9138.7100118.9139.4159.2100117.2131.8148.7	100 115.7 132.6 148.7 132.2 100 118.2 142.0 158.8 137.7 100 113.7 131.6 145.4 129.1 100 114.8 130.1 145.8 133.6 100 113.7 133.2 148.6 128.8 100 113.7 133.2 148.6 128.8 100 111.9 126.9 138.7 137.0 100 112.5 137.9 150.3 132.2 100 112.5 137.9 150.3 132.2 100 112.8 126.7 143.4 124.2 100 112.5 137.9 150.3 132.2 100 112.8 126.7 143.4 124.2 100 112.5 137.9 150.3 132.2 100 114.2 137.2 152.8 138.3 100 114.2 137.2 152.8 138.3 100 114.4 <td< td=""><td>100 115.7 132.6 148.7 132.2 148.2 100 118.2 142.0 158.8 137.7 152.7 100 113.7 131.6 145.4 129.1 144.8 100 113.7 131.6 145.4 129.1 144.8 100 113.7 133.2 148.6 128.8 142.5 100 113.7 133.2 148.6 128.8 142.5 100 111.9 126.9 138.7 137.0 139.1 100 112.5 137.9 150.3 132.2 135.1 100 116.4 138.9 153.5 139.1 149.0 100 112.8 126.7 143.4 124.2 140.1 100 112.8 126.7 143.4 124.2 140.1 100 112.5 137.9 150.3 132.2 134.4 100 114.2 137.2 152.8 138.3 145.6 100</td><td>100 115.7 132.6 148.7 132.2 148.2 145.8 100 118.2 142.0 158.8 137.7 152.7 138.9 100 113.7 131.6 145.4 129.1 144.8 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 100 114.8 130.1 145.8 133.6 148.2 150.6 100 113.7 133.2 148.6 128.8 142.5 141.0 100 111.9 126.9 138.7 137.0 139.1 142.6 100 112.5 137.9 150.3 132.2 135.1 137.9 100 112.8 126.7 143.4 124.2 140.1 138.4 100 112.5 137.9 150.3 132.2 134.4 134.7 100 112.5 137.9 150.3 132.2 134.4 134.7 100 114.2 137.2 <t< td=""><td>100115.7132.6148.7132.2148.2145.8149.3100118.2142.0158.8137.7152.7138.9136.7100113.7131.6145.4129.1144.8139.9139.6100114.8130.1145.8133.6148.2150.6150.3100113.7133.2148.6128.8142.5141.0137.8100111.9126.9138.7137.0139.1142.6147.3100112.5137.9150.3132.2135.1137.9132.6100116.4138.9153.5139.1149.0148.0151.6100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100114.2137.2152.8138.3145.6138.5137.9100117.8128.0140.2126.6135.8129.0125.8100114.4130.6145.3131.1150.6143.7149.7100118.9139.4159.2145.5161.7159.1163.3100118.9139.4159.2145.5161.7159.1163.3100117.2131.8148.7129.4149.7147.0154.0<td>100 115.7 132.6 148.7 132.2 148.2 145.8 149.3 144.9 100 118.2 142.0 158.8 137.7 152.7 138.9 136.7 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 139.6 138.6 100 114.8 130.1 145.8 133.6 148.2 150.6 150.3 146.3 100 113.7 133.2 148.6 128.8 142.5 141.0 137.8 135.8 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 116.4 138.9 153.5 139.1 149.0 148.0 151.6 150.9 100 112.5 137.9 150.3 132.2 134.4 134.7 128.2 138.4 100</td></td></t<></td></td<> <td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2100118.2142.0158.8137.7152.7138.9136.7139.9149.7100113.7131.6145.4129.1144.8139.9139.6138.6141.5100114.8130.1145.8133.6148.2150.6150.3146.3154.9100113.7133.2148.6128.8142.5141.0137.8135.8142.2100111.9126.9138.7137.0139.1142.6147.3145.0143.9100112.5137.9150.3132.2135.1137.9132.6129.9132.2100116.4138.9153.5139.1149.0148.0151.6150.9156.5100112.8126.7143.4124.2140.1138.4138.1138.4143.3100112.5137.9150.3132.2134.4134.7128.2138.4152.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.4130.6145.3131.1150.6143.7149.7141.9<td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6100112.5137.9150.3132.2134.4134.7128.2138.4143.3148.4100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9100114.4130.6145.3131.1150.6143.714</td><td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2181.5100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7189.9100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0161.0100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4178.9100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1175.3100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6155.4100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6147.3100116.4138.9153.5139.1149.0148.0151.6150.9156.5163.1181.3100112.8126.7143.4124.2140.1138.4138.1138.4143.3148.4163.5100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2167.5100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9160.8100114.4130.6145.3131.1150.6143.7149.7<td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2181.5201.9100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7189.9231.2100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0161.0206.4100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4178.9221.3100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1175.3207.6100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6155.4180.5100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6147.3179.4100116.4138.9153.5139.1149.0148.0151.6150.9156.5163.1181.3222.4100112.8126.7143.4124.2140.1138.4138.1138.4143.3148.4163.5187.8100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2167.5208.7100114.2137.2152.8138.3145.6138.5137.9131.1130.614</td><td>100 115.7 132.6 148.7 132.2 148.2 145.8 149.3 144.9 150.2 156.2 181.5 201.9 269.0 100 118.2 142.0 158.8 137.7 152.7 138.9 136.7 139.9 149.7 171.7 189.9 231.2 297.3 100 113.7 131.6 145.4 129.1 144.8 139.9 139.6 138.6 141.5 146.0 161.0 206.4 264.0 100 114.8 130.1 145.8 133.6 148.2 150.6 150.3 146.3 154.9 159.4 178.9 221.3 280.0 100 113.7 133.2 148.6 128.8 142.5 141.0 137.8 135.8 142.2 151.1 175.3 207.6 281.3 100 111.9 126.9 138.7 137.0 139.1 142.6 147.3 143.9 146.6 155.4 180.5 204.4 100 116.4 138.9 153.5 139.1 149.0 148.0 151.6 150.</td></td></td>	100 115.7 132.6 148.7 132.2 148.2 100 118.2 142.0 158.8 137.7 152.7 100 113.7 131.6 145.4 129.1 144.8 100 113.7 131.6 145.4 129.1 144.8 100 113.7 133.2 148.6 128.8 142.5 100 113.7 133.2 148.6 128.8 142.5 100 111.9 126.9 138.7 137.0 139.1 100 112.5 137.9 150.3 132.2 135.1 100 116.4 138.9 153.5 139.1 149.0 100 112.8 126.7 143.4 124.2 140.1 100 112.8 126.7 143.4 124.2 140.1 100 112.5 137.9 150.3 132.2 134.4 100 114.2 137.2 152.8 138.3 145.6 100	100 115.7 132.6 148.7 132.2 148.2 145.8 100 118.2 142.0 158.8 137.7 152.7 138.9 100 113.7 131.6 145.4 129.1 144.8 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 100 114.8 130.1 145.8 133.6 148.2 150.6 100 113.7 133.2 148.6 128.8 142.5 141.0 100 111.9 126.9 138.7 137.0 139.1 142.6 100 112.5 137.9 150.3 132.2 135.1 137.9 100 112.8 126.7 143.4 124.2 140.1 138.4 100 112.5 137.9 150.3 132.2 134.4 134.7 100 112.5 137.9 150.3 132.2 134.4 134.7 100 114.2 137.2 <t< td=""><td>100115.7132.6148.7132.2148.2145.8149.3100118.2142.0158.8137.7152.7138.9136.7100113.7131.6145.4129.1144.8139.9139.6100114.8130.1145.8133.6148.2150.6150.3100113.7133.2148.6128.8142.5141.0137.8100111.9126.9138.7137.0139.1142.6147.3100112.5137.9150.3132.2135.1137.9132.6100116.4138.9153.5139.1149.0148.0151.6100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100114.2137.2152.8138.3145.6138.5137.9100117.8128.0140.2126.6135.8129.0125.8100114.4130.6145.3131.1150.6143.7149.7100118.9139.4159.2145.5161.7159.1163.3100118.9139.4159.2145.5161.7159.1163.3100117.2131.8148.7129.4149.7147.0154.0<td>100 115.7 132.6 148.7 132.2 148.2 145.8 149.3 144.9 100 118.2 142.0 158.8 137.7 152.7 138.9 136.7 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 139.6 138.6 100 114.8 130.1 145.8 133.6 148.2 150.6 150.3 146.3 100 113.7 133.2 148.6 128.8 142.5 141.0 137.8 135.8 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 116.4 138.9 153.5 139.1 149.0 148.0 151.6 150.9 100 112.5 137.9 150.3 132.2 134.4 134.7 128.2 138.4 100</td></td></t<>	100115.7132.6148.7132.2148.2145.8149.3100118.2142.0158.8137.7152.7138.9136.7100113.7131.6145.4129.1144.8139.9139.6100114.8130.1145.8133.6148.2150.6150.3100113.7133.2148.6128.8142.5141.0137.8100111.9126.9138.7137.0139.1142.6147.3100112.5137.9150.3132.2135.1137.9132.6100116.4138.9153.5139.1149.0148.0151.6100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100112.5137.9150.3132.2134.4134.7128.2100114.2137.2152.8138.3145.6138.5137.9100117.8128.0140.2126.6135.8129.0125.8100114.4130.6145.3131.1150.6143.7149.7100118.9139.4159.2145.5161.7159.1163.3100118.9139.4159.2145.5161.7159.1163.3100117.2131.8148.7129.4149.7147.0154.0 <td>100 115.7 132.6 148.7 132.2 148.2 145.8 149.3 144.9 100 118.2 142.0 158.8 137.7 152.7 138.9 136.7 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 139.6 138.6 100 114.8 130.1 145.8 133.6 148.2 150.6 150.3 146.3 100 113.7 133.2 148.6 128.8 142.5 141.0 137.8 135.8 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 116.4 138.9 153.5 139.1 149.0 148.0 151.6 150.9 100 112.5 137.9 150.3 132.2 134.4 134.7 128.2 138.4 100</td>	100 115.7 132.6 148.7 132.2 148.2 145.8 149.3 144.9 100 118.2 142.0 158.8 137.7 152.7 138.9 136.7 139.9 100 113.7 131.6 145.4 129.1 144.8 139.9 139.6 138.6 100 114.8 130.1 145.8 133.6 148.2 150.6 150.3 146.3 100 113.7 133.2 148.6 128.8 142.5 141.0 137.8 135.8 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 112.5 137.9 150.3 132.2 135.1 137.9 132.6 129.9 100 116.4 138.9 153.5 139.1 149.0 148.0 151.6 150.9 100 112.5 137.9 150.3 132.2 134.4 134.7 128.2 138.4 100	100115.7132.6148.7132.2148.2145.8149.3144.9150.2100118.2142.0158.8137.7152.7138.9136.7139.9149.7100113.7131.6145.4129.1144.8139.9139.6138.6141.5100114.8130.1145.8133.6148.2150.6150.3146.3154.9100113.7133.2148.6128.8142.5141.0137.8135.8142.2100111.9126.9138.7137.0139.1142.6147.3145.0143.9100112.5137.9150.3132.2135.1137.9132.6129.9132.2100116.4138.9153.5139.1149.0148.0151.6150.9156.5100112.8126.7143.4124.2140.1138.4138.1138.4143.3100112.5137.9150.3132.2134.4134.7128.2138.4152.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.2137.2152.8138.3145.6138.5137.9131.1130.6100114.4130.6145.3131.1150.6143.7149.7141.9 <td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6100112.5137.9150.3132.2134.4134.7128.2138.4143.3148.4100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9100114.4130.6145.3131.1150.6143.714</td> <td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2181.5100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7189.9100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0161.0100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4178.9100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1175.3100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6155.4100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6147.3100116.4138.9153.5139.1149.0148.0151.6150.9156.5163.1181.3100112.8126.7143.4124.2140.1138.4138.1138.4143.3148.4163.5100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2167.5100114.2137.2152.8138.3145.6138.5137.9131.1130.6143.9160.8100114.4130.6145.3131.1150.6143.7149.7<td>100115.7132.6148.7132.2148.2145.8149.3144.9150.2156.2181.5201.9100118.2142.0158.8137.7152.7138.9136.7139.9149.7171.7189.9231.2100113.7131.6145.4129.1144.8139.9139.6138.6141.5146.0161.0206.4100114.8130.1145.8133.6148.2150.6150.3146.3154.9159.4178.9221.3100113.7133.2148.6128.8142.5141.0137.8135.8142.2151.1175.3207.6100111.9126.9138.7137.0139.1142.6147.3145.0143.9146.6155.4180.5100112.5137.9150.3132.2135.1137.9132.6129.9132.2140.6147.3179.4100116.4138.9153.5139.1149.0148.0151.6150.9156.5163.1181.3222.4100112.8126.7143.4124.2140.1138.4138.1138.4143.3148.4163.5187.8100112.5137.9150.3132.2134.4134.7128.2138.4152.6156.2167.5208.7100114.2137.2152.8138.3145.6138.5137.9131.1130.614</td><td>100 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Source: MLS Home Price Index, Real Estate Board of Greater Vancouver. The HPI represents the estimated change in the sales price of a benchmark property within each market.

Exhibit 3C shows trends in apartment prices in the city of Vancouver, by price group. Looking at the average price per square foot in each price group, the general trend is that prices rose more (in percentage terms) in the lower price groups than in higher price groups. This is significant, because CACs are a function of land value and broadly speaking higher unit prices imply higher land values and higher CACs. So, price growth was most rapid in the price groups that generally would have paid less in CACs.



Exhibit 3D shows trends in average rents in the region. The figures show rent increases in all communities in all years from 2009 to 2018. The city of Vancouver average rent increased by about 42% over the decade, matching the regional average. Most communities (including Vancouver) do not charge CACs on most new rental projects, so CACs are not driving this rent growth.

Clearly, Metro Vancouver has experienced very rapid growth in house prices and rents over the last 15 years. These increases span the entire region, for both single detached and apartment units. While these increases are of concern, from a housing affordability viewpoint, there are three reasons to suspect the increases are not due to CACs: first, the price growth has been strongest in single detached units, which do not pay CACs; second, rents have risen over the whole region even though rental units generally do not pay CACs; and third, sales prices have cooled in 2018 and 2019 after provincial measures (e.g. foreign buyers tax, Property Transfer Tax, school tax surcharge) and federal measures (revised mortgage qualification rules) that have affected the demand side of the market, even though the City has made minimal changes in CAC policy during this time frame. The complexity of housing markets makes it very difficult to isolate the impact of one variable, but the trend in prices suggests that classic microeconomic forces (supply and demand) are the primary drivers of price, not local government charges.

Exhibit 3C: Total Number of Sales and Average Sales Price per Square Foot of Floorspace by Price Category for Apartment/Attached Homes in the City of Vancouver, 2014 to 2018

		Total N	Number (Of Sales		Average Sales Price per Sg.Ft. of Floorspace						
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	% increase	
											2014-2018	
\$0-\$500,000	105	76	26	11	3	\$429	\$446	\$594	\$409	n/a	n/a	
\$500,001-\$1,000,000	2,194	2,295	1,202	417	159	\$613	\$665	\$753	\$834	\$862	41%	
\$1,000,001-\$1,500,000	1,420	875	2,061	1,869	1,279	\$646	\$701	\$847	\$984	\$1,034	60%	
\$1,500,001-\$2,000,000	608	1,847	1,059	1,258	902	\$732	\$774	\$892	\$995	\$1,035	41%	
\$2,000,001-\$2,500,000	286	420	471	589	492	\$828	\$873	\$984	\$1,075	\$1,105	33%	
\$2,500,001-\$3,000,000	163	277	343	388	325	\$886	\$930	\$1,066	\$1,156	\$1,199	35%	
\$3,000,001-\$3,500,000	106	141	200	249	192	\$971	\$979	\$1,121	\$1,220	\$1,267	30%	
\$3,500,001-\$4,000,000	42	95	129	153	112	\$1,027	\$1,107	\$1,194	\$1,295	\$1,252	22%	
\$4,000,001+	121	200	277	331	221	\$1,345	\$1,443	\$1,529	\$1,629	\$1,721	28%	
Total	5,045	6,226	5,768	5,265	3,685							

West Side Apartment/Attached Units

East Side Apartment/Attached Units

		Total N	Number C	Of Sales		Average Sales Price per Sq.Ft. of Floorspace						
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	% increase 2014-2018	
\$0-\$500,000	146	151	50	10	1	\$379	\$403	\$433	n/a	n/a	n/a	
\$500,001-\$1,000,000	1,234	1,375	193	697	304	\$493	\$511	\$590	\$511	\$788	60%	
\$1,000,001-\$1,500,000	433	529	585	892	810	\$542	\$589	\$715	\$589	\$861	59%	
\$1,500,001-\$2,000,000	132	269	251	376	353	\$575	\$647	\$751	\$647	\$903	57%	
\$2,000,001-\$2,500,000	10	45	143	209	178	n/a	\$663	\$821	\$663	\$933	n/a	
\$2,500,001-\$3,000,000	7	14	64	96	77	n/a	\$855	\$899	\$855	\$988	n/a	
\$3,000,001-\$3,500,000	1	4	13	27	30	n/a	n/a	\$958	\$858	\$1,055	n/a	
\$3,500,001-\$4,000,000	0	0	4	6	11	n/a	n/a	n/a	n/a	\$1,075	n/a	
\$4,000,001+	0	2	2	10	3	n/a	n/a	n/a	n/a	n/a	n/a	
Total	1,963	2,389	1,305	2,389	1,767							

Source: Analysis based on MLS Link (Paragon) residential sales data. For any price categories/years with less than 10 sales, we did not calculate the average sales price due to the small data set.



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	% increase 2009-2018
Burnaby	\$918	\$932	\$948	\$966	\$981	\$1,017	\$1,042	\$1,119	\$1,189	\$1,249	36%
Coquitlam	\$868	\$882	\$897	\$906	\$919	\$931	\$986	\$1,021	\$1,123	\$1,199	38%
Delta	\$817	\$832	\$838	\$868	\$892	\$907	\$920	\$963	\$997	\$1,040	27%
Langley City	\$824	\$832	\$847	\$853	\$893	\$880	\$935	\$1,041	\$1,164	\$1,214	47%
Langley Township	\$925	\$884	\$907	\$880	\$931	\$911	\$1,026	n/a	\$1,415	\$1,403	52%
Maple Ridge	\$736	\$739	\$769	\$789	\$782	\$781	\$820	\$843	\$860	\$989	34%
New Westminster	\$801	\$825	\$849	\$866	\$885	\$922	\$933	\$993	\$1,079	\$1,205	50%
North Vancouver City	\$961	\$976	\$1,006	\$1,027	\$1,073	\$1,098	\$1,163	\$1,249	\$1,337	\$1,428	49%
North Vancouver District	\$1,174	\$1,210	\$1,227	\$1,294	\$1,401	\$1,400	\$1,462	\$1,517	\$1,650	\$1,680	43%
Pitt Meadows	\$882	\$896	\$940	\$958	\$944	\$962	\$985	\$1,027	\$1,184	\$1,279	45%
Port Coquitlam	\$880	\$895	\$902	\$906	\$925	\$965	\$983	\$1,018	\$1,104	\$1,287	46%
Port Moody	\$1,158	\$1,210	\$1,172	\$1,159	\$1,166	\$1,140	\$1,209	\$1,234	\$1,275	\$1,473	27%
Richmond	\$1,047	\$1,065	\$1,067	\$1,104	\$1,143	\$1,158	\$1,223	\$1,304	\$1,326	\$1,391	33%
Surrey	\$827	\$832	\$836	\$833	\$867	\$879	\$898	\$960	\$1,025	\$1,092	32%
UEL	\$1,482	\$1,561	\$1,645	\$1,603	\$1,640	\$1,644	\$1,720	\$1,766	\$1,891	\$1,995	35%
Vancouver	\$1,044	\$1,062	\$1,106	\$1,131	\$1,147	\$1,178	\$1,236	\$1,327	\$1,392	\$1,481	42%
West Vancouver	\$1,360	\$1,462	\$1,478	\$1,519	\$1,511	\$1,610	\$1,673	\$1,746	\$1,833	\$1,896	39%
White Rock	\$844	\$855	\$865	\$883	\$884	\$890	\$918	\$943	\$1,026	\$1,088	29%
Vancouver CMA	\$986	\$1,006	\$1,037	\$1,058	\$1,078	\$1,110	\$1,156	\$1,236	\$1,308	\$1,394	41%

Exhibit 3D: Average Rents (All Unit Types) by Municipality in Metro Vancouver, 2009 to 2018

Source: CMHC Rental Market Survey.

6.3 The Pace of Development Activity and Rezonings

In this section we examine the pace of apartment development activity and rezoning activity in the city. We also compare the pace of development in Vancouver with the rest of the urban region.

Exhibit 4A shows the total number of new apartment units constructed in the city of Vancouver and the other municipalities in the Vancouver Census Metropolitan Area (CMA) for the 25 year period 1994 to 2018.

Exhibit 4A shows that:

- Over the 25 year period from 1994 to 2018, the city had 37% of all apartment unit construction in the region.
- The pace of apartment development in the city averaged over 3,600 units per year, more than any other municipality. The next highest average pace of development was in Burnaby, Richmond, and Surrey, which *combined* achieved about 3,200 units per year.

If development policy in the city (including CACs) has put downward pressure on the pace of development, the implication is that Vancouver "should" have accommodated an even larger share of all new apartment units in the region, which seems unlikely considering there is competition from a large number of high density, transit-oriented neighbourhoods under development across Metro Vancouver.

There is considerable evidence that the entire region is not seeing enough rental unit construction, which is the main reason rents are so high. This is a significant housing affordability concern that needs to be addressed, but it is not a problem caused by CACs as new rental housing projects (including those that involve rezoning) almost never pay CACs.



	Total # of Apartment Starts 1994 to 2018	Annual Average # of Apartment Starts 1994 to 2018	Share of Total Regional Apartment Starts 1994 to 2018
Burnaby	29,877	1,195	12%
Coquitlam	15,248	610	6%
Delta	3,147	126	1%
Langley City	3,827	153	2%
Langley Township	6,724	269	3%
Maple Ridge	3,385	135	1%
New Westminster	10,546	422	4%
North Vancouver City	8,848	354	4%
North Vancouver District	5,179	207	2%
Pitt Meadows	1,291	52	1%
Port Coquitlam	4,897	196	2%
Port Moody	3,847	154	2%
Richmond	24,582	983	10%
Surrey	25,298	1,012	10%
UEL	3,921	157	2%
Vancouver	91,261	3,650	37%
West Vancouver	1,327	53	1%
White Rock	2,216	89	1%
Other Areas*	1,584	94	1%
VANCOUVER CMA TOTAL	247,005	9,880	100%
Rest of CMA (excluding Vancouver)	155,744	6,230	63%

Exhibit 4A: Apartment Starts by Municipalit	ty in the Vancouver CMA for the 25 Year Period from 1994 to 2018
Exhibit H ti / qui thiont ofunto by municipant	

Source: CMHC Housing Portal. CMA refers to the Census Metropolitan Area. "Other areas" includes Anmore, Belcarra, Bowen Island, Lions Bay, and unincorporated areas. See Attachment 1 for detailed data.

Exhibit 4B shows the City's share of regional apartment construction for various time intervals.

Exhibit 4B: City of Vancouver Share of Vancouver CMA Apartment Starts

	30 Years 1989 to 2018	25 Years 1994 to 2018	10 Years 2009 to 2018	5 Years 2014 to 2018	1 Year 2018
City of Vancouver	105,755	91,261	39,361	23,726	4,917
Vancouver CMA	288,224	247,005	123,957	77,157	15,888
City of Vancouver Share of CMA	37%	37%	32%	31%	31%

Source: Based on data from CMHC Housing Portal. CMA refers to the Census Metropolitan Area.

Exhibit 4B shows that:

- Since the late 1990s, by which time the City's CAC policies had become formalized along the lines they exist today, the city has captured 37% of all apartment activity in the region.
- More recently, the city's share fell to 31%.

These shares are bound to fluctuate depending on many factors including rapid transit development (which creates new development nodes at station locations), municipal plans throughout the region, market interest, and prices (which are higher in Vancouver than most communities). The key point to take from these figures is that the city of Vancouver has sustained a very high share of regional apartment activity during a time when

the City has had a CAC policy that could be considered more aggressive than most other municipalities in the region. Considering that the number of attractive, competitive locations for high density development in the region has been increasing (due to rapid transit development and community planning initiatives), in our view it is difficult to see how CACs could be described as having acted to significantly constrain the pace of apartment development in the city.

Exhibit 5 shows the split between new apartment development that has occurred in the city on already-zoned land (meaning no CAC) versus new apartment development that has required rezoning (which typically involves a CAC) over the last decade.

As shown, the long term split over 15 years is 38% on land already zoned and 62% on rezoned sites. This is significant, as it means that over one third of all new apartments did not pay CACs so if CACS did affect price over one third of the market ought to be immune. The share of new development on rezoned sites is increasing, though, because of the dwindling supply of land that is already zoned for intended higher density. As a result, in the last 5 years 78% of all units were in projects that involved rezoning.

	Total on Already	Total on Rezoned	Total
	Zoned Sites	Sites	
2004	1,416	1,431	2,847
2005	1,723	2,976	4,699
2006	2,058	1,710	3,768
2007	1,411	2,803	4,214
2008	2,234	1,555	3,789
2009	2,110	1,533	3,643
2010	1,088	2,214	3,302
2011	2,375	589	2,964
2012	1,001	1,483	2,484
2013	841	2,423	3,264
2014	759	2,910	3,669
2015	706	1,632	2,338
2016	1,052	4,189	5,241
2017	1,165	2,182	3,347
2018	576	3,997	4,573
Total Unit Completions:			
Last 15 years (2004 to 2018)	20,515	33,627	54,142
Last 10 years (2009 to 2018)	11,673	23,152	34,825
Last 5 years (2014 to 2018)	4,258	14,910	19,168
Average Annual:			
Last 15 years (2004 to 2018)	1,368	2,242	3,609
Last 10 years (2009 to 2018)	1,167	2,315	3,483
Last 5 years (2014 to 2018)	852	2,982	3,834
Share on already zones sites vs Rezoned sites from:			
	38%	62%	100%
			100%
			100%
Last 15 years (2004 to 2018) Last 10 years (2009 to 2018) Last 5 years (2014 to 2018)	38% 34% 22%	62% 66% 78%	1(

Exhibit 5: Multi-family* Unit Completions at Zoned Sites and Rezoned Sites Over the Past 10 Years (2009 to 2018)

Source: City of Vancouver. Note * only includes multi-family units completed in projects with 3 or more units.

Exhibit 6 shows the pace at which the City of Vancouver has rezoned property to create new capacity for apartment development for the 5 year period from January 2014 to January 2019. New residential capacity created by rezonings in this period added capacity for about 25,725 units. Not all of these units have been built yet, as some were only recently approved. During this time, just under 20,000 new units were completed (see Exhibit 5) so the new zoned capacity is keeping pace with (or a little ahead of) the pace of construction.



This is good for housing prices because a steady supply of development sites means potential for a steady supply of new units, which tends to moderate price growth.

The City's rezoning "output" is keeping up with the recent total pace of development. This pace of rezoning activity is also, by definition, an indicator of the overall rate at which landowners are willing to put their sites into the development market even though CACs are capturing some of land value gain from rezoning.

Exhibit 6: New Market Residential Capacity Created from Rezonings Over the Past 5 Years (Jan 2014 to Jan 2019)

Area	Net Additional Square Feet Approved	Estimated Net Additional Residential Units Approved
TOTAL	17,669,290	25,725

Source: City of Vancouver. Note that this only includes market residential units (i.e. it does not include non-residential, 100% social housing, or non-profit rezoning projects). Also note that where rezoning information was not readily available, the City assumed a standard size of 660 square feet per unit to estimate the number of new residential units.

Exhibit 7 shows two snapshots of the amount of high density residential activity in the region, at September 2013 and January 2019. Each snapshot shows the number of high density (over 6 storeys) projects that were under construction or recently completed and actively selling units.

In the 2013 snapshot, the city of Vancouver accounted for 52 projects, about one third of the regional total. As of 2019, the city accounts for 50 projects, about the same level of activity but a higher percentage of regional activity because the regional total is smaller.

Exhibit 8 shows the number of high density projects in the approvals process, in snapshots in 2013 and 2019.

In 2013, the city of Vancouver had 17 projects, about 23% of the regional total. In January 2019, the city has 35 high density residential projects in the approvals process, with the same share of about 23% of total regional activity. It is worth noting that this significant increase in total regional activity (double the number of projects in the recent snapshot) is occurring even though almost every municipality in the region seeks CACs at rezoning. Large increases in activity have also occurred in Burnaby and Coquitlam, in part due to major redevelopment projects at transit stations. Both of these communities seek CACs.

The city of Vancouver continues to capture a larger share of regional apartment activity than any other municipality in the region, even though the number of high density transit-oriented nodes offering development sites is increasing. The city's high share of projects in the approvals process suggests that land owners have been willing to sell their land into the development market.



	Snaps	shot in September	r 2013	Snapshot in January 2019						
Municipality	Number of High Density Residential Projects	% Share of High Density Residential Projects in the Region	Number of Developers	Number of High Density Residential Projects	% Share of High Density Residential Projects in the Region	Number of Developers				
Vancouver	52	35%	29	50	38%	37				
Burnaby	21	14%	12	24	18%	15				
Richmond	21	14%	18	15	11%	7				
West Vancouver	0	-	0	8	6%	6				
Coquitlam	13	9%	7	6	5%	5				
Surrey	11	7%	8	6	5%	6				
White Rock	3	2%	3	6	5%	5				
New Westminster	11	7%	10	5	4%	4				
North Vancouver District	1	-	1	4	3%	4				
UBC-UEL	3	2%	3	3	2%	2				
North Vancouver City	6	4%	4	2	2%	1				
Port Moody	4	3%	2	2	2%	1				
Port Coquitlam	2	1%	1	0	0%	0				
Delta	1	-	1	0	0%	0				
Langley	0	-	0	0	0%	0				
Maple Ridge	0	-	0	0	0%	0				
Pitt Meadows	1	-	1	0	0%	0				
Total	150	100%	65	131	100%	69				

Exhibit 7: Number of Active High Density Residential Projects in Greater Vancouver (Snapshots in Sept 2013 and Jan 2019)

Source: The September 2013 data was assembled by Coriolis Consulting from MPC Intelligence's "The Trac" online subscription service and includes residential and mixed use projects in the approvals process with 6 storeys or more. The January 2019 data was assembled by Coriolis Consulting using data from NHS by Urban Analytics and includes residential and mixed use projects in the approvals process with 5 storeys or more. Data includes all projects currently under construction, selling units, and/or about to commence marketing units. Some developers have more than one project in a municipality or are active in multiple municipalities. Therefore, the number of developers active in a municipality does not necessarily equal the number of projects in that municipality, and the total number of developers with projects in the approvals process in the region is less than the sum of the municipal figures.



	Snaps	hot in Septemb	er 2013	Sna	pshot in January	2019
Municipality	Number of High Density Residential Projects	% Share of High Density Residential Projects in the Region	Number of Developers	Number of High Density Residential Projects	% Share of High Density Residential Projects in the Region	Number of Developers
Vancouver	17	23%	13	35	23%	33
Coquitlam	5	7%	2	33	22%	25
Burnaby	12	16%	9	30	20%	22
Richmond	8	11%	6	13	9%	12
Surrey	16	21%	11	13	9%	12
North Vancouver District	3	4%	3	7	5%	7
New Westminster	0	-	0	6	4%	6
White Rock	1	1%	1	4	3%	4
Port Moody	5	7%	5	3	2%	3
West Vancouver	0	-	0	2	1%	2
Delta	1	1%	1	2	1%	2
North Vancouver City	4	5%	4	1	1%	1
Langley	0	-	0	1	1%	1
Maple Ridge	3	4%	2	1	1%	1
UBC-UEL	0	-	0	0	0%	0
Port Coquitlam	0	-	0	0	0%	0
Pitt Meadows	0	-	0	0	0%	0
Total	75	100%	37	151	100%	108

Exhibit 8: Number of High Density Residential Projects in the Approvals Process by Municipality in Greater Vancouver (Snapshots in Sept 2013 and Jan 2019)

Source: The September 2013 data was assembled by Coriolis Consulting from MPC Intelligence's "The Trac" online subscription service and includes residential and mixed use projects in the approvals process with 6 storeys or more. The January 2019 data was assembled by Coriolis Consulting using data from NHS by Urban Analytics and includes residential and mixed use projects in the approvals process with 5 storeys or more. Some developers have more than one project in a municipality or are active in multiple municipalities. Therefore, the number of developers active in a municipality does not necessarily equal the number of projects in that municipality and the total number of developers with projects in the approvals process in the region is less than the sum of the municipal figures.

While there is no reliable way to estimate how much more development (if any) might have occurred in the city under a different CAC policy context, it is very clear that the city has consistently absorbed a very large share of regional apartment development, has received and approved applications for rezoning that are sufficient to keep pace with recent rates of development, and has more development in the pipeline than any other community in the region. In light of these trends, we do not see evidence that CAC policy has tended to constrain the pace of new multifamily development in Vancouver.

The City has consistently absorbed a very large share of regional apartment development, has received and approved applications for rezoning that are sufficient to keep pace with recent rates of development, and has more development in the pipeline than any other community in the region. In light of these trends, it seems difficult to conclude that CAC policy has constrained the pace of new multifamily development in Vancouver.

6.4 The Capacity for Future Development

The next indicator we examine is the City's future ability to continue to accommodate multifamily residential development. Exhibit 9 shows how much remaining apartment capacity (measured in numbers of units) exists under current zoning and development policy in the city, based on estimates of redevelopment that could occur by 2041. There is additional capacity beyond 2041.

The key to ensuring that CACs do not indirectly impact housing prices by reducing the supply of development land is to ensure that zoned development capacity remains large compared to the pace of construction. It seems clear that CAC policy in Vancouver is not acting to constrain the total supply of zoned development lands.

There is capacity for 43,100 units on lands that are already zoned for multifamily and for which

no CAC is required. Attachment 2 shows this 2019 estimate compared to an estimate as of 2014. In addition, rezonings since 2009 have added capacity for about 25,725 units (see Exhibit 6B) while about 20,000 units have been built (see Exhibit 5), so the net gain in zoned capacity is about 5,700 units. Exhibit 9 also shows capacity as estimated by the City in Official Plans, Community Plans, and Policy Statement Areas for another 46,388 units. While some of these will require rezoning (and CACs) there is little rezoning approval risk associated with this capacity.

Taken together, these figures indicate that as of 2019 the City has existing or planned capacity for about 95,000 units.

	Estimated Remaining Development Potential (# of Units) as of March 2019
Estimated capacity in Existing Multifamily Zoning Districts	43,100
Estimated capacity in Recently Approved CD-1 Districts (approved since 2009), net of unit completions	5,725
Estimated capacity in ODPs, Community Plan Areas, and Policy Statement Areas	46,388
Total	95,213

Exhibit 9: Remaining Development Potential to 2041 by Type of Capacity in the City of Vancouver

Source: City of Vancouver. Note these figures are the City's estimate of residential capacity by zone to 2041; there is additional residential capacity beyond 2041 in these zones.

The recent pace of apartment construction in the city has been about 3,800 units per year. If this pace continues, the total capacity of about 95,000 units could be expressed as up to 25 years of supply. In the 2014 version of this report, the numbers worked out to about 20 years of supply, so the City has expanded its long term capacity to accommodate apartment construction.

These figures should not be interpreted as meaning the City should stop planning for additional growth in housing supply, for several reasons:

• A large part of the 43,000 unit capacity in existing zoning districts should be regarded as "paper" capacity that is not all readily available for development in the short term. Much of this capacity is "unused" density on sites that have already been developed and are not economically viable for redevelopment. For example, there are existing 3 storey residential buildings in locations zoned for 4 storeys. Until these properties redevelop, which may be many years in the future depending on the condition of the existing buildings, the unused zoning capacity exists on paper but is not practically available. If for illustrative



purposes we assume that only half of this "paper" capacity is available for development in the short term, then the available total capacity is about 74,000 units or 19 years at the recent rate of development.

- In order to avoid even more upward pressure on land value, the market needs significantly more capacity than will be developed in the short term.
- Planning for significant increases in capacity takes years in Vancouver. The entire three-phase Cambie Corridor plan, focused on the Canada Line, took 10 years. Rezonings consistent with the plan have already occurred, but many of the sites are still in the approvals process.
- The recent pace of total apartment development (about 3,800 units per year) has included only about 1,100 units per year of secured purpose-built rental housing (see Exhibit 10).⁶ Metro Vancouver estimates that the region needs about 6,000 units per year of rental housing to keep up with growth in rental households. All levels of government are working to increase the pace of rental construction; if Vancouver captures the same share of future rental as it does of strata (around one third of the regional total), then the pace of rental construction should be almost double the current pace. If the pace of total apartment activity (strata and rental) rises, then the time horizon for the existing zoned capacity shortens. For illustrative purposes, if the total pace of strata and rental development rises to 5,000 units per year and if the available zoned capacity is 74,000 units then there would be about 15 years of capacity.
- Spreading zoned capacity around the city provides greater housing diversity in neighbourhoods, offers a
 wider array of prices and rents, and means that the pace of development in transitioning neighbourhoods
 can be slower than if all of the activity is focused in only a handful of areas. This is not an argument for
 widespread rezoning, but it is an argument for continuous planning to anticipate where growth should be
 distributed.

	2014	2015	2016	2017	2018	Total from 2014 to 2018	Share of Total
Approved under existing zoning	191	314	661	128	81	1,375	24%
Approved under rezoning:							
Rezoning with no CAC	661	628	1,068	692	859	3,908	69%
Rezoning with CAC	0	178	118	0	91	387	7%
Subtotal under rezoning	661	806	1,186	692	950	4,295	76%
Total	852	1,120	1,847	820	1,031	5,670	100%

Exhibit 10: Number of Secured Purpose-Built Rental Housing Units in Projects Approved during 2014 to 2018 (# units)

Source: City of Vancouver.

With the development capacity of already-zoned lands and the capacity that has been created by rezonings (notwithstanding that most of these rezonings have involved providing CACs), it seems clear that CAC policy is not acting to constrain the available supply of development lands. Land owners are apparently seeing sufficient financial incentive to sell their land into the development market to allow the City to maintain (and increase) its capacity to accommodate new apartment unit construction.

⁶ It is also noteworthy that of the 5,670 new rental units built in this time period, only 387 (7%) paid a CAC. So, increased rents are clearly not caused by CACs. Of the balance, about 96% of new rental units were in stand-alone rental projects that were not connected with strata residential development.



6.5 CACs and Land Values

When a developer buys land, the real objective is to buy the development opportunity (i.e. the density) conferred by the zoning on the property. Obtaining new density in exchange for providing CACs, therefore, is similar in some ways to obtaining density by buying land.

If a developer can obtain density by rezoning and can thereby acquire development entitlements for a lower cost than the prevailing price of land (as measured in dollars per square foot of developable density), then the economics of new development should be attractive. The CAC has generally been at a level that leaves considerable financial room for land owners to obtain a significant premium over the market value (under existing zoning) of their properties and leaves developers room to pay a premium for property assembly.

Therefore, it is useful to review the City's CAC policy from a land value perspective:

- For large sites or complex rezonings, the City negotiates CACs on a site-by-site basis. These projects tend to have larger impacts on local neighbourhoods and City services and they sometimes involve the creation of new communities in locations with few existing amenities. For these rezonings, the City considers the full list of potential needs for public benefits, evaluates development risks, considers the economic viability of development, and works with the developer to agree on a package of CACs. The cost of these CACs typically works out to the equivalent of 75% of the value of the increased density. These rezonings tend to involve large sites where the land owner is the developer or is a large industrial user leaving the site, so the City's CAC target (a) creates little or no risk that the CAC would cause the site to remain in present use and (b) is set at a level that leaves incentive for developers and land owners to proceed with rezoning. As evidence that this approach is working, all of the major transition/redevelopment areas that have been proposed (e.g. Coal Harbour, North side of False Creek, Olympic Village and adjacent lands, Joyce, and East Fraser Lands) are proceeding, delivering thousands of units and significant CAC revenue.
- In areas where the City has set defined target rates for CACs, these targets are set after careful consideration of neighbourhood impacts and needs, development economics, and the scale of new development projects. These area-wide targets must apply to a wide variety of sites with a wide range in financial performance, so it is necessary that the target rate be workable in almost all cases. Based on these factors, the target rates result in CACs that are in all cases less than the full market value of the increased density, in order to create the possibility of a win-win-win: the City and community obtain public benefits, the developer has an opportunity for a larger project, and some of the rezoning value accrues to land to provide owners with an incentive to sell. These target rates also have the advantage to developers of being predictable and widely known in the market place. The success of this defined target approach is illustrated by development in the Cambie Corridor. The target CAC was established at \$55 per square foot of additional density in 2013 (with inflationary and one-time adjustments between 2013 and 2019). Between the adoption of the Cambie Corridor Plan in May 2011 and mid 2014, the City approved 17 rezonings (with a total of 2,700 units), there were 9 additional projects (1,100 units) in the approvals process, and there were 10 additional projects (700 units) at the preliminary enquiry stage. This pace of development between 2011 and 2014 suggests that the CAC was not an impediment.

Broadly speaking, it costs less for developers in Vancouver to obtain new density via rezoning than to buy a similar bundle of development entitlements in the form of land that is already zoned. In other words, it is theoretically possible to deliver a unit on a rezoned site paying a CAC at a lower cost than in a non-rezoned project. Of course, developers sell units at market price and developers must pay a price to land owners that gives an incentive to sell, so any land value gain from rezoning not taken up by CACs goes mainly to the land

owner and to a lesser extent to developer cost recovery or extra developer profit, not to lower housing sales prices. But the point is that rezoning and favourable CAC policy are making new development capacity available at a cost that is similar to or less than the value of the capacity on already-zoned sites.

The Province's guideline suggests that CAC targets should be "...modest to minimize the impact on housing affordability".⁷ "Modest" is not defined and is a word that could mean very different things in different market contexts. More helpfully, the guide also suggests that the contributions should "strike a balance between ensuring new development contributes to a community while minimizing the risk that these contributions hurt housing affordability."⁸

The dollar value of CACs in the City of Vancouver may not strike some people as a "modest" number, when compared with other housing markets in the Province. In a Vancouver context, however, the CAC has generally been at a level that leaves financial room for land owners to receive a premium over the market value (under existing zoning) of their properties and leaves developers room to pay a premium for property assembly and/or to retain some of the land value gain as compensation for the cost and risk of rezoning.

6.6 Implications

Multifamily prices are high in Vancouver and rose sharply over the last decade. Based on our review, CACs were not the cause. The pace of new development, the pace of rezonings, the total zoned capacity for new development, and the dollar amount of CACs relative to land values all show that the City is absorbing a high share of regional growth, rezoning land to keep pace with development, and obtaining CACs that are creating amenities while leaving sufficient incentive for many land owners to put their land in the redevelopment marketplace.

So why are prices rising even with such strong growth in supply? And if CACs are not the culprit, what is?

In our view, multifamily housing prices in Vancouver increased for these reasons:

- The City of Vancouver is an extraordinarily attractive place in the world to live and invest. As has been documented in many reports, surveys, and media articles, Vancouver is very highly rated as a place to live and it has become part of a global real estate market. There is high in-migration.
- The demand for owning multifamily residential real estate includes local households wanting homes, but it also includes investors from across the country and around the world, local investors, and affluent local home buyers who have accumulated large amounts of equity from their prior investment in local (often single detached) real estate. It seems to us that this continuing strong, broad appeal is evidenced by the difference between the comparatively short and shallow price impact of the 2008 financial crisis in this region compared to many North American real estate markets. This is not to say that there is no risk of market collapse (as anyone who remembers 1981 well knows), and recent market cooling shows that measures that reduce demand can cause a market correction, but strong demand from several sources is the main reason for past price growth.
- Demand from local households has been strengthened by a long period of very low interest rates and by increases in purchasing power due to family wealth transfers to help young households get into the market.



⁷ "Community Amenity Contributions: Balancing Community Planning, Public Benefits and Housing Affordability", Ministry of Community, Sport, and Cultural Development, March 2014, page 18.

⁸ "Community Amenity Contributions: Balancing Community Planning, Public Benefits and Housing Affordability", Ministry of Community, Sport, and Cultural Development, March 2014, page 18.

- The private and public sectors continue to make the region even more attractive by improving transportation infrastructure, developing new high quality neighbourhoods, and promoting the region.
- The region has a limited urban land base so competition for land is strong among residential, commercial, industrial, and institutional uses.
- Increasing transportation costs and travel times are leading some households to put more of a premium on living in the core of the region, which puts pressure on prices in the city.
- The pace of new housing supply that would be needed to cause prices to plateau or fall in the face of ongoing strong demand may be too much for the development industry or existing communities in Vancouver to comfortably absorb. While the overall length and complexity of the development approvals process causes the creation of new supply to take longer than it should, the record over the last decade shows that the rate of rezonings coming out of the process is high. Total capacity for future development is being sustained, so the problem may be a limit on the total amount of development the industry is able to deliver.

Basic microeconomics tells us that to reduce price it is necessary to increase supply, reduce demand, or achieve some of both.

Recent Provincial tax changes appear to have curtailed non-resident purchases of residential property and changes to mortgage qualification requirements have also contributed to recent cooling on the demand side, so housing sales prices have come off their 2018 high.

Increased supply could also put downward pressure on price, so if CACs cause the pace of development to be less than what it otherwise would be, then this constrained supply can mean that price is higher than it would otherwise be. However, with one third of all regional apartment construction it is hard to see how the pace of development in the city might be materially faster. There is sufficient zoned capacity in the city that if the industry saw an opportunity to accelerate the pace of development it could be possible, although there is a wide variety of possible constraints on the pace of development, such as:

- The total availability of construction labour for housing projects, a function of total labour supply and the amount dedicated to non-residential projects.
- The pace at which the City approves development permits and building permits.
- Community concerns about the pace of change.

In this context, we do not see any evidence that charging CACs (or the process of negotiating them) could be singled out at as causing the pace of development to be slow. The pace of new rental housing construction is far too low, but CACs are almost never charged on rental projects so don't affect the rate of development.

We also note that CAC policy, when carefully fashioned and efficiently implemented, can have beneficial effects on housing affordability:

- If one accepts the premise that in the absence of community benefits the pace of rezoning would be slower because of community opposition, then CACs are an important element of enabling growth in housing capacity.
- If one accepts the premise that amenities and infrastructure created by CACs would otherwise have to be funded out of property tax increases (which affect affordability for all residents and businesses), then CACs benefit all taxpayers by channeling a portion of the land value gain due to rezoning away from a few beneficiaries (land owners) to the broader community.

• In some cases, a portion of the CAC takes the form of affordable rental housing units which would not otherwise be financially viable to build.

There is no question that housing prices are high in Vancouver. In our view, the empirical evidence indicates that CACs are not the cause and may in fact be part of the solution. There is no question that housing prices are high in Vancouver. In our view, the empirical evidence indicates that CACs are not the cause and may in fact be part of the solution.



7.0 Conclusion

The purpose of this review is to see if the City of Vancouver's CAC policy has put upward pressure on housing prices. We see no evidence that this has been the case; to the contrary, CACs have been associated with a very large increase in the City's capacity to absorb new apartment development and in some cases have been used to achieve the creation of affordable housing units that would not otherwise have been built.

There are circumstances under which a local government's CAC policy could have negative impacts on housing affordability. If the expectation of community benefit is so high that existing land owners have insufficient incentive to sell their land into the development market or developers are unable to achieve reasonable profit margins, there is a risk that the amount of land available for new development is reduced. In a region like Metro Vancouver, with very high residential demand and constrained land supply, any new restrictions on the flow of land into the redevelopment market or reductions in the pace of new development would cause housing prices to rise. However, CACs are associated with rezonings, which increase the capacity to absorb new development and generate new land value that can be allocated among land owners, developers, and local government. Properly implemented, a CAC policy can produce positive outcomes for all stakeholders: land owners have an incentive to sell land into the development market, developers find new projects sufficiently rewarding, the community enjoys new amenities and services, and the addition of new housing supply provides more housing choice and to some extent limits price increases.

Housing prices have clearly increased significantly in the city and the region as a whole. Having reviewed the pace of development in the city, the rate at which the City approves new zoning capacity, the amount of development in the pipeline, and the available capacity for new development in the city, we see no compelling evidence that CACs have put upward pressure on housing prices in Vancouver. Vancouver continues to absorb a very large share of regional development, the City approves rezonings at a pace that does not appear to constrain development at least on a citywide scale, and there is zoned development capacity that could allow development to occur more quickly. There are factors pushing up housing prices in Vancouver, on the demand side and the supply side, but CACs are not one of them.

Vancouver continues to absorb a very large share of regional development, the City approves rezonings at a pace that does not appear to constrain development at least on a city-wide scale, and there is zoned development capacity that would allow development to occur more quickly if the industry saw an opportunity. There are factors pushing up housing prices in Vancouver, on the demand side and the supply side, but CACs are not one of them.

The record suggests that the City's CAC policy is achieving a balance between obtaining community amenities and a growing supply of housing. It may be the case that an even more rapid pace of development is needed to moderate housing price increases, but it is not the City's CAC policy that is impeding the pace of new construction or putting pressure on prices.

The City's approach to CACs is, in several key respects, consistent with the suggestions in the Provincial guide:

- The City has significantly increased the capacity for new housing.
- The City has balanced community amenity, the pace of development, and housing affordability.
- The City is increasing the use of specified target CAC rates to increase transparency and predictability.

• The City's approach is different in different areas and circumstances, reflecting local needs, local impacts, and local market conditions. Public benefit needs are assessed on a neighbourhood basis as part of the creation of new community plans and the City takes local market conditions into account when establishing targets for CACs.

As with all policies and procedures, the City's CAC system could be improved, but in principle it is working well to obtain public benefits while increasing housing supply; it is not causing housing prices to rise.



8.0 Attachments



Attachment 1: Apartment Starts by Municipality in the Vancouver Census Metropolitan Area (CMA), 1994 to 2018

1989 to 2005

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Burnaby	163	1,075	781	648	801	643	651	498	389	612	901	231	166	517	329	510	1,562	2,304
Coquitam	75	554	557	332	673	813	721	303	248	657	106	160	172	136	166	268	351	204
Delta	31	189	413	97	128	178	214	162	213	13	46	13	0	45	263	26	52	45
Langley City	173	367	258	187	199	418	616	154	156	183	80	0	233	54	100	0	119	169
Langley Township	16	78	103	26	73	300	24	58	245	295	47	0	14	0	144	128	110	42
Maple Ridge	23	208	251	113	283	118	176	119	12	134	230	12	50	101	0	0	87	80
New Westminster	303	947	495	259	493	213	608	394	163	365	286	94	87	83	192	453	192	546
North Vancouver City	37	222	200	39	51	131	200	176	311	243	254	258	205	119	16	555	252	232
North Vancouver District	156	99	212	289	131	10	273	65	246	106	167	60	0	250	201	100	86	0
Pitt Meadows	0	0	172	84	124	101	127	52	63	0	70	0	0	0	0	0	0	0
Port Coquitlam	98	0	120	164	130	687	494	347	96	91	26	122	31	105	4	139	85	313
Port Moody	0	10	2	0	18	60	11	380	0	294	87	0	33	20	200	196	258	511
Richmond	371	990	760	383	509	534	686	678	1,227	156	473	202	120	118	799	619	649	930
Surrey	219	566	854	507	992	2,081	1,354	732	1,011	539	177	33	92	284	201	346	638	660
UEL	0	0	0	2	0	0	2	0	0	0	0	0	0	36	0	198	423	419
Vancouver	1,348	2,587	2,552	2,337	2,823	4,195	4,395	3,798	3,400	4,933	3,399	2,591	2,039	3,698	3,081	3,460	4,497	3,217
West Vancouver	28	54	112	266	56	44	53	25	21	0	36	0	0	0	0	96	37	207
White Rock	79	140	158	158	107	151	29	136	34	6	80	0	28	0	60	64	110	104
Other Areas*		0	0	0	0	768	0	133	137	112	123	0	173	0	0	0	0	1
VANCOUVER CMA TOTAL	3,120	8,086	8,000	5,919	7,769	11,445	10,634	8,210	7,972	8,739	6,588	3,776	3,443	5,566	5,756	7,158	9,508	9,984
Rest of CMA (excluding Vancouver)	1,772	5,499	5,448	3,582	4,946	7,250	6,239	4,412	4,572	3,806	3,189	1,185	1,404	1,868	2,675	3,698	5,011	6,767

2006 to 2018

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total # of Apartment Starts 1994 to 2018	Annual Average # of Apartment Starts 1994 to 2018
Burnaby	890	1,891	1,110	559	808	1,047	1,093	1,827	1,049	1,448	3,629	3,649	2,207	29,877	1,195
Coquitlam	889	472	1,155	144	750	817	1,341	860	1,122	569	1,191	1,744	702	15,248	610
Delta	50	2	13	60	118	151	164	63	221	468	162	254	329	3,147	126
Langley City	297	125	118	160	167	220	63	0	67	184	8	75	479	3,827	153
Langley Township	3	216	446	260	296	716	588	401	476	544	215	966	490	6,724	269
Maple Ridge	436	254	45	2	21	81	308	97	144	56	137	171	632	3,385	135
New Westminster	735	628	422	158	129	266	734	196	404	843	1,028	1,239	301	10,546	422
North Vancouver City	346	657	300	12	226	412	427	467	427	786	766	217	984	8,848	354
North Vancouver District	46	0	167	47	149	335	191	260	272	146	666	92	1,254	5,179	207
Pitt Meadows	353	70	144	0	0	71	68	126	64	1	0	82	0	1,291	52
Port Coquitlam	199	740	125	24	349	38	241	183	198	272	144	344	187	4,897	196
Port Moody	364	837	353	0	0	0	291	0	0	0	4	4	4	3,847	154
Richmond	1,132	1,413	1,399	343	845	1,930	1,235	875	2,486	1,945	1,443	1,457	1,422	24,582	983
Surrey	1,021	2,025	3,109	371	742	1,591	984	1,189	1,045	2,362	974	2,461	1,357	25,298	1,012
UEL	326	272	257	137	230	351	95	513	0	0	212	450	0	3,921	157
Vancouver	2,404	3,301	3,687	1,048	3,033	2,656	4,368	4,530	3,350	3,067	8,154	4,238	4,917	91,261	3,650
West Vancouver	9	8	33	0	0	0	310	93	12	8	57	1	321	1,327	53
White Rock	63	301	52	98	77	52	272	128	74	95	126	43	184	2,216	89
Other Areas*	0	0	4	2	6	109	4	1	200	449	1	11	118	1,584	94
VANCOUVER CMA TOTAL	9,563	13,212	12,939	3,425	7,946	10,843	12,777	11,809	11,611	13,243	18,917	17,498	15,888	247,005	9,880
Rest of CMA (excluding Vancouver)	7,159	9,911	9,252	2,377	4,913	8,187	8,409	7,279	8,261	10,176	10,763	13,260	10,971	155,744	6,230

Source: CMHC Housing Portal.



Attachment 2: Remaining Development Potential in Existing Multifamily Zoning Districts:
Anticipated Capacity for Residential Units to 2041 of Lands Already Zoned for Multifamily Residential Use

Anticipated Supacity for Residential Onits to 2041 of Ear	INS AIICUNY 20		anning recorder			
	Estimate	ed Remaining	Estimated Remaining			
	Developm	nent Potential	Developm	nent Potential		
		(# of Units)		(# of Units)		
	a	s of May 2014	as o	of March 2019		
Zone	Units	%	Units	%		
Units Anticipated by 2041 in Existing Zoning Districts	25,700	100%	43,100	100%		
(C, HA, RM, IC-3, MC-2, FC-1, FM-1, DD)						

Source: City of Vancouver. Note that the City anticipates additional capacity beyond the year 2041 in these zones. The main difference between the May 2014 and March 2019 estimates is that the capacity in RM zones has increased significantly due to new RM zones in Grandview Woodland, the Cambie Corridor, and other locations.

