



REFERRAL REPORT

Report Date: March 28, 2023
Contact: Chris Robertson
Contact No.: 604.873.7684
RTS No.: 15471
VanRIMS No.: 08-2000-20
Meeting Date: April 11, 2023

TO: Vancouver City Council
FROM: General Manager of Planning, Urban Design and Sustainability
SUBJECT: Recalibration of Density Bonus Contributions

RECOMMENDATION TO REFER

THAT the General Manager of Planning, Urban Design and Sustainability be instructed to bring forward the application as described below and that the application be referred to Public Hearing together with the recommendations set out below;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary Zoning and Development By-law amendments, generally in accordance with the recommendations set out below, for consideration at the Public Hearing.

RECOMMENDATION FOR PUBLIC HEARING

- A. THAT Council approve, in principle, the application to amend the Zoning and Development By-law by changing the Density Bonus Contribution rates as set out in Appendix A with rates to be effective September 30, 2023.
- B. THAT Council approve, in principle, the added exemption for secured market rental in the Joyce-Collingwood RM-10N zone as shown in Appendix A to be effective upon enactment.
- C. THAT Council approve, in principle, a new definition of amenity to include Cultural Facility and Transportation and Public Realm Infrastructure, as well as to standardize eligible amenities and affordable housing across all District Schedule density bonus provisions, as shown in Appendix A to be effective upon enactment.
- D. THAT Recommendations A to C be adopted on the following conditions:

- (i) THAT passage of the above resolutions creates no legal rights for any person, or obligation on the part of the City and any expenditure of funds or incurring of costs is at the risk of the person making the expenditure or incurring the cost;
- (ii) THAT any approval that may be granted following the public hearing shall not obligate the City to enact any zoning by-laws; and
- (iii) THAT the City and all its officials shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

REPORT SUMMARY

Density Bonus Contributions involves certain zones that allow for extra density, up to a specified maximum floor space ratio, in exchange for cash contributions towards amenities and affordable housing. Density Bonus Contributions ensure the City is able to deliver required amenities and infrastructure to serve growth, reducing pressure on property taxes, utility fees and other City funding sources. Density Bonus Contributions are recalibrated every four years to reflect changes in market conditions and viability of new housing supply and job space.

This report seeks Council approval of recalibrated Density Bonus Contribution rates as outlined in Appendix A. The economic testing completed by external consultants recommends that the City maintain nine Density Bonus Contribution rates and increase only four.

This report also includes amendments that would:

- i) add an exemption to secured market rental development in the Joyce-Collingwood RM-10N zone to align with exemptions included in the other residential density bonus zones;
- ii) expand the types of amenities that density bonus contributions can fund in all zones to include Cultural Facilities and Transportation and Public Realm infrastructure; and
- iii) standardize eligible amenities and affordable housing across all density bonus zoning districts.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

- In 2003, Council adopted the Financing Growth Policy establishing key principles and a framework for development contributions.
- In March 2014, Council approved Density Bonus Contributions in Marpole. From 2016 to 2019, Council approved Density Bonus Contributions in Norquay, Joyce-Collingwood, Mount Pleasant, False Creek Flats, Cambie Corridor, and Grandview-Woodland.

- On July 7, 2022, Council [approved](#) the annual inflationary rate adjustments to Density Bonus Contributions and directed staff to recalibrate Density Bonus Contributions and report back with updated rates.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

REPORT

Background/Context

Vancouver is a growing city, with an additional 260,000 residents and 200,000 new jobs anticipated over the next 30 years. As new residents and employees arrive in Vancouver, the City strives to maintain and improve its network of public amenities and infrastructure. The City funds capital programs and projects from a range of sources:

- **City contributions** – Operating revenues (e.g. property tax, water and sewer utility fees) typically fund maintenance and renewal of existing public amenities and infrastructure.
- **Development contributions** – Development contributions (e.g. Development Cost Levies, Community Amenity Contributions, Density Bonus Contributions, conditions of development, utility connection charges) typically fund new and expanded public amenities and infrastructure to serve growth (see Appendix E for more information).
- **Partnership contributions** – External funding from the federal and provincial governments, regional agencies, non-profit agencies, foundations, and philanthropists could fund both maintenance and renewal work and new and expanded public amenities and infrastructure.

The Financing Growth Policy (2003) sets the framework for the collection and allocation of development contributions based on the key principle that new development should pay its fair share of growth-related costs to reduce pressure on property taxes and utility fees paid by existing residents and businesses that primarily fund renewal and maintenance costs.

One of the development contribution tools the City uses to secure public amenities and infrastructure within existing zoning is Density Bonus Contributions. Density Bonus Contributions permits developers to build additional floor space in exchange for amenities and/or affordable housing. Density Bonus Contributions can be in the form of in-kind amenities or cash contributions, with the focus of this report on the cash contribution rates.

The City has gradually increased the use of pre-set development contributions, such as CAC Targets and Density Bonus Contributions to add certainty and predictability, and to improve and streamline the process for all parties involved. As well, pre-set development contributions can be factored into the price of land and help dampen land price increases and speculation. To date, over 60% of rezonings with CACs are subject to a CAC target approach, and Density Bonus Contributions has been used in over 100 developments over the past few years.

Density Bonus Contributions help fund the required public amenities and infrastructure needed to serve growth. The City has developed public benefit strategies within recent community plans to establish the linkage between the costs of growth and the development contribution (e.g. Density Bonus Contributions) used to help fund those costs. If a Density Bonus Contribution is collected within a community plan area, the contribution will be allocated towards the corresponding public benefits strategy. It is important that Density Bonus Contributions are kept up to date to reflect the City's costs in delivering public amenities and infrastructure, particularly in the current environment of rapid cost escalation. The need to fund growth costs through development contributions is to be balanced with the need to support financial viability of new development to add new housing and job space. If the rate is set too high, it could deter development; if the rate is set too low, it could lead to land speculation while the City under-collects to recover growth costs.

The City recalibrates its pre-set development contributions every four years or sooner if local market conditions fundamentally change. Recalibrating Density Bonus Contributions on a regular basis ensures the City is able to deliver growth-related public amenities and infrastructure while increasing transparency and predictability for the market to adjust to any changes. In between recalibrations, Density Bonus Contributions are adjusted annually using a Council-adopted inflationary index that is based on annual changes in property values and construction costs, to minimize large rate increases during comprehensive updates.

Coriolis Consulting Corp. and Urban Systems Ltd. were retained by the City to analyze redevelopment within CAC Target and Density Bonus Contribution areas to identify any rate adjustments that should be considered (for the consultant reports, see Appendix C).

Note that a companion report on recalibrating CAC Targets is also being presented to Council (RTS 15470).

Strategic Analysis

The section below details the recommendations set out in the report.

Recommendation A: Recalibration of Density Bonus Contributions

Coriolis Consulting and Urban Systems conducted economic testing on several hypothetical development sites within each of the Density Bonus Contribution areas investigating whether the rates reflect market conditions or there is economic room to increase without impacting development viability. The testing included recent market data on revenues and costs, while also including a number of assumptions around developer profit and contingencies (for more information on the consultant testing, see Appendix C). Staff also conducted an analysis of development trends in each of these Density Bonus Contribution areas. Development take-up varied across the city, however staff found that new development has been occurring at an appropriate pace in all Density Bonus Contribution areas.

The testing revealed that 9 out of the 13 existing Density Bonus Contributions already reflect current market conditions and do not need to be adjusted. The analysis found that development in these areas remains viable with the current Density Bonus Contribution rates, and the level of development activity in each area indicates that these rates are not impeding development. For these reasons, staff recommend keeping the existing rates.

As shown in Table 1, the economic testing indicated that 4 of the 13 Density Bonus Contribution areas should be adjusted to reflect market changes over the past five years when the rates were last adjusted. These include adjustments for residential development in Cambie Corridor and False Creek Flats. For employment uses, the recommended adjustments to the Mount Pleasant Density Bonus Contribution rates will align with the pre-set rates within the Mount Pleasant and False Creek Flats areas (i.e. Broadway and Rest of Metro Core Linkage Targets, I-3A density bonus zone), creating a consistent approach to anticipated contributions for commercial development.

Table 1: Recommended Recalibration of Density Bonus Contributions
(\$/ft² on net additional density)

Density Bonus Contribution	Year Established	2022 Rate	Recalibration Adjustment	Recommended 2023 Density Bonus Rate
Cambie Corridor RM-8A/AN	2018	\$60.07/ft ²	+\$24.93/ft ²	\$85.00/ft²
False Creek Flats FC-2E	2017	\$131.06/ft ²	+\$9.84/ft ²	\$140.00/ft²
Mount Pleasant I-1A	2016	\$7.22/ft ²	+\$4.27/ft ²	\$11.49/ft²
Mount Pleasant I-1B (3.0 to 5.0 FSR)*	2016	\$7.22/ft ²	+\$4.27/ft ²	\$11.49/ft²
Mount Pleasant I-1B (5.0 to 6.0 FSR)*	2016	\$51.77/ft ²	-	\$51.77/ft²
Marpole RM-8/N	2014	\$21.84/ft ²	-	\$21.84/ft²
Marpole RM-9/N	2014	\$72.68/ft ²	-	\$72.68/ft²
Norquay RM-9A/AN	2016	\$21.29/ft ²	-	\$21.29/ft²
False Creek Flats I-3A	2017	\$11.49/ft ²	-	\$11.49/ft²
Joyce-Collingwood RM-9BN	2016	\$3.84/ft ²	-	\$3.84/ft²
Joyce-Collingwood RM-10/N	2016	\$16.38/ft ²	-	\$16.38/ft²
Grandview-Woodland RM-8A/AN	2018	\$3.67/ft ²	-	\$3.67/ft²
Grandview-Woodland RM-11/N	2018	\$3.67/ft ²	-	\$3.67/ft²
Grandview-Woodland RM-12N	2018	\$3.67/ft ²	-	\$3.67/ft²

* Note that the Mount Pleasant I-1B has a tiered rate from 3.0 to 5.0 FSR and from 5.0 to 6.0 FSR. Recommendation is to only adjust the rate from 3.0 to 5.0 FSR.

For Density Bonus Contribution increases, the City provides in-stream rate protection for Development Permit applications that have been submitted prior to a rate change, provided that the application has been submitted in a form satisfactory to the City and the application fee has been paid.

Note the Density Bonus Contribution rates presented in Appendix A have factored in current market conditions and therefore the annual inflationary rate adjustment is not required for 2023.

Recommendation B: Adding a Density Bonus Contribution exemption for secured market rental within the Joyce-Collingwood RM-10N district schedule

Certain residential floor area developed using bonus density may be eligible for exemptions from Density Bonus Contributions. These include social housing and secured market rental housing, provided criteria are met.

Secured market rental housing is currently exempt from Density Bonus Contributions within the RM-8, RM-9, RM-11, and RM-12 zones. The FC-2E density bonus zone includes an exemption for secured market rental with a below market requirement.

Staff recommend adding an exemption for secured market rental within the Joyce-Collingwood RM-10N zone. Staff have done extensive testing in this area and have found that there is no to marginal lift for a 6-storey rental development. This addition would make the exemptions offered across all residential density bonus zones consistent, streamline approvals and support rental housing.

Recommendation C: Streamlining definition of amenity and affordable housing eligibility across all density bonus zones

Each density bonus zone provides additional development opportunities in exchange for contributions towards new amenities and affordable housing as outlined in the community plan's Public Benefit Strategy. Within each density bonus zone, there is a list of eligible public benefit categories within the definition of an 'amenity' that can be funded using Density Bonus Contributions. The list of amenities can vary by density bonus zone, depending on the role of Density Bonus Contributions envisioned when the public benefit strategy was created. Additionally, not all density bonus zoning districts have an affordable housing share, which limits the ability to deliver affordable housing using Density Bonus Contributions.

Staff recommend that the types of public benefits that can be funded by Density Bonus Contributions in all density bonus zones be standardized and expanded to include affordable housing, and the definition of amenity be amended to include:

- Child Day Care Facility;
- Community centre or neighbourhood house;
- Cultural Facility;
- Library;
- Park or playground;
- Public Authority Use;
- Rink;
- Swimming Pool;
- Social Service Centre;
- Transportation and Public Realm Infrastructure

This list expands the types of eligible amenities, including replacing Museum or Archives with a broader category of Cultural Facility, and replaces Plazas with a broader category of Transportation and Public Realm Infrastructure. These broader public benefit categories will provide additional flexibility on the types of projects that can be funded through Density Bonus Contributions to better align with public benefit priorities and to align more closely to the types of amenities that can be funded through CACs. Including affordable housing shares across all density bonus zoning districts and expanding the amenity definition will provide further funding support to deliver the types of capital projects identified within the City's capital plans and public benefit strategies.

As an example, in the Mount Pleasant and False Creek Flats areas, only a small list of amenities can be funded through Density Bonus Contributions. Affordable housing was not considered when the public benefit strategies were created at that time. With the updated Broadway Public Benefits Strategy, expanding the list of amenities and incorporating affordable housing will help deliver the wide array of amenities and infrastructure as priorities emerge. The allocation of Density Bonus Contributions will continue to be guided by the applicable public

benefit strategy, community plans, and other policies, and the allocation is determined through the capital planning process.

Public/Civic Agency Input

Staff engaged with development stakeholders including the Urban Development Institute (UDI), National Association of Industrial and Office Properties (NAIOP), and Homebuilders Association of Vancouver (HAVAN) on the Density Bonus Contribution rate recalibration. Staff received comments around specific inputs used in the economic testing, as well as feedback suggestions that rates should decrease. Staff reviewed this feedback with the external consultants and are confident the inputs used and the rate recommendations are justified. For more information on the engagement and feedback received, including staff's response, see Appendix D.

Financial Implications

Development contributions such as DCLs, CACs and Density Bonus Contributions are the City's primary Financing Growth tools to fund public amenities and infrastructure to serve growth, thereby reducing the impact on property taxes, utility fees and other City funding sources.

As demonstrated through previous analyses done by Coriolis Consulting Corp., development contributions like CACs and Density Bonus Contributions do not increase the price of housing; housing prices are market-driven. When set appropriately, development contributions can be an effective tool to help dampen land speculation and price increases.

Should Council approve the proposed Density Bonus Contribution adjustments, and assuming past development activity trends, this could result in an additional contribution of approximately \$1.7 million per year.

Implications for Development

The proposed increase to the four Density Bonus Contribution rates recommended by Coriolis and Urban Systems is not expected to impact development viability based on economic testing. Refer to the consultant reports in Appendix C for further details.

Legal Implications

The proposed amendments are authorized by the Vancouver Charter and are supported by Legal Services.

CONCLUSION

As part of the Density Bonus Contribution rate recalibrated supported by economic testing, staff recommend maintaining nine Density Bonus Contribution rates and increase four Density Bonus Contribution rates. Staff recommend adding a density bonus exemption for secured market rental development in the Joyce-Collingwood RM-10N district schedule to provide consistency

across all residential density bonus zones and expanding the definition of Amenity and Affordable Housing shares across all density bonus zones.

* * * * *

**APPENDIX A:
ZONING & DEVELOPMENT BY-LAW AMENDMENTS**

**DRAFT By-law to amend Zoning and Development By-law
regarding density bonus shares**

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

1. This by-law amends the indicated provisions of the Zoning and Development By-law.
2. Council strikes out Schedule F and substitutes Schedule F attached to this by-law as Schedule A.
3. In the I-1A District Schedule and the I-3 District Schedule, Council:
 - (a) in section 3.1.1.2, adds “or per affordable housing share” after “per amenity share”;
 - (b) in section 3.1.1.3, adds “or affordable housing shares” after “amenity shares”;
 - (c) in section 4.1, adds “and Affordable Housing Shares” after “Amenity Shares”; and
 - (d) in section 4.1.2, adds “or affordable housing share” after “an amenity share”.
4. In the I-1B District Schedule, Council:
 - (a) in sections 3.1.1.2 and 3.1.1.3, adds “or per affordable housing share” after “per amenity share”;
 - (b) in section 3.1.1.4, adds “or affordable housing shares” after “amenity shares”;
 - (c) in section 4.1, adds “and Affordable Housing Shares” after “Amenity Shares”;
 - (d) in section 4.1.2, adds “or affordable housing share” after “an amenity share” wherever it appears; and
 - (e) in section 4.1.3, adds “or affordable housing share” after “an amenity share” wherever it appears.
5. In the FC-2 District Schedule, Council:
 - (a) in section 3.4.1.2(b), adds “or per affordable housing share” after “per amenity share”;
 - (b) in section 3.4.1.3, adds “or affordable housing shares” after “amenity shares”;

- (c) in section 4.1, adds “and Affordable Housing Shares” after “Amenity Shares”; and
- (d) in section 4.1.2, adds “or affordable housing share” after “an amenity share”.

6. In section 4.1.1 of the RM-8, RM-8N, RM-8A, and RM-8AN Districts Schedule, RM-9A and RM-9AN Districts Schedule, RM-9, RM-9N, and RM-9BN Districts Schedule, RM-10 and RM-10N Districts Schedule, RM-11 and RM-11N Districts Schedule, RM-12N District Schedule, I-1A District Schedule, I-1B District Schedule, I-3 District Schedule, and FC-2 District Schedule, Council strikes out section 4.1.1 and substitutes:

“4.1.1 For the purposes of this schedule, amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law.”.

7. In sections 3.1.1.1(a), 3.1.1.1(c), 3.2.1.1(a), and 3.2.1.1(c) of the RM-10 and RM-10N Districts Schedule, Council strikes out ““for-profit affordable rental housing” and is subject to a waiver of development cost levies in accordance with the Vancouver Development Cost Levy By-law,” and substitutes “secured market rental housing”.

8. In Schedule F, Council:

- (a) in the row for RM-8A and RM-8AN (Cambie Corridor), strikes out “\$646.56” and substitutes “914.93”;
- (b) in the row for I-1A (Mount Pleasant), strikes out “\$77.77” and substitutes “\$123.65”;
- (c) in the row for I-1B (Mount Pleasant), strikes out “\$77.77” and substitutes “\$123.65”; and
- (d) in the row for FC-2 (False Creek Flats), strikes out “\$1,410.72” and substitutes “\$1,506.95”.

9. A decision by a court that any part of this by-law is illegal, void, or unenforceable severs that part from this by-law, and is not to affect the balance of this by-law.

10. This by-law is to come into force and take effect upon enactment, except that section 8 comes into force and takes effect on September 30, 2023.

ENACTED by Council this _____ day of _____, 2023

Mayor

City Clerk

SCHEDULE A**Schedule F****Affordable Housing and Amenity Share Cost Schedule**

This is Schedule “F” to By-law No. 3575, being the “Zoning and Development By-law”.

Zoning District	Affordable Housing or Amenity Share Cost
RM-8 and RM-8N (Marpole)	\$235.08 per m ²
RM-8A and RM-8AN (Cambie Corridor)	\$646.56 per m ²
RM-8A and RM-8AN (Grandview-Woodland)	\$39.48 per m ²
RM-9 and RM-9N (Marpole)	\$782.30 per m ²
RM-9A and RM-9A/N (Norquay)	\$229.15 per m ²
RM-9BN (Joyce-Collingwood)	\$41.37 per m ²
RM-10 and RM-10N (Joyce-Collingwood)	\$176.28 per m ²
RM-11 and RM-11N (Grandview-Woodland)	\$39.48 per m ²
RM-12N (Grandview-Woodland)	\$39.48 per m ²
I-1A (Mount Pleasant)	\$77.77 per m ² (to a max FSR of 5.0 above 3.0 FSR)
I-1B (Mount Pleasant)	Level 1 - \$77.77 per m ² (to a max FSR of 5.0 above 3.0 FSR) Level 2 - \$557.30 per m ² (to a max FSR of 6.0 above 5.0 FSR)
I-3 (False Creek Flats)	\$123.65 per m ²
FC-2 (False Creek Flats)	\$1,410.72 per m ²

For the purposes of this schedule, “amenity” means 1 or more of the following, if they are made generally accessible to the public:

- (a) child day care facility;
- (b) community centre or neighbourhood house;
- (c) cultural facility;
- (d) library;
- (e) park or playground;
- (f) public authority use;
- (g) rink;
- (h) social service centre;

SCHEDULE F

- (i) swimming pool;
- (j) transportation and public realm infrastructure.

In May 2016, Council adopted the DCL annual inflationary rate adjustment system for making annual adjustments to Amenity Share Contributions (Density Bonus Contributions). The annual inflation index is based on a blend of annual property value inflation (BC assessment net property values for the City of Vancouver) and annual construction cost inflation (Statistics Canada non-residential construction price index for Vancouver) and calculated using public, third-party data. The formula used to calculate the inflationary rate adjustment is as follows:

ANNUAL INFLATION ADJUSTMENT OF AMENITY SHARE COST AND AFFORDABLE HOUSING SHARE COST =

$(\text{ANNUAL CONSTRUCTION INFLATION} \times 0.83) + (\text{ANNUAL PROPERTY VALUE INFLATION} \times 0.17)$

Rates are adjusted in accordance with this formula annually. The rate adjustment will be presented in a Report to Council every July, with new rates effective and enforceable on September 30 of every year.

To view the Council adopted inflation index, refer to the City website at:

<https://vancouver.ca/home-property-development/annual-inflation-index.aspx>

APPENDIX B: RED-LINE OF ZONING & DEVELOPMENT BY-LAW AMENDMENTS

Note: This document is being provided for information only as a reference tool to highlight the proposed amendments. The draft amending by-laws attached to the Council report RTS No. 15471 entitled Recalibration of Density Bonus Contributions represent the amendments being proposed to Council for approval. Should there be any discrepancy between this redline version and the draft amending by-laws, the draft amending by-laws prevail.

*Proposed amendments are shown in red and insertions in italics.

Schedule F

Schedule F

Affordable Housing and Amenity Share Cost Schedule

This is Schedule “F” to By-law No. 3575, being the “Zoning and Development By-law”.

Zoning District	Affordable Housing Share Cost	Amenity Share Cost
RM-8 and RM-8N (Marpole)	\$235.08 per m ²	\$235.08 per m ²
RM-8A and RM-8AN (Cambie Corridor)	\$646.56 per m ²	\$646.56 per m ²
RM-8A and RM-8AN (Grandview- Woodland)	\$39.48 per m ²	\$39.48 per m ²
RM-9 and RM-9N (Marpole)	\$782.30 per m ²	\$782.30 per m ²
RM-9A and RM-9A/N (Norquay)	\$229.15 per m ²	\$229.15 per m ²
RM-9BN (Joyce-Collingwood)	\$41.37 per m ²	\$41.37 per m ²
RM-10 and RM-10N (Joyce-Collingwood)	\$176.28 per m ²	\$176.28 per m ²
RM-11 and RM-11N (Grandview- Woodland)	\$39.48 per m ²	\$39.48 per m ²
RM-12N (Grandview Woodland)	\$39.48 per m ²	\$39.48 per m ²
I-1A (Mount Pleasant)	-	\$77.77 per m ² (to a max FSR of 5.0 above 3.0 FSR)
I-1B (Mount Pleasant)	-	Level 1 – \$77.77 per m ² (to a max FSR of 5.0 above 3.0 FSR) Level 2 – \$557.30 per m ²

		(to a max FSR of 6.0 above 5.0 FSR)
I-3 (False Creek Flats)		\$123.65 per m ²
FC-2 (False Creek Flats)		\$1,410.72 per m ²

Zoning District	Affordable Housing or Amenity Share Cost
RM-8 and RM-8N (Marpole)	\$235.08 per m ²
RM-8A and RM-8AN (Cambie Corridor)	\$914.93 per m ²
RM-8A and RM-8AN (Grandview-Woodland)	\$39.48 per m ²
RM-9 and RM-9N (Marpole)	\$782.30 per m ²
RM-9A and RM-9A/N (Norquay)	\$229.15 per m ²
RM-9BN (Joyce-Collingwood)	\$41.37 per m ²
RM-10 and RM-10N (Joyce-Collingwood)	\$176.28 per m ²
RM-11 and RM-11N (Grandview-Woodland)	\$39.48 per m ²
RM-12N (Grandview-Woodland)	\$39.48 per m ²
I-1A (Mount Pleasant)	\$123.65 per m ² (to a max FSR of 5.0 above 3.0 FSR)
I-1B (Mount Pleasant)	Level 1 - \$123.65 per m ² (to a max FSR of 5.0 above 3.0 FSR) Level 2 - \$557.30 per m ² (to a max FSR of 6.0 above 5.0 FSR)
I-3 (False Creek Flats)	\$123.65 per m ²
FC-2 (False Creek Flats)	\$1,506.95 per m ²

For the purposes of this schedule, “amenity” means 1 or more of the following

- (a) child day care facility;
- (b) community centre or neighbourhood house;
- (c) cultural facility;
- (d) library;
- (e) park or playground;
- (f) public authority use;

- (g) *rink;*
- (h) *social service centre*
- (i) *swimming pool;*
- (j) *transportation and public realm.*

In May 2016, Council adopted the DCL annual inflationary rate adjustment system for making annual adjustments to Amenity Share Contributions (Density Bonus Contributions). The annual inflation index is based on a blend of annual property value inflation (BC assessment net property values for the City of Vancouver) and annual construction cost inflation (Statistics Canada non-residential construction price index for Vancouver) and calculated using public, third-party data. The formula used to calculate the inflationary rate adjustment is as follows:

ANNUAL INFLATION ADJUSTMENT OF AMENITY SHARE COST AND AFFORDABLE HOUSING SHARE COST =
(ANNUAL CONSTRUCTION INFLATION x 0.83) + (ANNUAL PROPERTY VALUE INFLATION x 0.17)

Rates are adjusted in accordance with this formula annually. The rate adjustment will be presented in a Report to Council every July, with new rates effective and enforceable on September 30 of every year.

To view the Council adopted inflation index, refer to the City website at: <https://vancouver.ca/home-property-development/annual-inflation-index.aspx>

FC-2

District Schedule

- 3.4.1.2 Despite section **3.4.1.1** above, if the Director of Planning considers the intent of this schedule, all applicable Council policies and guidelines, and the submission of any advisory group, property owner or tenant, the Director of Planning may increase:
- (a) the permitted floor area for dwelling uses, provided that at least 50% of the residential floor area is developed as social housing;
 - (b) the permitted floor area for dwelling uses developed as secured market rental housing by 1 m² per amenity share *or per affordable housing share* provided to the City at no cost to the City; and
 - (c) the permitted floor area for dwelling uses developed as secured market rental housing, provided that a minimum of 35% of the dwelling units covering 35% of the floor space provided as secured market rental housing meet the rent requirements for each unit type set out in **Schedule H: Stipulated Rents at Initial Occupancy for Secured Market Rental Housing** of this by-law at the time of initial occupancy, and subject to the rental increases agreed upon in any Housing Agreement. Agreed upon rental increases will generally be in accordance with the increases permitted under section 22 of the Residential Tenancy Regulation, B.C. Reg. 477/2003,

to a maximum additional floor space ratio of 3.50, in addition to the maximum permitted floor space ratio of 3.00 for non-dwelling uses, including the provision of a minimum floor space ratio of 0.50 combined for any uses listed in sections **3.4.1.1(c)(i)(A)**, **3.4.1.1(c)(i)(B)**, **3.4.1.1(c)(i)(C)** and **3.4.1.1(c)(i)(D)** above.

- 3.4.1.3 Despite section **3.4.1.2** above, the maximum floor space ratio achievable as a result of the provision of amenity shares *or affordable housing shares* must otherwise comply in all respects with this schedule and this by-law.

4.1 Amenity Shares *and Affordable Housing Shares*

- 4.1.1 For the purposes of this schedule, ~~amenity means community centre or neighbourhood house.~~ *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law.*
- 4.1.2 For the purposes of this schedule, the cost of an amenity share *or affordable housing share* is the amount specified per m² in **Schedule F: Affordable Housing and Amenity Share Cost Schedule** of this by-law for the FC-2 zoning district.

I-1A

District Schedule

- 3.1.1.2 Despite section 3.1.1.1 above, the Director of Planning may increase the permitted floor area by 1 m² per amenity share *or per affordable housing share* provided to the City at no cost to the City, to a maximum additional floor space ratio of 2.00, for:
- (a) uses listed in section 3.1.1.1(a) or 3.1.1.1(b)(i) above; and
 - (b) digital entertainment and information communication technology,
- if the Director of Planning considers the intent of this schedule and all applicable Council policies and guidelines.
- 3.1.1.3 Despite section 3.1.1.2 above, the maximum floor space ratio achievable as a result of the provision of amenity shares *or affordable housing shares* must otherwise comply in all respects with this schedule and this by-law.

4.1 Amenity Shares *and Affordable Housing Shares*

- 4.1.1 For the purposes of this schedule, ~~an amenity means a child day care facility.~~ *an amenity has the meaning set out in Schedule F: Affordable Housing and Amenity Share Cost Schedule of this by-law.*
- 4.1.2 For the purposes of this schedule, the cost of an amenity share *or affordable housing share* is the amount specified per m² in **Schedule F: Affordable Housing and Amenity Share Cost Schedule** of this by-law for the I-1A zoning district.

I-1B

District Schedule

- 3.1.1.2 Despite section 3.1.1.1 above, the Director of Planning may increase the permitted floor area by 1 m² per amenity share *or per affordable housing share* (level 1) provided to the City at no cost to the City, to a maximum additional floor space ratio of 2.00, for:
- (a) uses listed in section 3.1.1.1(a) or 3.1.1.1(b)(i) above; and
 - (b) digital entertainment and information communication technology,
- if the Director of Planning considers the intent of this schedule and all applicable Council policies and guidelines.
- 3.1.1.3 Despite sections 3.1.1.1 and 3.1.1.2 above, the Director of Planning may increase the permitted floor area by 1 m² per amenity share *or per affordable housing share* (level 2) provided to the City at no cost to the City, to a maximum additional floor space ratio of 1.00, for:
- (a) uses listed in section 3.1.1.1(a) or 3.1.1.1(b)(i) above; and
 - (b) digital entertainment and information communication technology,
- if the Director of Planning considers the intent of this schedule and all applicable Council policies and guidelines.
- 3.1.1.4 Despite sections 3.1.1.2 and 3.1.1.3 above, the maximum floor space ratio achievable as a result of the provision of amenity shares *or affordable housing shares* must otherwise comply in all respects with this schedule and this by-law.

4.1 Amenity Shares *and Affordable Housing Shares*

4.1.1 For the purposes of this schedule, *amenity* has the meaning set out in Schedule F: *Affordable Housing Share and Amenity Share Cost Schedule* of this by-law.

~~(a) an amenity (level 1) means a child day care facility;~~

~~(b) an amenity (level 2) means a:~~

~~(i) child day care facility;~~

~~(ii) community centre or neighbourhood house;~~

~~(iii) library;~~

~~(iv) museum or archives;~~

~~(v) park or playground;~~

~~(vi) rink;~~

~~(vii) social service centre, and~~

~~(viii) swimming pool; and~~

~~(c) amenity (level 2) shares are subject to the following allocations:~~

~~(i) 14% must be allocated to a child day care facility, and~~

~~(ii) 86% must be allocated to any amenity (level 2) use listed in section 4.1.1(b) above.~~

4.1.2 For the purposes of this schedule, the cost of an amenity share *or affordable housing share* (level 1) is the amount specified per m² for an amenity share (level 1) in **Schedule F: Affordable Housing and Amenity Share Cost Schedule** of this by-law for the I-1B zoning district.

4.1.3 For the purposes of this schedule, the cost of an amenity share *or affordable housing share* (level 2) is the amount specified per m² for an amenity share (level 2) in **Schedule F: Affordable Housing and Amenity Share Cost Schedule** of this by-law for the I-1B zoning district.

I-3

District Schedule

- 3.1.1.2 Despite section 3.1.1.1 above, if the Director of Planning considers the intent of this schedule and all applicable Council policies and guidelines, the Director of Planning may increase the permitted floor area by 1 m² per amenity share *or per affordable housing share* provided to the City at no cost to the City to a maximum additional floor space ratio of 2.00, for the following uses:
- (a) artist studio, manufacturing uses, service uses permitted as outright approval uses, utility and communication uses, and wholesale uses; and
 - (b) office uses, except that the total floor area may include up to a maximum floor space ratio of 4.00 for office uses, and must include a minimum floor space ratio of 1.00 for any of the following uses combined:
 - (i) cultural and recreational uses, limited to artist studio - class B,
 - (ii) manufacturing uses, limited to:
 - (A) bakery products manufacturing,
 - (B) brewing or distilling,
 - (C) chemicals or chemical products manufacturing - class B,
 - (D) clothing manufacturing,
 - (E) dairy products manufacturing,
 - (F) food or beverage products manufacturing - class B,
 - (G) furniture or fixtures manufacturing,
 - (H) jewellery manufacturing,
 - (I) leather products manufacturing,
 - (J) metal products manufacturing - class A
 - (K) metal products manufacturing - class B,
 - (L) miscellaneous products manufacturing - class A,
 - (M) miscellaneous products manufacturing - class B,
 - (N) non-metallic mineral products manufacturing - class B,
 - (O) paper products manufacturing,
 - (P) printing or publishing,
 - (Q) plastic products manufacturing,
 - (R) rubber products manufacturing,

- (S) shoes or boots manufacturing,
- (T) textiles or knit goods manufacturing, and
- (U) wood products manufacturing - class B,
- (iii) retail uses, limited to farmers' market,
- (iv) service uses, limited to catering establishment, motor vehicle repair shop, print shop, repair shop - class A, repair shop - class B, and sign painting shop, or
- (v) accessory uses customarily ancillary to any use listed in this section **3.1.1.2**.

3.1.1.3 Despite section **3.1.1.2** above, the maximum floor space ratio achievable as a result of the provision of amenity shares *or affordable housing shares* must otherwise comply in all respects with this schedule and this by-law, and consideration will be given to:

- (a) the height, bulk, massing, location and overall design of the building and its impact on the site, surrounding buildings and streets;
- (b) the provision of public open space, landscape, and the impact of the overall design on the general amenity of the area;
- (c) the provision of roads and bike and pedestrian connections as outlined in Council plans and policies;
- (d) the impact of the development on traffic in the area; and
- (e) the provision for pedestrian needs.

4.1 Amenity Shares *and Affordable Housing Shares*

4.1.1 For the purposes of this schedule, ~~amenity means community centre or neighbourhood house.~~ *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law.*

4.1.2 For the purposes of this schedule, the cost of an amenity share *or affordable housing share* is the amount specified per m² in **Schedule F: Affordable Housing and Amenity Share Cost Schedule** of this by-law for the I-3 zoning district.

RM-8, RM-8N, RM-8A and RM-8AN

Districts Schedule

- 4.1.1 For the purposes of this schedule, *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law. amenity means 1 or more of the following:*
- ~~(a) child day care facility;~~
 - ~~(b) community centre or neighbourhood house;~~
 - ~~(c) library;~~
 - ~~(d) museum or archives;~~
 - ~~(e) park or playground;~~
 - ~~(f) plaza;~~
 - ~~(g) public authority use;~~
 - ~~(h) rink;~~
 - ~~(i) social service centre; and~~
 - ~~(j) swimming pool.~~

RM-9A and RM-9AN

Districts Schedule

- 4.1.1 For the purposes of this schedule, *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law. amenity means 1 or more of the following:*
- ~~(a) child-day-care-facility;~~
 - ~~(b) community-centre-or-neighbourhood-house;~~
 - ~~(c) library;~~
 - ~~(d) museum-or-archives;~~
 - ~~(e) park-or-playground;~~
 - ~~(f) plaza;~~
 - ~~(g) public-authority-use;~~
 - ~~(h) rink;~~
 - ~~(i) social-service-centre; and~~
 - ~~(j) swimming-pool.~~

RM-9, RM-9N and RM-9BN

Districts Schedule

- 4.1.1 For the purposes of this schedule, *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law. amenity means 1 or more of the following:*
- ~~(a) child day care facility;~~
 - ~~(b) community centre or neighbourhood house;~~
 - ~~(c) library;~~
 - ~~(d) museum or archives;~~
 - ~~(e) park or playground;~~
 - ~~(f) plaza;~~
 - ~~(g) public authority use;~~
 - ~~(h) rink;~~
 - ~~(i) social service centre; and~~
 - ~~(j) swimming pool.~~

RM-10 and RM-10N

Districts Schedule

3.1.1.1 The maximum floor space ratio is 0.90, except that the Director of Planning may increase:

(a) the permitted floor space ratio to a maximum of:

(i) 2.40 on sites with a minimum frontage of 30.0 m and a minimum site area of 855 m², or

(ii) 2.60 on sites with a minimum frontage of 40.0 m and a minimum site area of 1,115 m²,

where 100% of the residential floor area is either developed as ~~“for-profit affordable rental housing” and is subject to a waiver of development cost levies in accordance with the Vancouver Development Cost Levy By-law;~~ *secured market rental housing* or as social housing, if the Director of Planning considers the intent of this schedule, all applicable Council policies and guidelines, and the submission of any advisory group, property owner or tenant;

(c) the permitted floor space ratio to a maximum of 2.00 on sites with a frontage greater than 15.0 m and less than 30.0 m and a minimum site area of 557 m², where the Director of Planning considers the development site to consist of locked in lots and 100% of the residential floor area is either developed as ~~“for-profit affordable rental housing” and is subject to a waiver of development cost levies in accordance with the Vancouver Development Cost Levy By-law;~~ *secured market rental housing* or as social housing, if the Director of Planning considers the intent of this schedule, all applicable Council policies and guidelines, and the submission of any advisory group, property owner or tenant; and

3.2.1.1 The maximum floor space ratio is 0.9, except that the Director of Planning may increase:

(a) the permitted floor space ratio to a maximum of:

(i) 2.40 on sites with a minimum frontage of 30.0 m and a minimum site area of 855 m², or

(ii) 2.60 on sites with a minimum frontage of 40.0 m and a minimum site area of 1115 m²,

where 100% of the residential floor area is either developed as ~~“for-profit affordable rental housing” and is subject to a waiver of development cost levies in accordance with the Vancouver Development Cost Levy By-law;~~ *secured market rental housing* or as social housing, if the Director of Planning considers the intent of this schedule, all applicable Council policies and guidelines, and the submission of any advisory group, property owner or tenant;

(c) the permitted floor space ratio to a maximum of 2.00 on sites with a frontage greater than 15.0 m and less than 30.0 m and a minimum site area of 557 m², where the Director of Planning considers the development site to consist of locked in lots and 100% of the residential floor area is either developed as ~~“for-profit affordable rental housing” and is subject to a waiver of development cost levies in accordance with the Vancouver Development Cost Levy By-law;~~ *secured market rental housing* or as social housing, if the Director of Planning considers the intent of this schedule, all applicable Council policies and guidelines, and the submission of any advisory group, property owner or tenant; and

- 4.1.1 For the purposes of this schedule, ~~amenity means 1 or more of the following:~~ *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law.*
- ~~(a) child day care facility;~~
 - ~~(b) community centre or neighbourhood house;~~
 - ~~(c) library;~~
 - ~~(d) museum or archives;~~
 - ~~(e) park or playground;~~
 - ~~(f) plaza;~~
 - ~~(g) public authority use;~~
 - ~~(h) rink;~~
 - ~~(i) social service centre; and~~
 - ~~(j) swimming pool.~~

RM-11 and RM-11N

Districts Schedule

4.1.1 For the purposes of this schedule, *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law. amenity means 1 or more of the following:*

- ~~(a) child day care facility;~~
- ~~(b) community centre or neighbourhood house;~~
- ~~(c) library;~~
- ~~(d) museum or archives;~~
- ~~(e) park or playground;~~
- ~~(f) plaza;~~
- ~~(g) public authority use;~~
- ~~(h) rink;~~
- ~~(i) social service centre; and~~
- ~~(j) swimming pool.~~

RM-12N

District Schedule

4.1.1 For the purposes of this schedule, *amenity has the meaning set out in Schedule F: Affordable Housing Share and Amenity Share Cost Schedule of this by-law. amenity means 1 or more of the following:*

~~(a) child day care facility;~~

~~(b) community centre or neighbourhood house;~~

~~(c) library;~~

~~(d) museum or archives;~~

~~(e) park or playground;~~

~~(f) plaza;~~

~~(g) public authority use;~~

~~(h) rink;~~

~~(i) social service centre; and~~

~~(j) swimming pool.~~

APPENDIX C
CONSULTANT REPORTS

**Financial Analysis Inputs to Update of Target CAC
and Amenity Share Rates**

7 March 2023

Prepared for:
City of Vancouver

By:
coriolis 
CONSULTING CORP.

Table of Contents

1.0	Introduction.....	1
1.1	Background.....	1
1.2	Professional Disclaimer	1
2.0	Existing Target CAC and Amenity Share Rates	2
3.0	Case Study Sites and Approach to Analysis.....	3
3.1	Urban Land Economics Rationale	3
3.2	Approach to Analysis.....	5
3.2.1	CAC Case Study Sites and Development Scenarios	7
3.2.2	Density Bonus Case Study Sites and Development Scenarios	10
4.0	Summary of Key Financial Assumptions	13
5.0	Summary of Results of Financial Analysis	16
5.1	Rates that Should Not Be Increased	16
5.2	Rate Increases to Consider	18
6.0	Other Factors to Consider	20
7.0	Conclusions	21
8.0	Attachments	22
8.1	Strata Apartment Market Data	22
8.2	Townhouse Market Data	24
8.3	Financial Analysis	25

1.0 Introduction

1.1 Background

The City of Vancouver has fixed rate target Community Amenity Contributions (CACs) for residential (or mixed use) rezonings in a number of locations throughout the City. The City also has specific amenity share (density bonus) rates that an applicant is required to provide in order to obtain bonus density that is available in a number of zoning districts.

The target fixed rates and amenity share rates are adjusted for inflation on an annual basis to ensure that the rates reflect changes in the cost to the City of providing amenities identified in the public benefits strategies for each planning area. Periodically, the City also reviews the CAC and amenity share rates in detail to ensure the rates are reflective of the increased value associated with the increase in permitted density in each area.

Staff are completing an update of all of the existing target CAC and amenity share rates.

Therefore, the City retained Coriolis Consulting Corp. to analyze the financial performance of the different types of redevelopment projects permitted to occur each target CAC location and each density bonus zoning district to help identify any adjustments that should be considered. Our work focused on residential rates. Separate work was also completed on the rates for non-residential projects.

This report summarizes the analysis that we completed as input to the City's process. Our work was completed in Q4 2022, so all revenue and cost assumptions used in the analysis are based on market conditions as of late 2022.

1.2 Professional Disclaimer

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

Nothing contained in this report, express or implied, shall confer rights or remedies upon, or create any contractual relationship with, or cause of action in favor of, any third party relying upon this document.

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

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

2.0 Existing Target CAC and Amenity Share Rates

Staff are reviewing all of the existing target fixed rate CACs and existing bonus density (amenity share) rates in the entire City. This section summarizes the existing fixed rates.

The existing rates vary widely because the value of the additional density that is achievable through bonus density or rezoning varies significantly depending on the location of the site and the type of development project.

Exhibit 1 shows the target fixed rate CAC categories and the existing rates.

Exhibit 1: Existing CAC Target Rates by Area (per square foot)

	Existing CAC Target per Square Foot of Increased Density
Southeast False Creek – M-2 Sites up to 3.5 FSR	\$73.79
Cambie Corridor – 4 Storey Residential	\$78.64
Cambie Corridor – 4 Storey Mixed Use	\$21.84
Cambie Corridor – 6 Storey Residential	\$112.49
Cambie Corridor – 6-10 Storey Mixed Use	\$122.32
Little Mountain Adjacent Area – 4-6 Storey Residential	\$51.76
Norquay Village – Kingsway C-2 Sites	\$14.19
Marpole – 6 Storey Residential	\$88.46
Grandview-Woodland – Nanaimo St./ East 12 th Shopping Nodes	\$76.83
Grandview-Woodland – Midrise Multifamily	\$25.61

Source: City of Vancouver

Exhibit 2 shows density bonus zoning districts and the existing amenity share rates.

Exhibit 2: Existing Density Bonus Contribution Rates by Zoning District (per square foot)

	Existing Amenity Share Rate per Square Foot of Bonus Density
Marpole – RM-8/8N – 0.75 FSR to 1.2 FSR	\$21.84
Marpole – RM-9/9N – 0.75 FSR to 2.0 FSR	\$72.68
Cambie Corridor – RM-8A/8AN – 0.75 FSR to 1.2 FSR	\$60.07
Grandview-Woodland – RM-8A/8AN – 0.75 FSR to 1.2 FSR	\$3.67
Grandview-Woodland – RM-11/11N – 0.75 FSR to 1.7 FSR	\$3.67
Grandview-Woodland – RM-12N – 0.75 FSR to 1.7 FSR	\$3.67
Norquay Village – RM-9A/9AN – 0.70 FSR to 2.0 FSR	\$21.29
Joyce-Collingwood – RM-9BN – 0.70 FSR to 2.0 FSR	\$3.84
Joyce-Collingwood – RM-10N – 0.90 FSR to 2.6 FSR	\$16.38
False Creek Flats – FC-2 – 3.0 FSR to 6.5 FSR (Rental Bonus)	\$131.06

Source: City of Vancouver

3.0 Case Study Sites and Approach to Analysis

3.1 Urban Land Economics Rationale

The reason that development projects are able, in financial terms, to provide amenities in exchange for additional development rights is that the additional development rights achieved via rezoning (or bonus density zoning) have value. Otherwise, a developer could not absorb the cost of an amenity contribution.

When a developer acquires a development site, the developer is buying land of course, but in land economics terms the developer is buying the development entitlements that go along with the land (in the form of zoning). The amount a developer is able to pay for a property is in large part a function of the type and amount of development likely to be approved and the anticipated financial performance of that development.

To illustrate how amenity contributions work in land economics terms, Exhibit 3 shows simplified financial analysis for a hypothetical development project (in this case a multifamily residential development) under three different scenarios:

- The first scenario assumes the site is zoned for 30 apartment units.
- The second scenario assumes the site is upzoned to allow 45 apartment units with no amenity contribution.
- The third scenario assumes the site is upzoned to allow 45 apartment units with an amenity contribution of \$75,000 per additional unit (this rate is for illustrative purposes only).

The site is assumed to be an assembly of four existing older single family homes that have a combined market value of about \$7.2 million under existing use (i.e. the value that the lots could be sold to prospective buyers interested in purchasing a single family home). In all three scenarios, the site size, the assumed average selling price of individual units (measured in dollars per square foot), and the assumed construction cost (measured in dollars per square foot) are the same.

An illustrative pro forma is provided in Exhibit 3.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 3: Redevelopment Economics for Hypothetical Strata Apartment Project

Hypothetical Example for Illustrative Purposes Only	Scenario 1	Scenario 2	Scenario 3
	Site zoned for 30 unit MF project	Site up-zoned to 45 units, no amenity contribution	Site up-zoned to 45 units with \$75,000 per additional unit amenity contribution
Revenue (\$1,000,000/unit)	\$30,000,000	\$45,000,000	\$45,000,000
Costs			
Marketing/commissions (5% of revenue)	\$1,500,000	\$2,250,000	\$2,250,000
Hard & Soft Costs (\$600,000 per unit)	\$18,000,000	\$27,000,000	\$27,000,000
Profit Allowance (13% of revenue or 15% of costs)	\$3,900,000	\$5,850,000	\$5,850,000
Cost of rezoning	\$0	\$500,000	\$500,000
Amenity Contribution	\$0	\$0	\$1,125,000
Land Value Supported by Development	\$6,600,000	\$9,400,000	\$8,275,000
Value Under Existing Use	\$7,200,000	\$7,200,000	\$7,200,000
Increase Over Existing Value	negative	\$2,200,000	\$1,075,000
Viable for Redevelopment	no	yes	yes

Scenario 1 is the base case and shows how this project performs, in financial terms, under existing zoning. The developer in this case earns a typical profit margin (calculated as a margin of 13% of revenue) if the developer pays a maximum of \$6.6 million for the site. However, the existing use supports a value of about \$7.2 million (if sold to single family home buyers - and possibly more if the existing homeowners need an incentive to relocate) so the site is not attractive for redevelopment at the required profit margin. It is important to note that this is not always the case as some sites are financially attractive for redevelopment under existing zoning. However, this result is often the situation for assemblies of smaller single family lots in Vancouver so it is a good example for this illustration.

Scenario 2 shows how the project would perform if the site is rezoned to allow a higher density project without providing an amenity contribution. The project is bigger so the total revenue from unit sales, total cost, total profit, and total supportable land value are of course higher. However, it is important to note that the profit margin is the same (13% of revenue). The developer's ability to pay for the property increases to \$9.4 million (or \$2.2 million more than the existing value of \$7.2 million) because it allows a larger project (more density). This is higher than the site's value under existing use, so there is an incentive for the existing owners to sell and the site is now financially attractive for redevelopment.

In this case, the rezoning creates additional density and land value which makes a site viable for redevelopment that was not viable for development under existing zoning (Scenario 1). The question now is whether the project can also support an amenity contribution.

Scenario 3 shows how the project would work if the site is rezoned with an amenity contribution of \$75,000 per additional permitted unit (\$1.125 million in total). The project is now the same size as in Scenario 2, so the sales revenues, development, costs, and profit are the same as in Scenario 2. However, in Scenario 3 the developer provides an amenity contribution as part of the rezoning. In this scenario the developer can now afford to pay \$8.275 million to acquire the site. This illustrates that:

- The project is still financially viable to the developer.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

- The City receives a \$1.125 million amenity contribution as part of the rezoning.
- The developer can afford to pay \$8.275 million, which is higher than the \$7.2 million existing property value. This creates the opportunity for the developer to offer an incentive to the existing homeowners to make their property available for redevelopment.

It is important to note that if the municipality attempted to obtain a significantly higher CAC in Scenario 3 (say \$150,000 per additional unit), then the rezoning would not be financially attractive for the developer.

These scenarios illustrate key points about rezonings and amenity contributions:

1. The payment of the CAC does not change the price of housing (the units in Scenario 3 sell for the same price as in the other scenarios) because prices are set by supply and demand in the marketplace.
2. With the amenity contribution, the rezoning is still attractive to the developer, who earns the same profit margin in Scenarios 2 and 3. The difference is that the developer cannot pay the same amount to the landowner in Scenario 3 as in Scenario 2 (with no amenity contribution).
3. Landowners often require an incentive to sell their property (particularly if the site is not vacant). The cost of the CAC should be less than the additional value created by the rezoning to create an incentive for the property owner to sell to the developer.
4. The additional land value created by a rezoning:
 - Can make redevelopment of a site financially viable when it is not viable under existing zoning.
 - Creates the potential for an amenity contribution.
 - Creates an incentive to the existing owner to sell for the property for redevelopment if the cost of the amenity contribution is set appropriately.
5. The amount of the CAC (or density bonus payment) is limited by the financial performance of the project. CACs should be based on demonstrated community needs (i.e. public benefits strategy) or development impacts, but should not be so high that new projects at sites which are intended to be development candidates are not viable or there is no incentive for landowners to sell their land for redevelopment. The CAC approach should not simply be to “pay the land lift”. The CAC should be based on the increased cost of delivering the amenities and public facilities needed due to densification. However, understanding the land lift is important to ensure that the CAC is financially reasonable.

3.2 Approach to Analysis

To estimate the CAC or density bonus contribution that is supportable by projects in each fixed rate area, we analyzed the financial viability of redevelopment of a wide variety of different case study sites. We selected case studies that are representative of the types of redevelopment projects that are currently subject to target fixed rate CACs or amenity share contributions.

We analyzed the financial viability of redevelopment of a wide variety of sites in different locations under different assumed redevelopment heights, densities and mix of uses. For the project types that will occur on assemblies of single family lots, the case study sites include a range of existing single family lot sizes as the existing value per square foot of site area for single family lots can vary significantly depending on lot size. This change in existing lot size affects the CAC rate (or density bonus contribution) that is supportable by the project.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

We used the financial analysis to model the likely performance of redeveloping each site under the maximum density identified in the Community Plan or under the existing density bonus zoning district. Our analysis assumes that the developer purchases the site at its current market value under existing use and zoning or at the base value in the density bonus district (i.e., the developer does not pay the rezoned value of the site).

The methodology can be broadly summarized in the following steps:

1. We identified case study sites and redevelopment scenarios for the financial analysis. Sites were either vacant or improved with older, low quality improvements, similar to the types of properties that have been the focus of redevelopment in each area. Within CAC target areas and density bonus districts there are different existing uses which can have significantly different existing values (e.g. small single family lot, large single family lot, commercial building). We selected multiple case study sites within some of the fixed rate areas to represent the range of different existing uses. In total we analyzed 36 case study sites for the 20 CAC target areas and density bonus zoning districts. These case studies were agreed upon with the City. Section 3.2.1 provides a detailed description of each case study site and the redevelopment scenarios tested. Exhibit 4 provides a summary of the general location of each of the 36 redevelopment scenarios tested.

Exhibit 4: Summary of Types of Case Study Sites Analyzed

Number Development Scenarios Tested	Cambie Corridor	Marpole	Little Mountain Adjacent Area	SEFC and False Creek Flats	Grandview Woodland	Norquay Village	Joyce Collingwood	Total
Townhouse	4	2	0	0	3	0	0	9
Strata Apartment	4	5	1	0	2	1	2	15
Mixed Use Strata Apartment	5	0	0	1	3	2	0	11
Rental Apartment	0	0	0	1	0	0	0	1
Total	13	7	1	2	8	3	2	36

2. We estimated the existing value of each case study in the absence of any increased permitted density¹ (through rezoning or density bonus zoning). For this estimate, we considered two different values:
 - The value supported by the existing use (i.e., income stream or house value). This included a 20% assembly cost allowance for case study sites that were improved with existing homes to provide the existing homeowner with an incentive to sell their property for redevelopment and realize sufficient proceeds to purchase an alternate house in a nearby neighbourhood.
 - The land value under existing zoning (or the base density in a density bonus district).

The highest of these indicators was used for analysis.

3. Using a proforma (land residual) analysis, we estimated the land value supported by development assuming the site was rezoned to the maximum identified in the Plan (or approved for the maximum permitted FSR in the density bonus district), but without any amenity contribution. If the estimated

¹ For sites already rezoned into density bonus zoning districts, we estimated the value of the property under existing use (usually single family) as the starting existing property value.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

supportable redevelopment land value is higher than site's existing value (step 2), then the site is viable for redevelopment.

4. For the financially viable case study sites, we estimated the increase in value due to the increase in permitted density (estimated value in step 3 less estimated value in step 2).
 - For sites requiring rezoning, the potential CAC amount was calculated at 75% of the increased value (the current target under City practice for negotiated CACs).
 - For sites in density bonus zoning districts (or planned to be rezoned by the City into density bonus districts), the potential amenity share contribution was calculated at 100% of the increased value. In this case the contribution is set at 100% of the increased value because the time, costs, risks and uncertainties associated with rezoning are eliminated. An assumed assembly premium (for residential properties) is included in the estimated existing value so there is already financial room built into the analysis to offer a financial incentive to existing property owners.

For each site, we calculated the equivalent fixed rate CAC or amenity share rate in terms of dollars per square foot of floorspace over the achievable density under existing zoning (or the base density for the sites in the density bonus districts).

5. Different types of redevelopment projects can support different CAC and amenity share contributions. Therefore, in some fixed rate or density bonus locations, we analyzed a variety of different potential redevelopment scenarios which varied based on existing lot sizes, existing uses and permitted redevelopment opportunities (height, density, mix of uses). So our analysis produced a range of different estimates of the supportable fixed rate (CAC or amenity share) in these locations. As a final step, we worked with City staff to identify the case study scenarios that best represent the types of redevelopment opportunities remaining in each location. This allowed us to identify the case study scenarios that best represent the rate that is likely supportable by the types of redevelopment opportunities remaining in each location.

3.2.1 CAC Case Study Sites and Development Scenarios

There are ten different target CAC categories/locations for residential rezonings in the City. Some categories include a variety of different type of rezoning opportunities that vary based on existing property characteristics (lot size, zoning, existing use) and different rezoning opportunities (density, mix of uses). So we analyzed multiple scenarios in some locations. In total, we analyzed 20 different CAC target scenarios in different parts of the City.

Site 1a – 4 Storey Strata Apartment Cambie Corridor

This site is an assembly of three older single detached homes in the Langara area on lots that average about 6,800 square feet which are zoned RS-1. Under the Cambie Corridor Plan the site can be redeveloped to 4 storey strata apartment at 2.0 FSR.

Site 1b – 4 Storey Strata Apartment Cambie Corridor

This site is an assembly of four older single detached homes in the Oakridge Town Centre area on lots that average about 3,700 square feet which are zoned RS-1. Under the Cambie Corridor Plan the site can be redeveloped to 4 storey strata apartment at an FSR of 1.75.

Site 1c – 4 Storey Strata Apartment Cambie Corridor

This site is an assembly of three older single detached homes in the Queen Elizabeth area on lots that average about 7,450 square feet which are zoned RS-1. Under the Cambie Corridor Plan the site can be redeveloped to 4 storey strata apartment at an FSR of 2.0.

Site 2 – 4 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of five older single detached homes in the Langara area on lots that average about 4,350 square feet which are zoned RS-1. Under the Cambie Corridor Plan the site can be redeveloped to 4 storey strata mixed use apartment at an FSR of 2.5.

Site 3 – 6 Storey Strata Apartment Cambie Corridor

This site is an assembly of three older duplex buildings in the Oakridge Town Centre area on lots that average about 8,200 square feet which are zoned RT-2. Under the Cambie Corridor Plan the site can be redeveloped to 6 storey strata residential apartment at an FSR of 2.5.

Site 4a – 8 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of 2 older duplex buildings in the Oakridge Town Centre area on lots that average about 10,100 square feet which are zoned RT-2. Under the Cambie Corridor Plan the site can be redeveloped to 8 storey strata mixed use apartment with office space at an FSR of 3.25.

Site 4b – 10 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of three older single detached homes in the Langara area on lots that average about 7,250 square feet which are zoned RS-1. Under the Cambie Corridor Plan the site can be redeveloped to 10 storey strata mixed use apartment at an FSR of 3.5.

Site 4c – 6 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of older commercial properties in the Cambie Village area. The site is zoned C-2 (2.5 FSR), but under the Cambie Corridor Plan it can be redeveloped to 6 storey strata mixed use apartment at an FSR of 3.0.

Site 4d – 6 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an older commercial property in the Marpole area. The site is zoned C-1 (1.2 FSR), but under the Cambie Corridor Plan the site can be redeveloped to 6 storey strata mixed use apartment at an FSR of 3.0.

Site 5 – 4 to 6 Storey Strata Apartment Little Mountain Adjacent Area

This site is an assembly of six older single detached homes on lots that average about 3,650 square feet which are zoned RS-1. Under the Little Mountain Adjacent Area Policy the site can be redeveloped to 4-6 storey strata residential apartment at an FSR of 2.3.

Site 6a – 6 Storey Strata Apartment Marpole

This site is an assembly of four older single detached homes in the Oak sub-area on lots that average about 5,650 square feet which are zoned RS-1. Under the Marpole Plan the site can be redeveloped to 6 storey strata residential apartment at an FSR of 2.5.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Site 6b – 6 Storey Strata Apartment Marpole

This site is an assembly of four older single detached homes in Marpole on lots that average about 4,200 square feet which are zoned RS-1. Under the Plan the site can be redeveloped to 6 storey strata apartment at an FSR of 2.5.

Site 6c – 6 Storey Strata Apartment Marpole

This site is an assembly of three older single detached homes in Marpole on lots that average about 6,000 square feet which are zoned RS-1. Under the Marpole Plan the site can be redeveloped to 6 storey strata apartment at an FSR of 2.5.

Site 7a – Midrise Concrete Mixed Use Strata Apartment at 3.8 FSR Norquay

This site is an assembly of commercial properties along Kingsway in Norquay Village. The site is zoned C-2 (2.5 FSR), but under the Norquay Plan, the site can be rezoned to 12 storey midrise mixed-use at a density of 3.8 FSR.

Site 7b – Midrise Concrete Mixed Use Strata Apartment at 3.8 FSR Norquay

This site is an assembly of four older single detached homes along Kingsway on lots that average about 3,500 square feet which are zoned RT-2. Under the Norquay Plan, the site can be rezoned to 12 storey midrise mixed-use at a density of 3.8 FSR.

Site 8 – 6 Storey Strata Apartment Grandview Woodland

This site is an assembly of five older single detached homes in the Commercial Broadway Station Precinct on lots that average about 4,000 square feet which are zoned RS-1. Under the Grandview Woodland Community Plan the site can be redeveloped to 6 storey apartment at an FSR of 2.65.

Site 9a – 6 Storey Mixed Use Strata Apartment Grandview Woodland

This site is an older commercial property without existing rental units in the Nanaimo sub-area. The site is zoned C-1 (1.2 FSR), but under the Grandview Woodland Community Plan the site can be redeveloped to 6 storey mixed use at an FSR of 3.2.

Site 9b – 6 Storey Mixed Use Strata Apartment Grandview Woodland

This site is an assembly of three older single detached homes in the Commercial Broadway Station Precinct on lots that average about 4,350 square feet which are zoned RS-1. Under the Grandview Woodland Community Plan the site can be redeveloped to 6 storey mixed use at an FSR of 3.2.

Site 9c – 6 Storey Mixed Use Strata Apartment Grandview Woodland

This site is an assembly of commercial properties with 3 existing rental units. The site is zoned C-1 (1.2 FSR), but under the Grandview Woodland Community Plan the site can be redeveloped to 6 storey mixed use apartment at an FSR of 3.2.

Site 10 – Midrise Concrete Mixed Use Strata Apartment Project at 3.5 FSR Southeast False Creek

This site is an older service commercial property that is zoned M-2. Under the Southeast False Creek Official Development Plan the site can be redeveloped to midrise mixed use apartment at an FSR of 3.5.

3.2.2 Density Bonus Case Study Sites and Development Scenarios

There are ten different amenity share rates for bonus density in the different density bonus zoning districts in the City. Some bonus density districts include a variety of different types of redevelopment opportunities which vary based on existing property characteristics (lot size, use) and different redevelopment densities. So we analyzed multiple scenarios in some districts. In total, we analyzed 16 different density bonus scenarios.

Site 11a – RM-8/8N Strata Townhouse at 1.2 FSR Marpole

This site is an assembly of three older single detached homes in the Granville sub-area on lots that average about 6,050 square feet which are zoned RM-8. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 11b – RM-8/8N Strata Townhouse at 1.2 FSR Marpole

This site is an assembly of six older single detached homes in the Granville sub-area on lots that average about 3,400 square feet which are zoned RM-8. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 12a – 4 Storey RM-9 Strata Apartment Marpole

This site is an assembly of three older single family homes in the Cambie sub-area on lots that average about 5,500 square feet which are zoned RM-9. The base density is 0.75 FSR with the opportunity for bonus density up to 2.0 FSR. So the site can be redeveloped to 4 storey strata apartment at an FSR of 2.0.

Site 12b – 4 Storey RM-9 Strata Apartment Marpole

This site is an assembly of five older single family homes in the Cambie sub-area on lots that average about 4,900 square feet which are zoned RM-9. The base density is 0.75 FSR with the opportunity for bonus density up to 2.0 FSR. So the site can be redeveloped to 4 storey strata apartment at an FSR of 2.0.

Site 13a – RM-8A/8AN Strata Townhouse at 1.2 FSR Cambie Corridor

This site is an assembly of three older single family homes in the Oakridge Town Centre area on lots that average about 8,750 square feet. Under the Cambie Corridor Plan the site can be rezoned into the RM-8A District. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 13b – RM-8A/8AN Strata Townhouse at 1.2 FSR Cambie Corridor

This site is an assembly of three older single family homes in the Langara area on lots that average about 4,000 square feet which are zoned RM-8A. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 13c – RM-8A/8AN Strata Townhouse at 1.2 FSR Cambie Corridor

This site is an assembly of three older single family homes in the Queen Elizabeth area on lots that average about 6,250 square feet that are zoned RM-8A. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Site 13d – RM-8A/8AN Strata Townhouse at 1.2 FSR Cambie Corridor

This site is an assembly of three older single family homes in the Oakridge Town Centre area on lots that average about 7,700 square feet which are zoned RM-8A. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 14 – RM-8A/8AN Strata Townhouse at 1.2 FSR Grandview Woodland

This site is an assembly of six older single family homes in the Grandview sub-area zoned on lots that average about 4,000 square feet which are zoned RM-8A. The base density is 0.75 FSR with the opportunity for bonus density up to 1.2 FSR. So the site can be redeveloped as townhouse at an FSR of 1.2.

Site 15 – RM-11/11N 4 Storey Strata Apartment Grandview Woodland

This site is an assembly of six older single family homes in the Grandview sub-area on lots that average about 4,000 square feet which are zoned RM-11. The base density is 0.75 FSR with the opportunity for bonus density up to 1.7 FSR. So the site can be redeveloped to 4 storey strata apartment at an FSR of 1.7.

Site 16a – RM-12N Stacked Strata Townhouse at 1.45 FSR Grandview Woodland

This site is an assembly of three older single family homes in the Nanaimo sub-area on lots that average about 3,150 square feet which are zoned RM-12. The base density is 0.75 FSR with the opportunity for bonus density up to 1.45 FSR². So the site can be redeveloped to 4 storey townhouse at an FSR of 1.45.

Site 16b – RM-12N Stacked Strata Townhouse at 1.45 FSR Grandview Woodland

This site is an assembly of four older single family homes in the Nanaimo sub-area on lots that average about 6,350 square feet which are zoned RM-12. The base density is 0.75 FSR with the opportunity for bonus density up to 1.45 FSR. So the site can be redeveloped to 4 storey townhouse at an FSR of 1.45.

Site 17 – RM-9A/9AN 4 Storey Strata Apartment Norquay Village

This site is an assembly of four older single family homes on lots that average about 4,200 square feet which are zoned RM-9A. The base density is 0.7 FSR with the opportunity for bonus density up to 2.0 FSR. So the site can be redeveloped to 4 storey strata apartment at an FSR of 2.0.

Site 18 – RM-9B/9BN 4 Storey Strata Apartment Joyce Collingwood

This site is an assembly of three older single family homes on lots that average about 4,850 square feet which are zoned RM-9B. The base density is 0.7 FSR with the opportunity for bonus density up to 2.0 FSR. So the site can be redeveloped to 4 storey strata apartment at an FSR of 2.0.

Site 19 – RM-10/10N 6 Storey Strata Apartment Joyce Collingwood

This site is an assembly of five older single family homes on lots that average about 4,400 square feet which are zoned RM-10N. The base density is 0.9 FSR with the opportunity for bonus density up to 2.6 FSR. So the site can be redeveloped to 6 storey strata apartment at an FSR of 2.6.

² This can be further increased to 1.7 FSR in the RM-12 District for hybrid townhouse/apartment projects.

Site 20 – FC-2 Additional Rental Concrete Density False Creek Flats

This site is an older industrial property zoned FC-2. This district has a base density of 3.0 FSR for employment accommodating uses (stacked industrial). In Subarea E, an applicant can apply for up to 3.5 FSR of bonus density if it is used for rental apartment and the required amenity share contribution is provided.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

4.0 Summary of Key Financial Assumptions

Exhibit 5 summarizes the assumptions for the target CAC rate development scenarios, including average unit sales prices (including parking and storage), lease rates, hard construction costs and the all-in project cost excluding land acquisition and amenity/bonus density contributions (which would vary from site to site). All figures are rounded.

Exhibit 5: Key Assumptions for CAC Target Case Study Sites and Scenarios

Site Number	Plan Area/ Location	Assumed Development Scenario	Residential Sales Prices psf	Net Commercial Lease Rates (psf)	Hard Construction Costs psf ³	All In Project Costs psf ⁴
1a	Cambie Corridor	4 Storey Concrete Strata Residential Apartment at 2.0 FSR	\$1,600	n/a	\$570	\$880
1b	Cambie Corridor	4 Storey Stacked Townhouse at 1.75 FSR	\$1,450	n/a	\$525	\$840
1c	Cambie Corridor Plan	4 Storey Concrete Strata Residential Apartment at 2.0 FSR	\$1,600	n/a	\$570	\$880
2	Cambie Corridor Plan	4 Storey Concrete Mixed Use Strata Residential Project at 2.50 FSR	\$1,600	\$42.50 Retail	\$560	\$855
3	Cambie Corridor Plan	6 Storey Concrete Strata Residential Apartment at 2.46 FSR ⁵	\$1,600	n/a	\$570	\$880
4a	Cambie Corridor Plan	8 Storey Concrete Mixed Use Strata Residential Project at 3.25 FSR with Office	\$1,600	\$42.50 Retail \$42.50 Office	\$550	\$845
4b	Cambie Corridor Plan	10 Storey Concrete Mixed Use Strata Residential Project at 3.5 FSR	\$1,600	\$42.50 Retail	\$560	\$855
4c	Cambie Corridor Plan	6 Storey Concrete Mixed Use Strata Residential Project at 3.0 FSR	\$1,600	\$42.50 Retail	\$560	\$865
4d	Cambie Corridor Plan	6 Storey Concrete Mixed Use Strata Residential Project at 3.0 FSR	\$1,575	\$42.50 Retail	\$560	\$860
5	Little Mountain Adjacent Area	6 Storey Woodframe Strata Residential Apartment at 2.3 FSR	\$1,400	n/a	\$465	\$745
6a	Marpole Plan	6 Storey Concrete Strata Residential Apartment at 2.50 FSR	\$1,550	n/a	\$570	\$875
6b	Marpole Plan	6 Storey Concrete Strata Residential Apartment at 2.50 FSR	\$1,475	n/a	\$570	\$875
6c	Marpole Plan	6 Storey Concrete Strata Residential Apartment at 2.50 FSR	\$1,550	n/a	\$570	\$875
7a	Norquay Plan	Midrise Concrete Mixed Use Strata Residential Project at 3.8 FSR	\$1,300	\$37.50 Retail	\$525	\$795
7b	Norquay Plan	Midrise Concrete Mixed Use Strata Residential Project at 3.8 FSR	\$1,300	\$37.50 Retail	\$525	\$795
8	Grandview Woodland	6 Storey Woodframe Strata Residential Apartment at 2.5 FSR	\$1,250	n/a	\$440	\$700
9a	Grandview Woodland	6 Storey Woodframe Mixed Use Strata Residential Project at 3.2 FSR	\$1,250	\$40 Retail	\$450	\$705
9b	Grandview Woodland	6 Storey Woodframe Mixed Use Strata Residential Project at 3.2 FSR	\$1,250	\$40 Retail	\$450	\$705
9c	Grandview Woodland	6 Storey Woodframe Mixed Use Strata Residential Project at 3.2 FSR	\$1,250	\$40 Retail	\$450	\$705
10	Southeast False Creek	Midrise Concrete Mixed Use Strata Residential Project at 3.5 FSR	\$1,750	\$45 Retail	\$570	\$905

³ Includes servicing, landscape and contingency allowance.

⁴ All-in costs exclude land acquisition and any amenity or bonus density contributions.

⁵ City staff indicated that the maximum density at this site would likely be 2.46 FSR.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 6 summarizes the assumptions for density bonus zoning district development scenarios, including average unit sales prices (including parking and storage), lease rates, hard construction costs and the all-in project cost excluding land acquisition and amenity/bonus density contributions (which would vary from site to site). All figures are rounded.

Exhibit 6: Key Assumptions for Density Bonus Case Study Sites and Scenarios

Site Number	Plan Area/ Location	Assumed Development Scenario	Residential Completed Value per Sq Ft	Hard Construction Costs per Sq Ft ⁶	All In Project Costs per Sq Ft ⁷
11a	Marpole Plan	RM-8/8N Strata Townhouse with Underground Parking at 1.2 FSR	\$1,400	\$530	\$820
11b	Marpole Plan	RM-8/8N Strata Townhouse with Underground Parking at 1.2 FSR	\$1,400	\$530	\$820
12a	Marpole Plan	4 Storey Concrete Strata Residential Apartment at 2.0 FSR	\$1,575	\$575	\$870
12b	Marpole Plan	4 Storey Concrete Strata Residential Apartment at 2.0 FSR	\$1,575	\$570	\$865
13a	Cambie Corridor Plan	RM-8A/8AN Strata Townhouse with Underground Parking at 1.2 FSR	\$1,450	\$530	\$820
13b	Cambie Corridor Plan	RM-8A/8AN Strata Townhouse with Underground Parking at 1.2 FSR	\$1,450	\$525	\$835
13c	Cambie Corridor Plan	RM-8A/8AN Strata Townhouse with Underground Parking at 1.2 FSR	\$1,450	\$525	\$820
13d	Cambie Corridor Plan	RM-8A/8AN Strata Townhouse with Underground Parking at 1.2 FSR	\$1,450	\$530	\$820
14	Grandview Woodland	RM-8A/8AN Strata Townhouse with Surface Parking at 1.2 FSR	\$1,200	\$385	\$625
15	Grandview Woodland	RM-11/11N Apartment at 1.7 FSR	\$1,250	\$445	\$710
16a	Grandview Woodland	RM-12N Strata Stacked Townhouse at 1.45 FSR	\$1,200	\$455	\$730
16b	Grandview Woodland	RM-12N Strata Stacked Townhouse at 1.45 FSR	\$1,175	\$445	\$690
17	Norquay Plan	RM-9A/9AN 4 Storey Woodframe Strata Residential Apartment at 2.0 FSR	\$1,200	\$445	\$695
18	Joyce Collingwood	RM-9BN 4 Storey Woodframe Strata Residential Apartment at 2.0 FSR	\$1,150	\$445	\$690
19	Joyce Collingwood	RM-10N 6 Storey Woodframe Strata Residential Apartment at 2.6 FSR	\$1,150	\$445	\$680
20	False Creek Flats	FC-2 Additional Concrete Rental Density from 3.0 to 6.5 FSR	\$1,115	\$505	\$705

The overall project costs shown in the exhibit exclude land and amenity contributions. The costs include allowances for rezoning costs, demolition, servicing, professional fees, soft costs, development management, marketing, leasing, commissions, tenant inducements, financing, property taxes, transfer taxes, development cost levies, regional development cost charges, and contingency. In addition, some specific additional costs are included in the analysis:

1. An allowance for on-site rainwater management as provided by City staff.
2. An allowance for utilities relocation (for residential sites) as provided by City staff, assuming 50% of this cost is recovered through a latecomer agreement.
3. The proposed new Metro Vancouver Water DCC (this is not yet in effect).
4. The City's scheduled DCC rate increases as of September 2023.

⁶ Includes servicing, landscape and contingency allowance.

⁷ All-in costs exclude land acquisition and any amenity or bonus density contributions.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

To estimate the supportable land value for each scenario, a developer's profit margin of 15% of project costs (including the estimated supportable land value) is included. The profit margin used in the rental scenario (FC-2 district) is 10% on project costs.

5.0 Summary of Results of Financial Analysis

The supportable CAC or amenity share rate can vary from site to site within the same rate category depending on the characteristics of the specific property, such as existing lot sizes (for single family lots), the land value supported by the existing zoning, the uses included in the redevelopment project, and the amount of additional density that is permitted.

So, after we completed the analysis for each case study scenario, we identified the case study scenarios that best represent the types of properties remaining for redevelopment in each rate category and each location. This allowed us to narrow down the number of scenarios to consider when evaluating whether or not an existing rate should be considered for an increase.

When there was more than one remaining case study scenario to consider for a given rate, we focused on the case study scenario that supported the lower rate, not the higher rate. Using the lower end of the estimated supportable rates helps ensure that there are a significant number of properties in any given location that are financially viable for redevelopment. It should be noted that some sites would be able to support a higher rate than outlined in this section.

This section summarizes our findings. We separated the findings into two categories:

- Rates that should not be increased.
- Rates that could be considered for an increase.

Because of the large number of sites and scenarios analyzed, we have not included the detailed proformas in this report for every scenario. However, we have included the proformas (in the attachments) for the case study scenarios that are the basis for any suggested target CAC or amenity share rate increases.

5.1 Rates that Should Not Be Increased

Based on our analysis, the existing rates should not be increased for six of the ten existing target CAC rate categories. For these target CAC rate categories:

- The estimated supportable CAC rate⁸ (at 75% of estimated increase in land value) is not higher than the current CAC rate (after accounting for the assumed 20% assembly cost allowance for single family and duplex properties).
- However, the land value supported by the rezoning concept under the current target CAC rate is higher than the estimated existing zoned value⁹. Therefore, redevelopment should be viable at the existing rate, assuming properties can be acquired closer to the value supported by the existing zoning¹⁰.

⁸ For the case study scenarios that are representative of the remaining rezoning opportunities in each location.

⁹ For these rates, our analysis indicates that the rezoned land value will be higher than the existing zoned value so redevelopment is financially viable under the current rate. However, our analysis indicates the existing rate should not be increased because our analysis allocates 25% of any land lift to the applicant and because we have included a 20% assembly premium on the existing value for residential lots. These assumptions reduce the estimated supportable target CAC rate.

¹⁰ This means there is less room for developers to offer a financial incentive (assembly premium) to existing property owners when acquiring sites.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

- Rezoning and redevelopment has been occurring in these locations, which indicates that redevelopment is viable under the existing rate.

Exhibit 7 shows the target CAC rates should not be increased.

Exhibit 7: Target CAC Rates with No Financial Room for an Increase

Plan Area/ Location	Rezoning Description	Typical Existing Use	Existing Target CAC Rate PSF
Cambie Corridor	4 Storey Apartment at 2.0 FSR	Single Family Lots	\$78.64
Cambie Corridor	6 Storey Apartment at 2.5 FSR	Duplex Lots	\$112.49
Cambie Corridor	6 to 10 Storey Mixed Use Apartment at 3.0 to 3.5 FSR	Single family, Duplex or Commercial	\$122.32
Marpole	6 Storey Apartment at 2.5 FSR	Single Family Lots	\$88.46
Little Mountain	4 to 6 Storey Apartment	Single Family Lots	\$51.76
Grandview Woodland	6 Storey Mixed Use Apartment at 3.2 FSR	Commercial	\$76.83

Based on our analysis, the existing amenity share rates should not be increased in eight of the ten zoning districts with amenity share rates. For the case study scenarios that incorporate these amenity share rates:

- The estimated supportable amenity share rate (at 100% of estimated increase in land value due to the bonus density) is not higher than the current rate (after accounting for the assumed 20% assembly cost allowance on single family and duplex lots).
- However, in most cases, the estimated supportable land value under the current amenity share rate is higher than the estimated value at the base density (or existing use)¹¹. Therefore, in most of these density bonus zoning districts, redevelopment should be viable under the existing amenity share rate, assuming properties can be acquired close to the value supported by the existing use or the base density¹². The possible exceptions are:
 - The RM-11 District in Grandview Woodland. The remaining lots in this area tend to be small (and valuable per square foot) which makes redevelopment challenging at the maximum permitted density of 1.7 FSR. However, the existing amenity share rate is very low already (\$3.67 per square foot of bonus density).
 - The RM-9 District in Joyce-Collingwood. The remaining lots in this area tend to be small (and valuable per square foot) which makes redevelopment challenging at the maximum permitted density of 2.0 FSR. However, the existing amenity share rate is very low already (\$3.67 per square foot of bonus density).
 - The RM-9 District in Norquay. The remaining lots in this area tend to be small (and valuable per square foot) which makes redevelopment challenging at the maximum permitted density of 2.0 FSR.

¹¹ For most of these rates, our analysis indicates that the redevelopment land value will be higher than the existing use value so redevelopment is financially viable under the current amenity share rate. However, our analysis indicates the existing rate should not be increased because our analysis includes a 20% assembly premium on the existing value for residential lots. This assumption reduces the estimated supportable amenity share rate.

¹² This means there is less room for developers to offer a financial incentive to existing property owners (assembly premium) when acquiring sites.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

- Redevelopment has been occurring in these density bonus districts, which indicates that development is viable under the existing amenity share rate.

Exhibit 8 shows the amenity share rates that should not be increased.

Exhibit 8: Amenity Share Rates with No Financial Room for an Increase

Plan Area/ Location	Density Bonus District and Description	Typical Existing Use	Existing Amenity Share Rate PSF
Marpole Plan	RM-8/8N – Townhouse 0.75 FSR to 1.2 FSR	Single Family Lots	\$21.84
Marpole Plan	RM-9/9N – Apartment 0.75 FSR to 2.0 FSR	Single Family Lots	\$72.68
Grandview Woodland	RM-8A/8AN – Townhouse 0.75 FSR to 1.2 FSR	Single Family Lots	\$3.67
Grandview Woodland	RM-11/11N – Apartment 0.75 FSR to 1.7 FSR	Single Family Lots	\$3.67
Grandview Woodland	RM-12N – Stacked Townhouse 0.75 FSR to 1.7 FSR ¹³	Single Family Lots	\$3.67
Norquay Plan	RM-9A/9AN – Apartment 0.70 FSR to 2.0 FSR	Single Family Lots	\$21.29
Joyce Collingwood	RM-9BN – Apartment 0.70 FSR to 2.0 FSR	Single Family Lots	\$3.84
Joyce Collingwood	RM-10N – Apartment 0.90 FSR to 2.6 FSR	Single Family Lots	\$16.38

5.2 Rate Increases to Consider

Our analysis indicates that:

- Four of the ten existing target CAC rates could be considered for an increase.
- Two of the ten existing amenity share rates could be considered for an increase.
- A new CAC rate category could be considered for 6 storey mixed use rezonings in the Cambie Corridor area to the north of King Edward Avenue. These sites are currently included in the Cambie Corridor 6 to 10 storey mixed use rate category. The remaining development sites in this rate category to the north of King Edward are zoned C-2 while the remaining sites to the south of King Edward are zoned C-1, RS and RT. Therefore, because of the differences in existing zoning, rezoning supports a significantly different CAC rate in these two different subareas.

Exhibits 9 and 10 identify the rate categories that could be considered to be increased. The detailed financial analysis for the case study scenarios that correspond with these rate categories are included in the attachments.

¹³ The RM-12 District allows up to 1.7 FSR for hybrid townhouse/apartment projects.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 9: Target CAC Rates to Consider for a Rate Increase

Case Study Number	Plan Area/ Location	Category	Existing Rate PSF over Base Density	Estimated Supportable CAC Rate PSF over Base Density
2	Cambie Corridor	4 Storey Mixed Use at 2.5 FSR	\$21.84	\$30
4c	Cambie Corridor*	6 Storey Mixed Use at 3.0 to 3.5 FSR (C-2 sites)	\$122.32	\$185
7a	Norquay Village	Midrise Mixed Use at 3.8 FSR	\$14.19	\$30
8	Grandview Woodland	6 Storey Apartment at 2.65 FSR	\$25.61	\$40
10	Southeast False Creek	Midrise Mixed Use at 3.5 FSR	\$73.79	\$95

Note: * this would require a new rate category for C-2 sites north of King Edward Avenue

Exhibit 10: Summary of Analysis for Density Bonus Case Study Sites with Room for Increase

Case Study Number	Plan Area/ Location	Category	Existing Rate PSF over Base Density	Estimated Supportable Amenity Share Rate PSF over Base Density
13d	Cambie Corridor	RM-8A/8AN District: 0.75 to 1.2 FSR Townhouse	\$21.84	\$85
20	False Creek Flats	FC-2 District: 3.0 to 6.5 FSR for Rental Density	\$122.32	\$140

6.0 Other Factors to Consider

In addition to the results of the financial analysis, there are other factors that the City should consider when setting or adjusting fixed rates, including:

1. Each project has the ability to support a different fixed rate CAC depending on a variety of factors such as location, existing lot size (for single family lots), existing zoning, permitted redevelopment FSR, permitted height, servicing costs, and mix of use. Therefore, it is challenging to select a specific rate that is supportable by all sites.
2. Because the fixed rate (like any other development cost) affects the amount that a developer can afford to pay for land, the rate that is established will affect the number of sites that are financially attractive for redevelopment. A higher rate reduces the number of sites that are attractive for redevelopment while a lower rate increases the number of sites that are financially attractive for redevelopment.
3. The rate that is selected should be low enough that it is supportable by a significant number of sites that are intended to be redevelopment sites in the foreseeable future. Otherwise, the rate will restrict the number of sites that are attractive for development which can slow the pace of development and the supply of new units. Reduced supply in the face of continued demand will lead to market wide price increases.
4. Any increase in existing target fixed rate CACs will have a downward influence on the existing value of development sites so increases in a fixed rate will negatively affect existing land value.
5. The rates that are selected should reflect the cost of delivering the amenities and public facilities required in the study area due to the increased densification (and population). The rates should not exceed the level that is required to fund the required amenities and facilities.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

7.0 Conclusions

Based on our analysis, 14 of the 20 existing target CAC and amenity share rates should not be increased¹⁴.

We identified four existing target CAC rates and two amenity share rates that could be considered for an increase. In addition, we identified one new CAC rate category that could be created in the Cambie Corridor (by dividing an existing rate category into two categories).

Based on our case study financial analysis, the City could consider the rate increases shown in Exhibit 11.

Exhibit 11: Rate Increases to Consider by Category

Plan Area	Category	Existing Rate PSF	Suggested Rate ¹⁵ PSF to Consider	Type of Rate
Cambie Corridor	4 Storey Mixed Use at 2.5 FSR	\$21.84	\$30	Target CAC Rate
Cambie Corridor*	6 Storey Mixed Use at 3.0 to 3.5 FSR (C-2 Sites)	\$122.32	\$185	Target CAC Rate
Cambie Corridor	RM-8A/8AN District: 0.75 to 1.2 FSR Townhouse	\$21.84	\$85	Amenity Share Rate
Grandview Woodland	6 Apartment at 2.65 FSR	\$25.61	\$40	Target CAC Rate
Southeast False Creek	Midrise Mixed Use at 3.5 FSR	\$73.79	\$95	Target CAC Rate
False Creek Flats	FC-2 District: 3.0 to 6.5 FSR for Rental Density	\$122.32	\$140	Amenity Share Rate
Norquay Village	Midrise Mixed Use at 3.8 FSR	\$14.19	\$30	Target CAC Rate

Note: * this would require a new rate category for C-2 sites north of King Edward Avenue

These suggested rates are one input to determining appropriate rates for rezonings or density bonus districts. When establishing or adjusting rates, the City should also consider:

1. The estimated cost of delivering public benefits in the planning area.
2. Other planning objectives for the study area, such as the intended pace of development for specific housing types.
3. The impact on development viability of any other City policy changes that are being considered concurrently.

If the existing rates are changed or new rates are implemented, the City should ensure that all stakeholders (property owners, real estate industry professionals, developers, etc.) are aware of the proposed changes to the existing policy. In addition, developers should be given significant notice before any changes are implemented. This will give applicants that have already purchased property the opportunity to make an application under the existing rates without facing increased costs for CACs or density bonus contributions.

¹⁴ Consideration could also be given to divide one of these existing rate categories into two separate categories, each with different CAC rates.

¹⁵ Rates are applied to additional FSR beyond current zoning (or base density in bonus density zoning districts).

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

8.0 Attachments

8.1 Strata Apartment Market Data

Using independent market data from Zonda Urban, we examined pricing at 28 apartment projects that were marketing new strata apartment units in Vancouver as of November 2022. We focused on projects that had commenced marketing recently as well as projects that are located near existing target CAC rate locations and density bonus zoning districts. We excluded some projects that are outliers in terms of pricing (either unusually high pricing or low pricing).

We also supplemented this information with resale data (MLS) for units at newer buildings (not shown in this attachment).

8.1.1 West Side Concrete Strata Apartment Projects

This section summarizes the pricing for strata apartment projects on the West Side of Vancouver.

Exhibit 12: West Side Strata Apartment Projects Currently Marketing

Project Name	Address	Subarea	Total Units	Units Sold	Avg \$PSF	Date Started Marketing
Park Langara	6859 Cambie Street	Central Cambie Corr.	71	59	\$1,514	17/02/2022
Claridge House	5740 Cambie Street	Central Cambie Corr.	133	105	\$1,805	31/01/2022
Lina at QE Park	5190-5226 Cambie Street	Central Cambie Corr.	80	64	\$1,552	05/10/2021
Savoy at Queen Elizabeth Park	4238-4262 Cambie Street	Central Cambie Corr.	64	44	\$1,581	07/07/2021
RIAA In The Park	485 West 35th Avenue	Central Cambie Corr.	16	3	\$1,684	26/02/2021
Cambie Gardens (West Tower)	7433 Cambie Street	Central Cambie Corr.	184	129	\$1,594	9/11/2018
Cambie Gardens (East Tower)	500-650 West 57th Avenue	Central Cambie Corr.	124	105	\$1,623	31/05/2018
Legacy on Dunbar	3596 W 28th Avenue	Dunbar	48	34	\$1,879	02/10/2020
The Fifteen	5520 Dunbar Street	Dunbar	15	1	\$1,788	26/3/2020
Form	1558 W 6th Ave	Fairview	51	22	\$1,950	06/06/2022
5656 Balaclava	Balaclava Street and W 41st Avenue	Kerrisdale	79	11	\$1,894	03/11/2022
Carven	6020 East Boulevard	Kerrisdale	46	0	\$2,011	12/08/2022
Elm41	2465 W 41st Ave	Kerrisdale	23	3	\$1,813	15/07/2022
Chloe	6310 East Boulevard	Kerrisdale	46	30	\$1,847	19/06/2021
Kitsilano Block	2803 W 4th Ave	Kitsilano	59	35	\$1,814	01/04/2022
The Arbutus	2888 Arbutus Street	Kitsilano	20	14	\$1,660	27/18/2019
Gryphon Nova	989 W 67th Avenue	Marpole	43	26	\$1,564	09/11/2021
Oku	8080 Oak Street	Marpole	132	82	\$1,414	04/09/2021
Oakmont Vancouver	8486 Oak Street	Marpole	42	25	\$1,430	14/08/2021
Raphael	3688 West 10th Ave	Point Grey	35	29	\$1,720	24/04/2021
Tesoro	1601 Quebec Street	SEFC	92	55	\$1,915	31/07/2020

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Average unit pricing at these new west side apartment projects can be summarized as follows:

- \$1,414 to \$1,564 per square foot at projects in Marpole. These prices guided our assumptions for the Marpole case study scenarios.
- \$1,515 to \$1,805 per square foot at projects in the Cambie Corridor. These prices guided our assumptions for the Cambie case study scenarios.
- \$1,660 to \$1,950 per square foot at projects in other west side locations. These prices were considered for our pricing assumptions for other west side case study scenarios (such as SEFC), along with MLS resales data.

8.1.2 East Side Woodframe Strata Apartment Projects

This section summarizes the pricing for woodframe strata apartment projects on the East Side of Vancouver.

Exhibit 13: East Side Woodframe Strata Apartment Projects Currently Marketing

Project Name	Address	Subarea	Total Units	Units Sold	Avg \$PSF	Date Started Marketing
2550 Garden Drive	2550 Garden Drive	Renfrew	69	10	\$1,280	01/10/2022
V on E49	1969-1973 East 49th Avenue	Knight/Victoria Corridor	26	2	\$1,250	09/09/2022
The Grant	2419 Grant Street	Knight/Victoria Corridor	33	7	\$1,174	11/06/2022
Ace on the Drive	1650 E 12th Avenue	Knight/Victoria Corridor	61	20	\$1,276	14/05/2022
Linx	2246-2268 East Broadway	Knight/Victoria Corridor	54	49	\$1,186	24/02/2022
Grafia	2406-2488 Garden Drive	Knight/Victoria Corridor	122	91	\$1,170	26/11/2021

Average unit pricing at these new east side woodframe apartment projects ranges between about \$1,170 and \$1,280 per square foot.

8.1.3 East Side Concrete Strata Apartment Projects

This section summarizes the pricing for concrete strata apartment projects on the East Side of Vancouver.

Exhibit 14: East Side Concrete Strata Apartment Projects Currently Marketing

Project Name	Address	Subarea	Total Units	Units Sold	Avg \$PSF	Date Started Marketing
Gemini	138 East 8th Avenue	Mt Pleasant	18	0	\$1,429	28/07/2022
Frame	2727 Kingsway Street	Kingsway Corridor	217	108	\$1,290	30/03/2022

Average unit pricing at these new east side concrete apartment projects ranges between about \$1,290 and \$1,429 per square foot. The lower end of the range is a project in Norquay Village while the upper end is a project in Mount Pleasant. Our east side case study scenarios assumed the lower end of this range.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

8.2 Townhouse Market Data

We examined pricing at 12 townhouse projects that were marketing new units in Vancouver as of November 2022. We focused on projects that had commenced marketing recently as well as projects that are located near existing target CAC rate locations and density bonus zoning districts.

8.2.1 West Side Townhouse Projects

This section summarizes the pricing for townhouse projects on the West Side of Vancouver. All are located in the Cambie Corridor or Marpole.

Exhibit 15: West Side Townhouse Projects Currently Marketing

Project Name	Address	Subarea	Total Units	Units Sold	Avg \$PSF	Date Started Marketing
Savannah	7779 Yukon Street	Marpole	36	7	\$1,390	01/12/2022
King & Columbia (Phase 2)	4088 Columbia Street	Central Cambie Corr.	14	4	\$1,420	09/09/2022
Grace	4575 Ash Street	Central Cambie Corr.	43	21	\$1,408	04/07/2022
Oakhous	119-133 West 41st Avenue	Central Cambie Corr.	20	10	\$1,474	06/05/2022
Seasons	561 West 26 Avenue	Central Cambie Corr.	19	12	\$1,532	05/03/2022
Laurel 32	918 W 32nd Avenue	Central Cambie Corr.	20	16	\$1,435	01/12/2021
Oak Keys	851 West 28th Avenue	Central Cambie Corr.	20	7	\$1,493	15/10/2021
Rowe	755 W 49th Avenue	Central Cambie Corr.	47	46	\$1,450	23/10/2021

Average unit pricing at these new west side townhouse projects ranges between about \$1,390 and \$1,532 per square foot.

8.2.2 East Side Townhouse Projects

This section summarizes the pricing for townhouse projects on the East Side of Vancouver.

Exhibit 16: East Side Townhouse Projects Currently Marketing

Project Name	Address	Subarea	Total Units	Units Sold	Avg \$PSF	Date Started Marketing
Block 1910	2111 Guelph Street	Mt Pleasant	8	5	\$1,239	14/07/2022
E15	322 East 15th Avenue	Main/Fraser Corridor	49	37	\$1,263	10/06/2021
Lakewood Living	2057 East 1st Avenue	Knight/Victoria Corridor	24	18	\$1,120	11/03/2021
Templeton Living	2250 E 1st avenue	Knight/Victoria Corridor	60	36	\$1,115	13/04/2021

Average unit pricing at these new east side townhouse projects ranges between about \$1,115 and \$1,263 per square foot.

8.3 Financial Analysis

This attachment includes the financial analysis for the seven case study scenarios that are the basis for the increased rate recommendations. The analysis for the case study scenarios completed for rates that are not recommended to be considered for any increase is not included in these attachments.

For each case study, the attachments provide:

- A description of the case study site and redevelopment scenario.
- The estimated base (existing) value for the CAC or amenity share rate calculation.
- The proforma that produces the land value estimate for the redevelopment scenario and shows the supportable CAC or amenity share rate per square foot of increased floorspace.

8.3.1 Site 2

Site 2 – 4 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of five older single detached homes in the Langara area zoned RS-1 with lots that average about 4,350 square feet. Under the Cambie Corridor Plan the site can be redeveloped for 4 storey strata mixed use apartment development at an FSR of 2.5

Existing Value

Based on recent sales of similar houses in the nearby area (which are not permitted to be rezoned for multifamily use), we estimate that this site has a value of about \$12 million under existing use and zoning. Including a 20% assembly cost allowance results in a cost to the developer of about \$14.4 million.

Estimated Land Value Supported by 4 Storey Mixed Use Apartment at 2.5 FSR

The following proforma shows our estimate of the site's supportable land value as a 4 storey mixed use apartment at 2.5 FSR. As shown in the proforma, the estimated land value supported by redevelopment is about \$15.8 million or \$290 per square foot of FSR floor area. This is low compared to actual development site sales in the Cambie Corridor which indicates the analysis is conservative (as it takes into account the softening market conditions and higher project costs experienced in recent months).

The estimated increase in land value due to the rezoning is about \$1.6 million, which supports a total CAC of about \$1.2 million at 75% of the increased land value. The assumed rezoning increases the permitted floorspace by 39,162 square feet so this rezoning supports CAC of \$32 per square foot of additional density.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Market Retail Value (Leasehold)	\$7,495,815
Strata Residential Value	\$66,444,984
Total Gross Value	\$73,940,799
Less Commissions on Strata Residential	\$1,993,350
Less Commissions on Commercial	\$149,916
Net Sales Revenue/Value	\$71,797,533
Project Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0
Site Servicing	\$176,067
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$707,438
Allowance for Demolition of Existing Buildings	\$100,000
Hard Construction Costs	\$29,854,427
Soft Costs and Professional Fees	\$2,684,974
Development Management	\$1,199,552
Contingency on Hard and Soft Costs	\$1,773,623
Marketing on Strata Residential Units	\$1,661,125
Leasing Commissions on Commercial Space	\$57,111
Tenant Improvement Allowance on Retail Space	\$190,370
GVS & DD Sewer and Water Levy - Strata Residential	\$324,948
GVS & DD Sewer and Water Levy - Commercial	\$38,226
TransLink - Strata Residential	\$80,808
TransLink - Retail	\$9,595
Retail DCLs	\$218,012
Strata Residential DCLs	\$1,732,455
Less Property Tax Allowance During Approvals/Development	\$152,089
Interim Financing on Construction Costs	\$1,662,051
Financing Fees/Costs	\$438,729
Total Project Costs Before Land	\$44,311,599
Developer's Profit	\$9,641,880
Residual to Land and Land Carry	\$17,844,054
Less financing on land during construction and approvals	\$1,288,118
Less financing fee on land loan	\$78,514
Less property purchase tax	\$721,655
Residual Land Value	\$15,755,767
Calculated Potential Room For Amenity Contribution	
Concept	
Maximum Permissible Density Under Existing Zoning	0.70
Total Assumed Density	2.50
Net Additional Density	1.80
Net Additional Floorspace (sq.ft.)	39,162
Land Lift	
Existing Value	\$14,100,000
Value under Proposed Concept	\$15,755,767
Land Lift	\$1,655,767
75% of Land Lift	\$1,241,826
75% of Land Lift per Net Additional Floorspace	\$32

8.3.2 Site 4c

Site 4c – 6 Storey Mixed Use Strata Apartment Cambie Corridor

This site is an assembly of older C-2 commercial properties in the Cambie Village area. The properties are improved with older low density commercial space. The current zoning allows mixed use development at 2.5 FSR. Under the Cambie Corridor Plan the site can be rezoned to allow 6 storey strata mixed use apartment development at 3.0 FSR.

Estimated Value Under Existing Zoning

The following existing zoning proforma shows our estimate of the supportable land value if redeveloped to 4 storey mixed use apartment at 2.5 FSR. The estimated value is about \$11.75 million.

Estimated Land Value Supported by 6 Storey Mixed Use Apartment at 3.0 FSR

The following rezoning proforma shows our estimate of the site's value if rezoned to allow a 6 storey mixed use apartment at 3.0 FSR. As shown in the proforma, the estimated land value supported by the proposed use is about \$13.7 million or \$289 per square foot of FSR floor area. This is low compared to actual development site sales in the Cambie Corridor which indicates the analysis is conservative (as it takes into account the softening market conditions and higher project costs experienced in recent months).

The estimated increase in land value due to the rezoning is about \$1.95 million which supports a CAC of about \$1.45 million at 75% of the increased land value. The assumed rezoning increases the permitted floorspace by 7,893 square feet so rezoning of this case study site supports a CAC of \$185 per square foot of additional density.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 18: Site 4c – Existing C-2 Zoning - 4 Storey Mixed Use Strata Apartment Proforma

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

Site and Building Size	
Site Size	15,786 sq.ft. or 0.36 acre
Frontage	132 ft.
Maximum Permissible Density Under Existing Zoning	2.50 FSR
Net Additional Density	0.00 FSR
Total Assumed Density	2.50 FSR
Exclusions from FSR (Allowance)	0.09 FSR or 40.0 sf per unit
Total Commercial Density	0.35
Total Residential Density	2.24
Total Gross Density	2.59
Gross Floorspace	40,945 sq.ft.

Concept	Gross SF	Efficiency	Net Saleable or Rentable	Avg Unit Size	Number of Units	Parking Stalls per Unit or 1000 sf	Parking Stalls
Retail							
Leasehold	5,525	100%	5,525	n/a	n/a	2.0	11
Residential							
Strata	35,420	85%	30,107	814	37	1.1	41
Total	40,945	n/a	35,632	n/a	37	n/a	52

Revenue/Value	
Retail	
Leasehold	\$984 per net square foot including parking revenue
Residential	
Strata	\$1,600 per net square foot

Pre Construction Costs	
Rezoning Allowance	\$0
Fixed Rate CAC	\$0 or \$0.00 psf of Net Additional Floor Area
Site Servicing	\$140,854 or \$3,500 per lineal metre of frontage
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$513,299 or \$350 per square metre of gross site area
Allowance for Demolition of Existing Buildings	\$201,060

Construction Costs	
Hard Cost Used in Analysis	\$527
Soft Costs and Professional Fees	8.5% of hard costs, landscaping and site prep/servicing costs
Development Management	3.5% of hard costs, landscaping and site prep/servicing costs and soft costs
Contingency on Hard and Soft Costs	5.0% of hard, soft and management costs

Government Levies	
GVS & DD Sewer and Water Levy - Strata Residential	\$6,249 per unit
GVS & DD Sewer and Water Levy - Commercial	\$5.02 per sq.ft. of commercial space
TransLink - Strata Residential	\$1,554 per unit
TransLink - Retail	\$1.26 per sq.ft. of retail space
Retail DCLs	\$28.63 per sq.ft. of floorspace
Strata Residential DCLs	\$35.46 per sq.ft. of floorspace

Financing	
Interim Financing	6.00% assuming a 1.75 year construction period
Financing Charged on	50% of land and 75% of construction costs
Financing Fees	1.0%

Commissions and Marketing	
Commissions on Sale of Commercial	2.0% of gross commercial value
Commission on Sale of Strata Residential Units	2.5% of value
Marketing on Strata Residential Units	3.0% of value
Leasing Commissions on Commercial Space	\$7.50 per sq.ft.
Tenant Improvement Allowance on Retail Space	\$25.00 per sq.ft.

Other Costs and Allowances	
Net GST on Market Rental Units	5.00% of capitalized value of rental units
Property Taxes	0.938244% of assessed value (Light industrial rate) 0.269293% of assessed value (Residential Rate) 0.931078% of assessed value (Commercial Rate)
Assumed Current Assessment (Year 1 of analysis)	\$16,717,300
Assumed Assessment After 1 year of Construction (Year 2 of analysis)	\$26,804,917 (50% of completed project value)
Developer's Profit	15.0% of total costs or 13.0% of gross market revenue/value

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis**Revenue**

Market Retail Value (Leasehold)	\$5,438,770
Strata Residential Value	\$48,171,064
Total Gross Value	\$53,609,834
Less Commissions on Strata Residential	\$1,204,277
Less Commissions on Commercial	\$108,775
Net Sales Revenue/Value	\$52,296,782

Project Costs

Rezoning Allowance	\$0
Fixed Rate CAC	\$0
Site Servicing	\$140,854
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$513,299
Allowance for Demolition of Existing Buildings	\$201,060
Hard Construction Costs	\$21,588,252
Soft Costs and Professional Fees	\$1,971,445
Development Management	\$880,772
Contingency on Hard and Soft Costs	\$1,302,284
Marketing on Strata Residential Units	\$1,445,132
Leasing Commissions on Commercial Space	\$41,438
Tenant Improvement Allowance on Retail Space	\$138,128
GVS & DD Sewer and Water Levy - Strata Residential	\$231,213
GVS & DD Sewer and Water Levy - Commercial	\$27,736
TransLink - Strata Residential	\$57,498
TransLink - Retail	\$6,962
Retail DCLs	\$158,184
Strata Residential DCLs	\$1,255,990
Less Property Tax Allowance During Approvals/Development	\$135,163
Interim Financing on Construction Costs	\$1,214,538
Financing Fees/Costs	\$320,599
Total Project Costs Before Land	\$32,380,545

Developer's Profit \$6,990,722

Residual to Land and Land Carry \$12,925,515

Less financing on land during construction and approvals	\$793,950
Less financing fee on land loan	\$57,519
Less property purchase tax	\$331,155

Residual Land Value \$11,742,892

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 19: Site 4c – 6 Storey Mixed Use Strata Apartment Proforma at 3.0 FSR

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

Site and Building Size							
Site Size		15,786 sq.ft. or		0.36 acre			
Frontage		132 ft.					
Maximum Permissible Density Under Existing Zoning		2.50 FSR					
Net Additional Density		0.50 FSR					
Total Assumed Density		3.00 FSR					
Exclusions from FSR (Allowance)		0.12 FSR or		40.0 sf per unit			
Total Commercial Density		0.35					
Total Residential Density		2.77					
Total Gross Density		3.12					
Gross Floorspace		49,198 sq.ft.					

Concept	Gross SF	Efficiency	Net Saleable or Rentable	Avg Unit Size	Number of Units	Parking Stalls per Unit or 1000 sf	Parking Stalls
Retail							
Leasehold	5,525	100%	5,525	n/a	n/a	2.0	11
Residential							
Strata	43,673	85%	37,122	807	46	1.1	51
Total	49,198	n/a	42,647	n/a	46	n/a	62

Revenue/Value	
Retail	
Leasehold	\$984 per net square foot including parking revenue
Residential	
Strata	\$1,600 per net square foot

Pre Construction Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0 or
Site Servicing	\$140,854 or \$3,500 per lineal metre of frontage
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$513,299 or
Allowance for Demolition of Existing Buildings	\$201,060

Construction Costs	
Hard Cost Used in Analysis	\$529
Soft Costs and Professional Fees	8.5% of hard costs, landscaping and site prep/servicing costs
Development Management	3.5% of hard costs, landscaping and site prep/servicing costs and soft costs
Contingency on Hard and Soft Costs	5.0% of hard, soft and management costs

Government Levies	
GVS & DD Sewer and Water Levy - Strata Residential	\$6,249 per unit
GVS & DD Sewer and Water Levy - Commercial	\$5.02 per sq.ft. of commercial space
TransLink - Strata Residential	\$1,554 per unit
TransLink - Retail	\$1.26 per sq.ft. of retail space
Retail DCLs	\$28.63 per sq.ft. of floorspace
Strata Residential DCLs	\$35.46 per sq.ft. of floorspace

Financing	
Interim Financing	6.00% assuming a
Financing Charged on	50% of land and
Financing Fees	1.0%

Commissions and Marketing	
Commissions on Sale of Commercial	2.0% of gross commercial value
Commission on Sale of Strata Residential Units	2.5% of value
Marketing on Strata Residential Units	3.0% of value
Leasing Commissions on Commercial Space	\$7.50 per sq.ft.
Tenant Improvement Allowance on Retail Space	\$25.00 per sq.ft.

Other Costs and Allowances	
Property Taxes	0.938244% of assessed value (Light industrial rate)
	0.2692933% of assessed value (Residential Rate)
	0.931078% of assessed value (Commercial Rate)
Assumed Current Assessment (Year 1 of analysis)	\$16,717,300
Assumed Assessment After 1 year of Construction (Year 2 of analysis)	\$32,416,957 (50% of completed project value)
Developer's Profit	15.0% of total costs or 13.0% of gross market revenue/value

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Market Retail Value (Leasehold)	\$5,438,770
Strata Residential Value	\$59,395,144
Total Gross Value	\$64,833,914
Less Commissions on Strata Residential	\$1,484,879
Less Commissions on Commercial	\$108,775
Net Sales Revenue/Value	\$63,240,260
Project Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0
Site Servicing	\$140,854
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$513,299
Allowance for Demolition of Existing Buildings	\$201,060
Hard Construction Costs	\$26,044,602
Soft Costs and Professional Fees	\$2,350,234
Development Management	\$1,050,002
Contingency on Hard and Soft Costs	\$1,552,503
Marketing on Strata Residential Units	\$1,781,854
Leasing Commissions on Commercial Space	\$41,438
Tenant Improvement Allowance on Retail Space	\$138,128
GVS & DD Sewer and Water Levy - Strata Residential	\$287,454
GVS & DD Sewer and Water Levy - Commercial	\$27,736
TransLink - Strata Residential	\$71,484
TransLink - Retail	\$6,962
Retail DCLs	\$158,184
Strata Residential DCLs	\$1,548,641
Less Property Tax Allowance During Approvals/Development	\$172,821
Interim Financing on Construction Costs	\$1,680,176
Financing Fees/Costs	\$390,174
Total Project Costs Before Land	\$39,407,605
Developer's Profit	\$8,454,342
Residual to Land and Land Carry	\$15,378,313
Less financing on land during construction and approvals	\$1,231,803
Less financing fee on land loan	\$68,433
Less property purchase tax	\$389,472
Residual Land Value	\$13,688,604
Calculated Potential Room For Amenity Contribution	
Concept	
Maximum Permissible Density Under Existing Zoning	2.50
Total Assumed Density	3.00
Net Additional Density	0.50
Net Additional Floorspace (sq.ft.)	7,893
Land Lift	
Existing Value	\$11,742,892
Value under Proposed Concept	\$13,688,604
Land Lift	\$1,945,712
75% of Land Lift	\$1,459,284
75% of Land Lift per Net Additional Floorspace	\$185

8.3.3 Site 7a

Site 7a – Midrise Concrete Mixed Use Strata Apartment Project at 3.8 FSR Norquay

This site is an assembly of commercial properties along Kingsway in Norquay Village zoned C-2 and developed with older commercial buildings. Under the Norquay Plan, the site can be rezoned and redeveloped to a 12 storey midrise mixed use project with retail at grade at a density of 3.8 FSR.

Existing Value

The site is improved with about 13,500 square feet of older commercial space. We estimate that the income stream from the existing buildings supports a value of about \$9.05 million which is higher than the land value supported by the existing C-2 zoning. So the existing value is about \$9.05 million.

Estimated Land Value Supported by Concrete Mixed Use Apartment at 3.8 FSR

The following proforma shows our estimate of the site's value if rezoned to allow a concrete mixed use apartment project at 3.8 FSR. As shown in the proforma, the estimated land value supported by the proposed use is about \$9.95 million, or \$153 per square foot of FSR floor area. This is low compared to actual development site sales in East Vancouver which indicates the analysis is conservative (as it takes into account the softening market conditions and higher project costs experienced in recent months).

The increase in land value due to the rezoning is \$890,000 which supports a CAC of about \$670,000. The assumed rezoning increases the permitted floorspace at the property by 22,096 square feet so rezoning of this case study site supports a CAC of \$30 per square foot of additional density.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 20: Site 7a – Midrise Concrete Mixed Use Strata Apartment Project at 3.8 FSR Proforma

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

Site and Building Size	
Site Size	16,997 sq.ft. or 0.39 acre
Frontage	165 ft.
Maximum Permissible Density Under Existing Zoning	2.50 FSR
Net Additional Density	1.30 FSR
Total Assumed Density	3.80 FSR
Exclusions from FSR (Allowance)	0.15 FSR or 40.0 sf per unit
Total Commercial Density	0.35
Total Residential Density	3.60
Total Gross Density	3.95
Gross Floorspace	67,187 sq.ft.

Concept	Gross SF	Efficiency	Net Saleable or Rentable	Avg Unit Size	Number of Units	Parking Stalls per Unit or 1000 sf	Parking Stalls
Retail							
Leasehold	5,949	100%	5,949	n/a	n/a	2.0	12
Residential							
Strata	61,238	85%	52,053	801	65	1.1	72
Total	67,187	n/a	58,002	n/a	65	n/a	83

Revenue/Value	
Retail	
Leasehold	\$866 per net square foot including parking revenue
Residential	
Strata	\$1,290 per net square foot

Pre Construction Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0 or \$0.00 psf of Net Additional Floor Area
Site Servicing	\$176,067 or \$3,500 per lineal metre of frontage
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$552,665 or \$350 per square metre of gross site area
Allowance for Demolition of Existing Buildings	\$203,520

Construction Costs	
Hard Cost Used in Analysis	\$495
Soft Costs and Professional Fees	8.5% of hard costs, landscaping and site prep/servicing costs
Development Management	3.5% of hard costs, landscaping and site prep/servicing costs and soft costs
Contingency on Hard and Soft Costs	5.0% of hard, soft and management costs

Government Levies	
GVS & DD Sewer and Water Levy - Strata Residential	\$6,249 per unit
GVS & DD Sewer and Water Levy - Commercial	\$5.02 per sq.ft. of commercial space
TransLink - Strata Residential	\$1,554 per unit
TransLink - Retail	\$1.26 per sq.ft. of retail space
Retail DCLs	\$28.63 per sq.ft. of floorspace
Strata Residential DCLs	\$35.46 per sq.ft. of floorspace

Financing	
Interim Financing	6.00% assuming a 2.25 year construction period
Financing Charged on	50% of land and 75% of construction costs
Financing Fees	1.0%

Commissions and Marketing	
Commissions on Sale of Commercial	2.0% of gross commercial value
Commission on Sale of Strata Residential Units	3.0% of value
Marketing on Strata Residential Units	2.5% of value
Leasing Commissions on Commercial Space	\$7.50 per sq.ft.
Tenant Improvement Allowance on Retail Space	\$25.00 per sq.ft.

Other Costs and Allowances	
Property Taxes	0.938244% of assessed value (Light industrial rate)
	0.2692933% of assessed value (Residential Rate)
	0.931078% of assessed value (Commercial Rate)
Assumed Current Assessment (Year 1 of analysis)	\$13,037,600
Assumed Assessment After 1 year of Construction (Year 2 of analysis)	\$36,148,703 (50% of completed project value)
Developer's Profit	15.0% of total costs or 13.0% of gross market revenue/value

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Market Retail Value (Leasehold)	\$5,149,454
Strata Residential Value	\$67,147,952
Total Gross Value	\$72,297,406
Less Commissions on Strata Residential	\$2,014,439
Less Commissions on Commercial	\$102,989
Net Sales Revenue/Value	\$70,179,978
Project Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0
Site Servicing	\$176,067
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$552,665
Allowance for Demolition of Existing Buildings	\$203,520
Hard Construction Costs	\$33,266,210
Soft Costs and Professional Fees	\$2,970,619
Development Management	\$1,327,168
Contingency on Hard and Soft Costs	\$1,962,312
Marketing on Strata Residential Units	\$1,678,699
Leasing Commissions on Commercial Space	\$44,616
Tenant Improvement Allowance on Retail Space	\$148,721
GVS & DD Sewer and Water Levy - Strata Residential	\$406,185
GVS & DD Sewer and Water Levy - Commercial	\$29,863
TransLink - Strata Residential	\$101,010
TransLink - Retail	\$7,496
Retail DCLs	\$170,315
Strata Residential DCLs	\$2,171,515
Less Property Tax Allowance During Approvals/Development	\$195,645
Interim Financing on Construction Costs	\$2,362,295
Financing Fees/Costs	\$490,249
Total Project Costs Before Land	\$49,515,171
Developer's Profit	\$9,427,582
Residual to Land and Land Carry	\$11,237,225
Less financing on land during construction and approvals	\$964,154
Less financing fee on land loan	\$50,006
Less property purchase tax	\$277,291
Residual Land Value	\$9,945,775
Calculated Potential Room For Amenity Contribution	
Concept	
Maximum Permissible Density Under Existing Zoning	2.50
Total Assumed Density	3.80
Net Additional Density	1.30
Net Additional Floorspace (sq.ft.)	22,096
Land Lift	
Existing Value	\$9,052,941
Value under Proposed Concept	\$9,945,775
Land Lift	\$892,833
75% of Land Lift	\$669,625
75% of Land Lift per Net Additional Floorspace	\$30

8.3.4 Site 8

Site 8 – 6 Storey Strata Apartment Grandview Woodland

This site is an assembly of five older single detached homes in the Commercial Broadway Station Precinct area. The lots are zoned RS-1 with an average lot size of about 4,000 square feet. Under the Grandview Woodland Community Plan the site can be rezoned to allow a 6 storey strata residential apartment development at an FSR of 2.65.

Existing Value

Based on recent sales of similar houses in the nearby area (which are not permitted to be rezoned for multifamily redevelopment), we estimate that this site has an existing value of about \$8.625 million as five single family homes. Including a 20% assembly cost allowance results in a cost to the developer of about \$10.35 million.

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

The following proforma shows our estimate of the site's value if rezoned to allow a 6 storey woodframe strata apartment project at 2.65 FSR. As shown in the proforma, the estimated land value supported by the proposed use is about \$12.5 million or \$234 per square foot of FSR floor area. This value is consistent with multifamily residential land sales on the East Side.

The estimated increase in land value due to the rezoning is \$2.1 million which supports a CAC of about \$1.6 million at 75% of the increased land value. The assumed rezoning increases the permitted floorspace at the site by 39,254 square feet so this rezoning supports a target CAC of \$40 per square foot of additional floorspace.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis**Revenue**

Strata Residential Value	\$59,186,031
Total Gross Value	\$59,186,031
Less Commissions on Strata Residential	\$1,775,581
Net Sales Revenue/Value	\$57,410,450

Project Costs

Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0
Site Servicing	\$176,067
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$654,549
Allowance for Demolition of Existing Buildings	\$100,000
Hard Construction Costs	\$23,249,985
Soft Costs and Professional Fees	\$2,119,101
Development Management	\$946,740
Contingency on Hard and Soft Costs	\$1,399,822
Marketing on Strata Residential Units	\$1,479,651
GVS & DD Sewer and Water Levy - Strata Residential	\$368,691
TransLink - Strata Residential	\$91,686
Strata Residential DCLs	\$1,975,282
Less Property Tax Allowance During Approvals/Development	\$90,028
Interim Financing on Construction Costs	\$1,334,876
Financing Fees/Costs	\$352,365
Total Project Costs Before Land	\$35,588,842

Developer's Profit \$7,717,858

Residual to Land and Land Carry \$14,103,750

Less financing on land during construction and approvals	\$1,018,114
Less financing fee on land loan	\$62,056
Less property purchase tax	\$554,144

Residual Land Value \$12,469,435

Calculated Potential Room For Amenity Contribution**Concept**

Maximum Permissible Density Under Existing Zoning	0.70
Total Assumed Density	2.65
Net Additional Density	1.95
Net Additional Floorspace (sq.ft.)	39,254

Land Lift

Existing Value	\$10,350,000
Value under Proposed Concept	\$12,469,435
Land Lift	\$2,119,435
75% of Land Lift	\$1,589,577
75% of Land Lift per Net Additional Floorspace	\$40

8.3.5 Site 10

Site 10 – Concrete Mixed Use Strata Apartment Project at 3.5 FSR Southeast False Creek

This site is an older commercial property in Southeast False Creek that is zoned M-2 and improved with an older low density service commercial building. Under the Southeast False Creek Official Development Plan the site can be rezoned to allow midrise strata mixed use apartment development at an FSR of 3.5.

Existing Value

The site is improved about 26,000 square feet of existing service commercial and industrial floor space. We estimate that the potential income stream from the existing space would support a value of about \$24.7 million which is significantly higher than the land value supported by the existing M-2 zoning. So the estimated existing value is about \$24.7 million.

Estimated Land Value Supported by Concrete Mixed Use Apartment at 3.5 FSR

The following proforma shows our estimate of the site's value if rezoned to allow a concrete mixed use apartment project at 3.5 FSR. As shown in the proforma, the estimated land value supported by the proposed use is about \$38.3 million or \$362 per square foot of FSR floor area. This may be conservative as the current assessed land value is higher and the site was listed for sale in the recent past for a much higher price.

The estimated increase in land value due to the rezoning is \$13.6 million so the supportable CAC (at 75% of the increased value) is about \$10.2 million. M-2 does not allow residential floorspace, so the rezoning increases the allowed residential density by 105,812 square feet. Redevelopment at this case study site supports a CAC of \$96 per square foot of additional residential floorspace.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 22: Site 10 – Mixed Use Strata Apartment at 3.5 FSR Proforma

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

Site and Building Size							
Site Size		30,232 sq.ft. or		0.69 acre			
Frontage		370 ft.					
Maximum Permissible Density Under Existing Zoning		0.00 FSR					
Net Additional Density		3.50 FSR					
Total Assumed Density		3.50 FSR					
Exclusions from FSR (Allowance)		0.14 FSR or		40.0 sf per unit			
Total Commercial Density		0.35					
Total Residential Density		3.29					
Total Gross Density		3.64					
Gross Floorspace		110,012 sq.ft.					

Concept	Gross SF	Efficiency	Net Saleable or Rentable	Avg Unit Size	Number of Units	Parking Stalls per Unit or 1000 sf	Parking Stalls
Retail							
Leasehold	10,581	100%	10,581	n/a	n/a	2.0	21
Residential							
Strata	99,431	85%	84,516	805	105	1.1	116
Total	110,012	n/a	95,097	n/a	105	n/a	137

Revenue/Value		
Retail		
Leasehold	\$1,044	per net square foot including parking revenue
Residential		
Strata	\$1,750	per net square foot

Pre Construction Costs		
Rezoning Allowance	\$500,000	
Fixed Rate CAC	\$0	or \$0.00 psf of Net Additional Floor Area
Public Art	\$1.98	psf
Site Servicing	\$394,817	or \$3,500 per lineal metre of frontage
Utilities Relocation (Net of Latecomer)	\$750,000	
Rainwater Management Costs	\$983,027	or \$350 per square metre of gross site area
Allowance for Demolition of Existing Buildings	\$520,000	

Construction Costs		
Hard Cost Used in Analysis	\$537	
Soft Costs and Professional Fees	8.5%	of hard costs, landscaping and site prep/servicing costs
Development Management	3.5%	of hard costs, landscaping and site prep/servicing costs and soft costs
Contingency on Hard and Soft Costs	5.0%	of hard, soft and management costs

Government Levies		
GVS & DD Sewer and Water Levy - Strata Residential	\$6,249	per unit
GVS & DD Sewer and Water Levy - Commercial	\$5.02	per sq.ft. of commercial space
TransLink - Strata Residential	\$1,554	per unit
TransLink - Retail	\$1.26	per sq.ft. of retail space
Retail DCLs	\$28.63	per sq.ft. of floorspace
Strata Residential DCLs	\$35.46	per sq.ft. of floorspace
Layered DCLs	\$20.15	per sq.ft. of floorspace

Financing		
Interim Financing	6.00%	assuming a 2.25 year construction period
Financing Charged on	50%	of land and 75% of construction costs
Financing Fees	1.0%	

Commissions and Marketing		
Commissions on Sale of Commercial	2.0%	of gross commercial value
Commission on Sale of Strata Residential Units	3.0%	of value
Marketing on Strata Residential Units	2.5%	of value
Leasing Commissions on Commercial Space	\$7.50	per sq.ft.
Tenant Improvement Allowance on Retail Space	\$25.00	per sq.ft.

Other Costs and Allowances		
Property Taxes	0.938244%	of assessed value (Light industrial rate)
	0.269293%	of assessed value (Residential Rate)
	0.931078%	of assessed value (Commercial Rate)
Assumed Current Assessment (Year 1 of analysis)	\$42,378,700	
Assumed Assessment After 1 year of Construction (Year 2 of analysis)	\$79,473,721	(50% of completed project value)
Developer's Profit	15.0%	of total costs or 13.0% of gross market revenue/value

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Market Retail Value (Leasehold)	\$11,044,128
Strata Residential Value	\$147,903,315
Total Gross Value	\$158,947,443
Less Commissions on Strata Residential	\$4,437,099
Less Commissions on Commercial	\$220,883
Net Sales Revenue/Value	\$154,289,461
Project Costs	
Rezoning Allowance	\$500,000
Fixed Rate CAC	\$0
Public Art	\$217,824
Site Servicing	\$394,817
Utilities Relocation (Net of Latecomer)	\$750,000
Rainwater Management Costs	\$983,027
Allowance for Demolition of Existing Buildings	\$520,000
Hard Construction Costs	\$59,062,836
Soft Costs and Professional Fees	\$5,263,923
Development Management	\$2,351,735
Contingency on Hard and Soft Costs	\$3,477,208
Marketing on Strata Residential Units	\$3,697,583
Leasing Commissions on Commercial Space	\$79,359
Tenant Improvement Allowance on Retail Space	\$264,530
GVS & DD Sewer and Water Levy - Strata Residential	\$656,145
GVS & DD Sewer and Water Levy - Commercial	\$53,118
TransLink - Strata Residential	\$163,170
TransLink - Retail	\$13,332
Retail DCLs	\$302,940
Strata Residential DCLs	\$3,525,816
Layered DCLs	\$2,216,742
Less Property Tax Allowance During Approvals/Development	\$484,386
Interim Financing on Construction Costs	\$4,302,036
Financing Fees/Costs	\$892,805
Total Project Costs Before Land	\$90,173,331
Developer's Profit	\$20,726,747
Residual to Land and Land Carry	\$43,389,383
Less financing on land during construction and approvals	\$3,765,114
Less financing fee on land loan	\$193,083
Less property purchase tax	\$1,127,248
Residual Land Value	\$38,303,939
Calculated Potential Room For Amenity Contribution	
Concept	
Maximum Permissible Density Under Existing Zoning	0.00
Total Assumed Density	3.50
Net Additional Density	3.50
Net Additional Floorspace (sq.ft.)	105,812
Land Lift	
Existing Value	\$24,700,000
Value under Proposed Concept	\$38,303,939
Land Lift	\$13,603,939
75% of Land Lift	\$10,202,954
75% of Land Lift per Net Additional Floorspace	\$96

8.3.6 Site 13d

Site 13d – RM-8A/8N Strata Townhouse at 1.2 FSR - Cambie Corridor

This site is an assembly of three older single family homes in the Oakridge area with average lot sizes of 7,700 square feet. The site is zoned RM-8A allowing townhouse development with a base density of 0.75 FSR and a maximum density of 1.2 FSR, if the required amenity share contribution is provided.

Existing Value

To estimate the value of the bonus density, we assumed the base value is the market value of the property under its existing use as single family lots (our analysis indicates that the townhouse value at the base density of 0.75 FSR townhouse would be lower). Based on recent sales of similar houses in the nearby area (which are not candidates for rezoning to multifamily), we estimate that the three lots have a value of about \$9.65 million. Including a 20% assembly cost allowance results in a cost to the developer of about \$11.58 million.

Estimated Land Value Supported by Strata Townhouse at 1.2 FSR

The following proforma shows our estimate of the site's value under townhouse development at 1.2 FSR with no amenity share contribution. As shown in the proforma, the estimated land value supported by the concept is about \$12.5 million, or \$448 per square foot of FSR floor area. This is at the lower end of actual townhouse development site sales in the area which indicates the analysis is conservative (as it takes into account the softening market conditions and higher project costs experienced in recent months).

The estimated increase in land value due to the bonus density is about \$900,000. The bonus floorspace at the property is about 10,458 square feet so the bonus density supports an amenity share contribution of \$86 per square foot.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Exhibit 23: Site 13d –Strata Residential Townhouse at 1.2 FSR Proforma

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

Site and Building Size							
Site Size		23,240 sq.ft. or		0.53 acre			
Frontage		308 ft.					
Maximum Permissible Density Under Existing Zoning		0.75 FSR					
Net Additional Density		0.45 FSR					
Total Assumed Density		1.20 FSR					
Exclusions from FSR (Allowance)		0.03 FSR or		40.0 sf per unit			
Total Residential Density		1.23					
Total Gross Density		1.23					
Gross Floorspace		28,688 sq.ft.					

Concept	Gross SF	Efficiency	Net Saleable or Rentable	Avg Unit Size	Number of Units	Parking Stalls per Unit or 1000 sf	Parking Stalls
Residential							
Strata	28,688	100%	28,688	1,434	20	1.5	30
Total	28,688	n/a	28,688	n/a	20	n/a	30

Revenue/Value		
Residential		
Strata	\$1,450	per net square foot

Pre Construction Costs		
Density Bonus	\$0	or \$0 psf of Net Additional Floor Area
Site Servicing	\$328,541	or \$3,500 per lineal metre of frontage
Utilities Relocation (Net of Latecomer)	\$500,000	
Rainwater Management Costs	\$755,676	or \$350 per square metre of gross site area
Allowance for Demolition of Existing Buildings	\$60,000	

Construction Costs		
Hard Cost Used in Analysis	\$493	
Soft Costs and Professional Fees	8.5%	of hard costs, landscaping and site prep/servicing costs
Development Management	3.5%	of hard costs, landscaping and site prep/servicing costs and soft costs
Contingency on Hard and Soft Costs	5.0%	of hard, soft and management costs

Government Levies		
GVS & DD Sewer and Water Levy - Strata Townhouse Residential	\$8,679	per unit
TransLink - Strata Residential	\$2,485	per unit
Strata Residential DCLs	\$8.23	per sq.ft. of floorspace

Financing		
Interim Financing	6.00%	assuming a 1.50 year construction period
Financing Charged on	50%	of land and 75% of construction costs
Financing Fees	1.0%	

Commissions and Marketing		
Commission on Sale of Strata Residential Units	3.0%	of value
Marketing on Strata Residential Units	2.5%	of value

Other Costs and Allowances		
Property Taxes	0.938244%	of assessed value (Light industrial rate)
	0.269293%	of assessed value (Residential Rate)
	0.931078%	of assessed value (Commercial Rate)
Assumed Current Assessment (Year 1 of analysis)	\$9,929,100	
Assumed Assessment After 1 year of Construction (Year 2 of analysis)	\$20,798,850	(50% of completed project value)
Developer's Profit	15.0%	of total costs or 13.0% of gross market revenue/value

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Strata Residential Value	\$41,597,700
Total Gross Value	\$41,597,700
Less Commissions on Strata Residential	\$1,247,931
Net Sales Revenue/Value	\$40,349,769
Project Costs	
Density Bonus	\$0
Site Servicing	\$328,541
Utilities Relocation (Net of Latecomer)	\$500,000
Rainwater Management Costs	\$755,676
Allowance for Demolition of Existing Buildings	\$60,000
Hard Construction Costs	\$14,148,989
Soft Costs and Professional Fees	\$1,342,423
Development Management	\$599,747
Contingency on Hard and Soft Costs	\$886,769
Marketing on Strata Residential Units	\$1,039,942
GVS & DD Sewer and Water Levy - Strata Townhouse Residential	\$173,580
TransLink - Strata Residential	\$49,700
Strata Residential DCLs	\$236,103
Less Property Tax Allowance During Approvals/Development	\$68,112
Interim Financing on Construction Costs	\$681,398
Financing Fees/Costs	\$208,710
Less Net GST (assuming builder holds units)	\$0
Total Project Costs Before Land	\$21,079,690
Developer's Profit	\$5,424,340
Residual to Land and Land Carry	\$13,845,739
Less financing on land during construction and approvals	\$747,670
Less financing fee on land loan	\$60,921
Less property purchase tax	\$554,802
Residual Land Value	\$12,482,346
Calculated Potential Room For Amenity Share	
Concept	
Maximum Permissible Density Under Existing Zoning	0.75
Total Assumed Density	1.20
Net Additional Density	0.45
Net Additional Floorspace (sq.ft.)	10,458
Land Lift	
Existing Value	\$11,580,000
Value under Proposed Concept	\$12,482,346
Land Lift	\$902,346
100% of Land Lift	\$902,346
100% of Land Lift per Net Additional Floorspace	\$86

8.3.7 Site 20

Site 20 – FC-2 Additional Rental Concrete Density False Creek Flats (Subarea E)

This site is an older service commercial and industrial property in the FC-2 District (subarea E) with a total site area of about 31,082 square feet. This district allows a based density of 3.0 FSR of employment accommodating use (stacked industrial). In Subarea E, an applicant can apply for up to 3.5 FSR of bonus density if it is used for rental apartment and the required amenity share contribution is provided.

Existing Value

For this site, we did not estimate the value supported by the base density (3.0 FSR of employment floorspace). We focused on the incremental land value supported by the 3.5 FSR of bonus rental apartment density as the 3.0 FSR of employment density is the same with or without the bonus density.

Estimated Land Value Supported by Concrete Market Rental Apartment at 3.5 FSR

The following proforma shows our estimate of the land value supported by 3.5 FSR of market rental development, with no amenity share contribution. As shown in the proforma, the estimated land value supported by this concept is about \$15.25 million, or \$140 per square foot of FSR floor area. This may be conservative as it is lower than current list prices for high density rental apartment development sites in nearby locations.

So the estimated increase in land value due to the bonus density is about \$15.25 million. The bonus floorspace at the property is 108,785 square feet so the bonus density at this site supports an amenity share contribution of \$142 per square foot.

FINANCIAL ANALYSIS INPUTS TO UPDATE OF TARGET CAC AND AMENITY SHARE RATES

Analysis	
Revenue	
Market Rental Value	\$103,106,383
Total Gross Value	\$103,106,383
Less Commissions on Rental	\$0
Net Sales Revenue/Value	\$103,106,383
Project Costs	
Density Bonus	\$0
Site Servicing	\$0
Utilities Relocation (Net of Latecomer)	\$0
Rainwater Management Costs	\$0
Allowance for Demolition of Existing Buildings	\$0
Hard Construction Costs	\$52,055,692
Soft Costs and Professional Fees	\$4,424,734
Development Management	\$1,976,815
Contingency on Hard and Soft Costs	\$2,922,862
GVS & DD Sewer and Water Levy - Rental Residential	\$920,843
TransLink - Rental Residential	\$228,995
Market Rental DCLs	\$3,857,525
Less Property Tax Allowance During Approvals/Development	\$307,068
Interim Financing on Construction Costs	\$3,413,711
Financing Fees/Costs	\$708,450
Less Net GST (assuming builder holds units)	\$5,155,319
Total Project Costs Before Land	\$76,708,808
Developer's Profit	\$9,377,526
Residual to Land and Land Carry	\$17,020,049
Less financing on land during construction and approvals	\$1,249,697
Less financing fee on land loan	\$75,739
Less property purchase tax	\$436,513
Residual Land Value	\$15,258,100
Calculated Potential Room For Amenity Share	
Concept	
Maximum Permissible Density Under Existing Zoning	0.00
Total Assumed Density	3.50
Net Additional Density	3.50
Net Additional Floorspace (sq.ft.)	108,785
Land Lift	
Existing Value	\$0
Value under Proposed Concept	\$15,258,100
Land Lift	\$15,258,100
100% of Land Lift	\$15,258,100
100% of Land Lift per Net Additional Floorspace	\$140

RECALIBRATION OF CAC TARGETS
AND DENSITY BONUS
CONTRIBUTIONS

CITY OF VANCOUVER

March 7, 2023

URBAN
S Y S T E M S

550 - 1090 Homer Street, Vancouver, BC V6B 2W9 | T: 604.235.1701

CONTACT: Justin Barer
E: jbarer@urbansystems.ca

PREPARED FOR:

City of Vancouver
453 West 12th Avenue
Vancouver, BC V5Y 1V4

550 - 1090 Homer Street, Vancouver, BC V6B 2W9 | T: 604.235.1701

File: 1166.0108.01

This report is prepared for the sole use of the City of Vancouver. No representations of any kind are made by Urban Systems Ltd. or its employees to any party with whom Urban Systems Ltd. does not have a contract. © 2023 URBANSYSTEMS®.

CONTENTS

1.0 INTRODUCTION	1
1.1 BACKGROUND.....	1
2.0 APPROACH	3
2.1 METHODS.....	3
2.2 SITE IDENTIFICATION.....	4
2.3 TYPOLOGIES AND DENSITIES TESTED	6
2.3.1 COMMERCIAL LINKAGE TARGET SITES.....	6
2.3.2 DENSITY BONUS SITES	6
2.4 ANALYSIS APPROACH.....	7
3.0 FINANCIAL ANALYSIS ASSUMPTIONS AND RESULTS	8
3.1 INPUT ASSUMPTIONS.....	8
3.1.1 REVENUES AND VALUES AT COMPLETION.....	8
3.1.2 CONSTRUCTION COSTS.....	8
3.1.3 OTHER INPUT VARIABLES.....	9
3.1.4 FINANCING ASSUMPTIONS	10
3.2 COMMERCIAL LINKAGE TARGET CASE STUDY RESULTS.....	10
3.2.1 DOWNTOWN.....	10
3.2.2 BURRARD SLOPES / UPTOWN / FAIRVIEW.....	12
3.2.3 MOUNT PLEASANT	13
3.3 DENSITY BONUSING CASE STUDY RESULTS.....	15
3.3.1 MOUNT PLEASANT	15
3.3.2 FALSE CREEK FLATS.....	16
3.4 SUMMARY RESULTS.....	17
4.0 SYNOPSIS / CONCLUSIONS	19
4.1 COMMERCIAL LINKAGE TARGET AREAS.....	19
4.2 DENSITY BONUS ZONING DISTRICTS.....	19

TABLES

Table 1:	Applicable Commercial Linkage Target Rates.....	3
Table 2:	Applicable Density Bonus Rates.....	3
Table 3:	Case Study Site Characteristics and Assessed Values.....	6
Table 4:	Commercial Linkage Target Sites Redevelopment Densities and Concepts.....	6
Table 5:	Density Bonus Sites Redevelopment Densities and Concepts.....	7
Table 6:	Revenue Assumptions.....	8
Table 7:	Construction Cost Assumptions.....	9
Table 8:	Other Input Variables	9
Table 9:	Applicable DCL and DCC Rates.....	9
Table 10:	Land and Construction Financing Assumptions.....	10
Table 11:	CBD Core Testing Results.....	11
Table 12:	CBD Shoulder Testing Results.....	11
Table 13:	Burrard Slopes Testing Results.....	12
Table 14:	Uptown Residual Testing Results.....	12
Table 15:	Fairview Testing Results	13
Table 16:	Mount Pleasant Site #1 Testing Results	13
Table 17:	Mount Pleasant Site #2 Testing Results.....	14
Table 18:	Mount Pleasant Site #3 Testing Results.....	14
Table 19:	Mount Pleasant I-1A Zone Testing Results – Leasehold Redevelopment.....	15
Table 20:	Mount Pleasant I-1B Zone Testing Results – Leasehold Redevelopment.....	15
Table 21:	False Creek Flats I-3 Subarea A Zone Testing Results – Leasehold Redevelopment.....	16
Table 22:	Downtown Commercial Linkage Sites – Summary	17
Table 23:	Burrard Slopes / Uptown / Fairview Commercial Linkage Sites – Summary.....	17
Table 24:	Mount Pleasant Commercial Linkage Sites – Summary	17
Table 25:	Density Bonus Sites Summary – Leasehold Redevelopment.....	18

FIGURES

Figure 1:	Downtown, Broadway Plan area and Rest of Metro Core	1
Figure 2:	Mount Pleasant Industrial Area	2
Figure 3:	False Creek Flats	2
Figure 4:	Commercial Linkage Target Rates Case Study Sites	5
Figure 5:	Density Bonus Contribution Rates Case Study Sites	5

1.0 INTRODUCTION

1.1 BACKGROUND

In July 2022, Urban Systems was retained by the City of Vancouver to conduct a two-part economic review of Community Amenity Contribution (CAC) targets and Density Bonus rates. The CAC target review pertains to the City’s “Commercial Linkage” targets, applied to rezoning applications for non-strata commercial developments in the Downtown, Broadway Plan area, and the rest of the Metro Core area. The Density Bonus rates apply to zoning districts I-1A and I-1B in Mount Pleasant, and I-3 subarea A in the False Creek Flats. The intent of the economic review was to determine if there is potential for increases to Commercial Linkage targets or Density Bonus contribution rates.

Figure 1: Downtown, Broadway Plan area and Rest of Metro Core

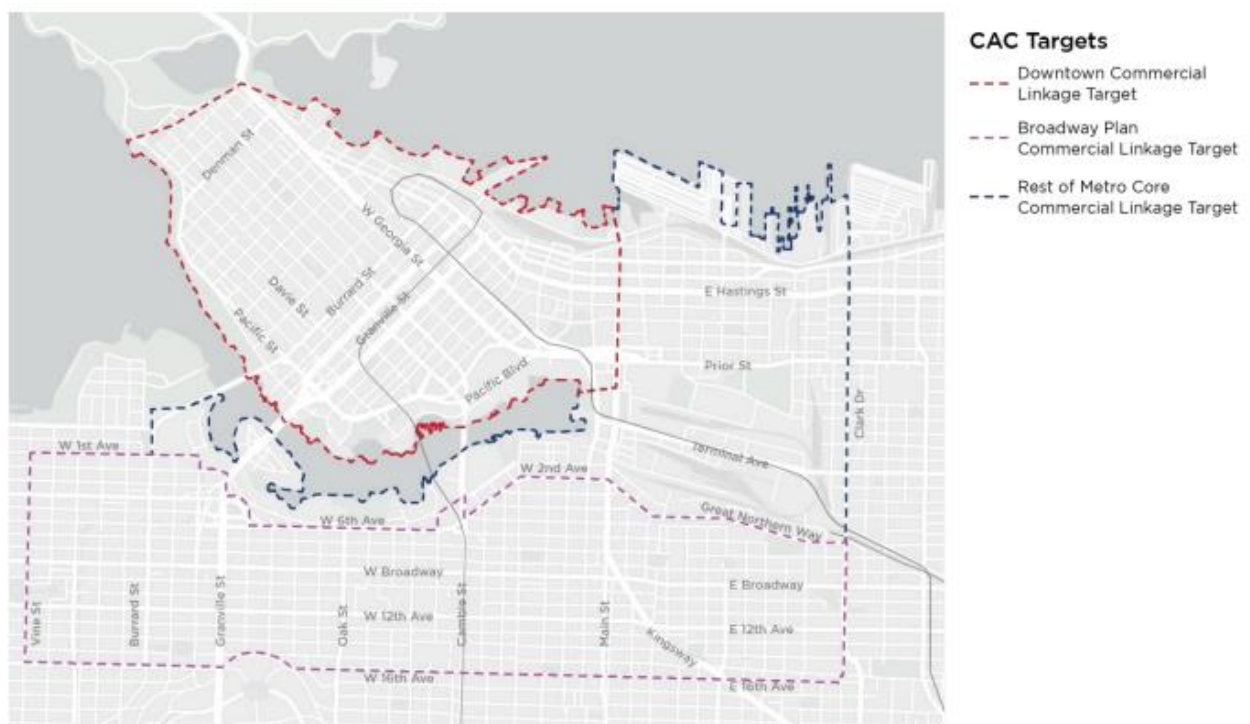


Figure 2: Mount Pleasant Industrial Area



Figure 3: False Creek Flats



The current Commercial Linkage target rates and Density Bonus rates in each of the above areas are as follows:

Table 1: Applicable Commercial Linkage Target Rates

Area	Eligibility Criteria	Commercial Linkage Target (effective Sept 30, 2022)	Allocation
Downtown	100% non-strata commercial developments	\$17.24 / sq.ft.	Affordable housing and childcare in Metro Core
Broadway Plan		\$11.49 / sq.ft.	As per Broadway Plan Public Benefits Strategy
Rest of Metro Core		\$11.49 / sq.ft.	Affordable housing and childcare in Metro Core

Table 2: Applicable Density Bonus Rates

Area	Zoning District	Density (FSR)	Rate (effective Sept. 30, 2022)
Mount Pleasant	I-1A	Over 3.0 to 5.0	\$7.22 / sq.ft.
Mount Pleasant	I-1B	Over 3.0 to 5.0 Over 5.0 to 6.0	\$7.22 / sq.ft. \$51.77 / sq.ft.
False Creek Flats	I-3 subarea A	Over 3.0 to 5.0	\$11.49 / sq.ft.

Economic testing of rezoning / redevelopment in each applicable area was completed by December 2022 and brought forward for review by City of Vancouver staff and external stakeholders in January 2023. Any Commercial Linkage target rate or Density Bonus rate change recommendations will be brought to Council for consideration in April 2023. Any approved changes will take effect September 30, 2023, with in-stream rate protection applicable.

2.0 APPROACH

2.1 METHODS

The ability for any project to make a density bonus or community amenity contribution (CAC) payment is a function of area-specific development economics. The land values supported by a given use (or uses), at specified forms and densities after a rezoning (or at a higher density within a given zone) must equal or exceed the property value supported by the existing use / base zoned density. This land value must be calculated by 'backing out' development costs, required profit and land costs from potential revenues or values at project completion. As such, the approach to calculating updated Commercial Linkage target rates and Density Bonus rates is based on a series of pro forma financial analyses in which we estimate land values supported by various rezoning and redevelopment scenarios. We then compare these to base land values to see:

- a. Are the rezoned / higher density projects viable (i.e., do they support a land value equal to or higher than under base circumstances)? And,

- b. What do the land value uplift amounts translate to for a density bonus rate or target CAC rate, as applicable?

In the case of both CACs and density bonus calculations, any currently applicable contribution rates are incorporated into the rezoned or density bonused pro formas, such that the profit on total cost calculation accounts for already 'in-force' rates. The residual calculations are therefore calculating whether there is *additional* financial room in any of the pro formas to justify further rate increases.

The additional Commercial Linkage target rate and Density Bonus rate are calculated as:

- 75% of the lift in land value created through rezoning for Commercial Linkage targets
- 100% of the lift in land value between base and maximum density for the density bonus rates

The base land value from which land lift is calculated in both commercial linkage target and density bonus pro formas is the higher of:

- (1) the residual land value at base FSR (base density or current zoning) of a 100% non-strata commercial or mixed employment development, or
- (2) the residual land value at base FSR of a 100% strata commercial or mixed employment development.

2.2 SITE IDENTIFICATION

Urban Systems worked with City staff to identify “development candidate” parcels in each applicable target area or zoning district. Altogether, 8 sample sites were selected for Commercial Linkage target rate testing, and 3 sites were selected for Density Bonus rate testing.

Commercial Linkage target pro formas were completed for:

- 2 sites in and around Downtown, representing the core and shoulder areas
- 3 sites in Burrard Slopes, Uptown and Fairview
- 3 sites in Mount Pleasant (West 6th Avenue)

Density bonus rate pro formas were completed for:

- 2 sites in Mount Pleasant (zoning districts I-1A and I-1B)
- 1 site in the False Creek Flats (zoning district I-3 Subarea A)

The sites selected for analysis are shown in Figure 4 and 5 on the next page.

Figure 4: Commercial Linkage Target Rates Case Study Sites

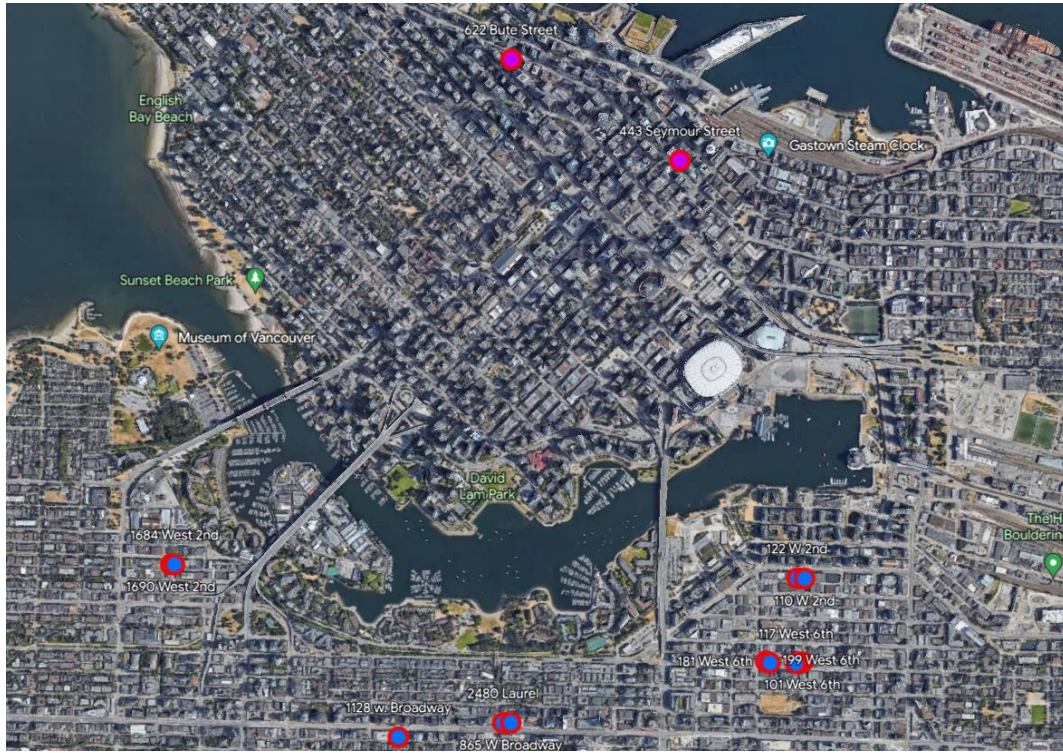
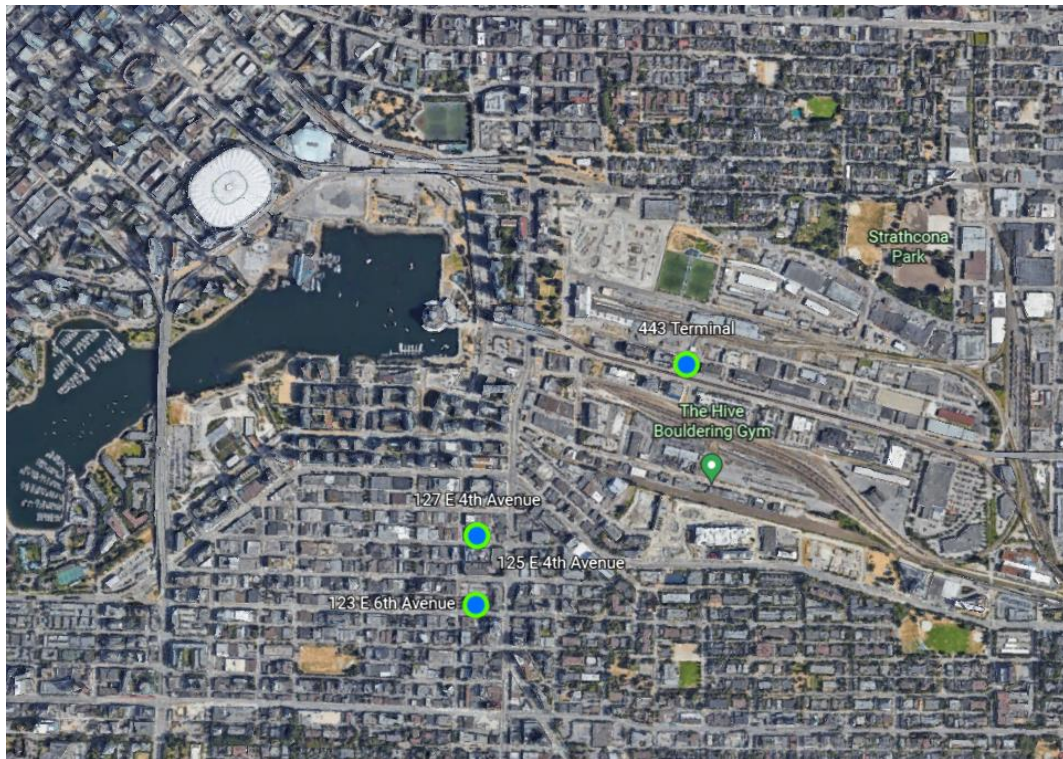


Figure 5: Density Bonus Contribution Rates Case Study Sites



The table below identifies characteristics of the case study parcels and assemblies used in this analysis.

Table 3: Case Study Site Characteristics and Assessed Values

Case Study	Target Area or Zoning District	Density Bonus (DB) area or Commercial Linkage Target (CLT) area?	Site Size (sq.ft.)	Permitted Density (FSR) under Current Zoning or Base Zoning
1	CBD Core	CLT	18,678	9.0
2	CBD Shoulder	CLT	8,698	9.0
3	Burrard Slopes	CLT	11,984	3.0
4	Uptown	CLT	23,064	3.0
5	Fairview	CLT	18,756	3.0
6	Mount Pleasant	CLT	18,103	3.0
7	Mount Pleasant	CLT	15,092	3.0
8	Mount Pleasant	CLT	20,870	3.0
9	Mount Pleasant	DB (I-1A)	20,870	3.0
10	Mount Pleasant	DB (I-1B)	29,698	3.0
11	False Creek Flats	DB (I-3 subarea A)	26,073	3.0

2.3 TYPOLOGIES AND DENSITIES TESTED

2.3.1 COMMERCIAL LINKAGE TARGET SITES

For each commercial linkage target site, residual valuations were prepared under current zoning and under a likely future rezoned scenario. For sites in the Downtown, the rezoned densities were based on desktop research of new office development applications and / or recently approved projects. For sites in Uptown / Fairview, rezoned densities were based on the max densities for each case study site per sub-area policies in the Broadway Plan. For sites in the Burrard Slopes and Mount Pleasant, densities were based on recent project approvals and the max densities outlined for those areas subject to density bonus zoning.

Table 4: Commercial Linkage Target Sites Redevelopment Densities and Concepts

Case Study	Target Area	Max Density Tested (FSR)	Redevelopment Concept Tested
1	CBD Core	19.5	Ground level retail, office above
2	CBD Shoulder	19.5	Ground level retail, office above
3	Burrard Slopes	4.5	1.0 FSR Industrial, 3.5 FSR office
4	Uptown	7.5	Ground level retail, office above
5	Fairview	7.5	Ground level retail, office above
6	Mount Pleasant	6.0	50% industrial, 50% office
7	Mount Pleasant	6.0	50% industrial, 50% office
8	Mount Pleasant	6.0	50% industrial, 50% office

2.3.2 DENSITY BONUS SITES

For each density bonus zoning site, residual valuations were prepared under base and max density prescribed for the applicable zoning district.

Table 5: Density Bonus Sites Redevelopment Densities and Concepts

Case Study	Zoning District	Max Density Tested (FSR)	Redevelopment Concept Tested
9	I-1A	5.0	1.0 FSR industrial, 4.0 FSR office
10	I-1B	6.0	1.0 FSR industrial, 5.0 FSR office
11	I-3 Subarea A	5.0	1.0 FSR industrial, 4.0 FSR office

2.4 ANALYSIS APPROACH

The financial analyses compare the estimated property values of the sites under base conditions (either redevelopment under current zoning, or redevelopment under base density in density bonusing districts) with the estimated land value supported by redevelopment as leasehold projects. The goal is to determine if the redeveloped use (either through density bonus or rezoning) generates increased land value, and if so, how much additional density bonus rate or commercial linkage target rate might that redevelopment be able to carry.

Having identified the case study sites, development typologies, density ranges, and where a rezoning would be required, we undertook pro forma analysis as follows.

Base Value Estimation

The 'base value' or existing land value for each case study site was estimated in the absence of any rezoning. For this estimate, two values were considered:

- For commercial linkage target sites, the base value of each was set based on a residual value if the site were redeveloped under current zoning. That base value was the higher of (a) the value of the site if redeveloped as a 100% non-strata project, or (b) the value of the site if redeveloped as a 100% strata project.
- For density bonus zones, the base value of each site was set as the higher of either (a) the value of the site if redeveloped as a 100% non-strata project at base density, or (b) the value of the site if redeveloped as a 100% strata project at base density.

Land Value Uplift Through Density Increase / Rezoning

We prepared pro forma analyses to determine the residual land value supported by redevelopment, looking at densities and concept mixes as outlined in Tables 4 and 5 above.

For commercial linkage target sites, if the estimated supportable rezoned land value as a 100% non-strata project is higher than the site's existing value (set as the higher of strata or non-strata redevelopment under current zoning), then the site is deemed viable for redevelopment. Otherwise, it is not financially viable under that set of conditions, and no increase to the Commercial Linkage target rate is justified. If it is shown to be viable, then we calculate the additional commercial linkage target per square foot that could be paid, based on 75% of the value of uplift. Note that the Commercial Linkage target rate applies only to 100% non-strata redevelopments.

For density bonus sites, if the value of redevelopment at max density is higher than the value of redevelopment under base density (the latter as 100% strata), then the site is viable for redevelopment and an increase to the density bonus rate is potentially warranted. Note that the density bonus rate would apply to any higher density project, regardless of tenure (strata or non-strata).

3.0 FINANCIAL ANALYSIS ASSUMPTIONS AND RESULTS

The assumptions and detailed outputs for each pro forma analysis can be found in the Appendix. Here we outline these assumptions and results in summary.

3.1 INPUT ASSUMPTIONS

Pro forma analyses were prepared using a variety of revenue and cost market inputs, gathered through a combination of our research and analysis of available industry data (public-facing publications and USL database subscriptions), and targeted industry interviews. A summary of these inputs can be found in the tables below.

3.1.1 REVENUES AND VALUES AT COMPLETION

On the revenue side, the following assumptions were made across the range of non-strata pro formas prepared:

Table 6: Revenue Assumptions

Component	Quantum
Ground-floor retail space (where applicable)	
Downtown	\$60 / sq.ft.
Uptown / Fairview	\$50 / sq.ft.
Office Space	
Downtown	\$55 / sq.ft.
Burrard Slopes / Mt. Pleasant	\$47 to \$50 / sq.ft.
Light Industrial Space	
Mt. Pleasant	\$40 / sq.ft.
False Creek Flats	\$40 / sq.ft.

In the case of density bonus sites, strata pro formas were also prepared as density bonus rates are applied regardless of tenure. For these properties, the following revenue assumptions were made:

- Office Space: \$1,300 / sq.ft.
- Light Industrial Space: \$1,100 / sq.ft.

To calculate the value at completion for leasehold projects, we prepare valuations based on net operating income (NOI) and prevailing capitalization (cap) rates. In calculating each project's NOI, we include a 5% vacancy allowance, and a non-recoverable operating cost allowance of 2% for any retail space (where applicable). The following cap rates are applied.

- Retail: 5.25%
- Downtown office: 4.25%
- Other office: 4.5%

3.1.2 CONSTRUCTION COSTS

Construction costs for new office and mixed employment projects were sourced through desktop research and confirmed through targeted interviews. They are presented in Table 7 below.

Table 7: Construction Cost Assumptions

Variable	Quantum
Parking (underground)	\$185 / sq.ft. of underground
Hard Costs	
Downtown	\$520 / sq.ft.
Other Office	\$375 / sq.ft.
Industrial	\$365 / sq.ft.
Office Common Area Fit-Up	\$60 / sq.ft.
Tenant Improvements (TIs)	
Retail	\$30 / sq.ft.
Office	\$80 / sq.ft.
Light Industrial	\$40 / sq.ft.

3.1.3 OTHER INPUT VARIABLES

Each pro forma also considered notable cost items flagged for us by the City, such as utilities relocation and on-site rainwater management, along with all of the required municipal and regional fees and charges. Atop that, we include allowance for soft costs and developer profit, the former at 12% of hard costs, and the latter at 15% on all costs. A contingency allowance of 3.5% on all hard and soft costs is also included.

Table 8: Other Input Variables

Variable	Quantum
On-Site Servicing	\$3,500 per linear metre frontage
Utilities Relocation	\$750,000 per site
Rainwater Management	\$350 per site square metre
Development Cost Levy (DCL) Rates	Updated to Sept. 2023 rates
Regional Development Cost Charges (DCCs)	Updated sewer DCC & New Water DCC
Soft Cost Allowance	12% of hard costs
Developer Profit Allowance	15% on all costs

For reference, the Development Cost Levy (DCL) and Development Cost Charge (DCC) rates used in the analyses are as follows.

Table 9: Applicable DCL and DCC Rates

DCL / DCC Category	2023 Rate
Vancouver Commercial DCL	\$28.63 / sq.ft.
Vancouver Office DCL	\$28.63 / sq.ft.
Vancouver Mixed Employment / Light Industry DCL	\$21.55 / sq.ft.
Metro Vancouver Commercial DCCs	\$5.02 / sq.ft.
Translink Commercial DCC	\$1.26 / sq.ft.
Translink Office DCC	\$1.01 / sq.ft.
Translink Industrial DCC	\$0.30 / sq.ft.

3.1.4 FINANCING ASSUMPTIONS

Financing assumptions were input based on the best information available at the time the analyses were completed. In the intervening period between preparation of analyses and preparation of this document, rates have risen beyond those used in this analysis, and presented in the table below.

Table 10: Land and Construction Financing Assumptions

Variable	Quantum
Interest Rate	5.5%
Loan-to-Value Ratio on Land	50%
Loan-to-Value Ratio on Construction	75%
Financing Fees	1.25% of financed construction costs

Base land values for the land lift calculations are set using residual valuations that assume each case study site is redeveloped under current zoning (in the case of commercial linkage sites), or at the base density permitted within a density bonus zone. In each of these instances, the base value is set as the higher of: (1) residual value if redevelopment as a 100% non-strata project, or (2) residual value if redeveloped as 100% strata project. Note that small changes to revenue assumptions, costs, profit margins, or approvals timelines can cause significant swings in pro forma results.

3.2 COMMERCIAL LINKAGE TARGET CASE STUDY RESULTS

3.2.1 DOWNTOWN

Two case study sites were selected for testing in the Downtown, one located in the Central Business District (CBD) Core, the other in the CBD Shoulder area. The latter site is just under 8,700 square feet, and the former is just under 19,000 square feet. Based on our research, each site was tested assuming a rezoning to allow for redevelopment at 19.5 floor space ratio (FSR) versus 9.0 FSR under current zoning.

Case Study #1: CBD Core

This case study looks at rezoning and redevelopment at **19.5 FSR**, assuming ground level retail and office above. The summary table below shows:

- Change in property value, compared to base value if redeveloped under current zoning
- The Commercial Linkage target amount that would be paid under the current target rate structure
- The calculated change in property value achieved through rezoning
- The potential value of an additional amenity contribution at 75% of land lift

Table 11: CBD Core Testing Results

CBD Core Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	18,678
Rezoned Density (FSR)	19.5
Gross Floor Area (sq.ft.)	364,225
CAC at current target rate	\$3,381,000
Land Value Supported by Concept (net of closing costs and transfer tax)	\$49,377,000
Recommendation	No rate increase supportable

This development concept is deemed viable, however there is no financial 'room' to justify any upward increase to the current commercial linkage target rate of \$17.24 per square foot.

Case Study #2: CBD Shoulder

In this case study, we test the same redevelopment concept as in Case Study #1, also at **19.5 FSR**.

Table 12: CBD Shoulder Testing Results

CBD Shoulder Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	8,698
Rezoned Density (FSR)	19.5
Gross Floor Area (sq.ft.)	169,611
CAC at current target rate	\$1,575,000
Land Value Supported by Concept (net of closing costs and transfer tax)	\$20,672,000
Recommendation	No rate increase supportable

3.2.2 BURRARD SLOPES / UPTOWN / FAIRVIEW

Case Study #3: Burrard Slopes

This case study looked at a **4.5 FSR** redevelopment on a 12,000 square foot lot on West 2nd Avenue in the Burrard Slopes area. Current zoning permits up to 3.0 FSR. The redevelopment concept assumes ground level commercial with office above.

Table 13: Burrard Slopes Testing Results

Burrard Slopes Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	11,984
Rezoned Density (FSR)	4.5
Gross Floor Area	53,928
CAC at current target rate	\$206,542
Land Value Supported by Concept (net of closing costs and transfer tax)	\$2,066,000
Recommendation	No rate increase supportable

Case Study #4: Uptown

This case study looked at a **7.5 FSR** redevelopment with retail on the ground floor and office above.

Table 14: Uptown Residual Testing Results

Uptown Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	23,064
Rezoned Density (FSR)	7.5
Gross Floor Area (sq.ft.)	172,980
CAC at current target rate	\$1,192,500
Land Value Supported by Concept (net of closing costs and transfer tax)	\$2,812,000
Recommendation	No rate increase supportable

Case Study #5: Fairview

As with the Uptown case study above, the Fairview case study looked at a **7.5 FSR** redevelopment with retail on the ground floor and office above.

Table 15: Fairview Testing Results

Fairview Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	18,756
Rezoned Density (FSR)	7.5
Gross Floor Area	140,672
CAC at current target rate	\$969,796
Land Value Supported by Concept (net of closing costs and transfer tax)	\$2,510,000
Recommendation	No rate increase supportable

3.2.3 MOUNT PLEASANT

Case Study #6: Mount Pleasant Site 1

This case study examined a **6.0 FSR** mixed employment (office and industrial) development in Mount Pleasant, on a site with current zoning for up to 3.0 FSR mixed employment. The redevelopment concept assumes that 50% of the floor area would be leasehold industrial and 50% would be leasehold office space.

Table 16: Mount Pleasant Site #1 Testing Results

Mount Pleasant Site 1 Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	18,103
Rezoned Density (FSR)	6.0
Gross Floor Area	108,618
CAC at current target rate	\$624,000
Land Value Supported by Concept (net of closing costs and transfer tax)	\$3,862,000
Recommendation	No rate increase supportable

Case Study #7: Mount Pleasant Site 2

The second Mount Pleasant case study site is similar to Case Study #6 above, testing a **6.0 FSR** non-strata mixed-employment redevelopment on a site which currently permits such development up to 3.0 FSR. For this site, the industrial / office split after rezoning is 50/50.

Table 17: Mount Pleasant Site #2 Testing Results

Mount Pleasant Site 2 Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	15,092
Rezoned Density (FSR)	6.0
Gross Floor Area	90,549
CAC at current target rate	\$520,205
Land Value Supported by Project (net of closing)	\$591,977
Recommendation	No rate increase supportable

Case Study #8: Mount Pleasant Site 3

The third Mount Pleasant case study is, as with the other cases above, a **6.0 FSR** mixed employment project, again with a 50/50 split between industrial and office space. A mixed-employment redevelopment at up to 3.0 FSR is permitted under current zoning, and is used as the basis for establishing the base land value for the land lift calculation.

Table 18: Mount Pleasant Site #3 Testing Results

Mount Pleasant Site 3 Case Study	
Scenario	Rezoned – Leasehold
Site Size (sq.ft.)	20,870
Rezoned Density (FSR)	6.0
Gross Floor Area	125,220
CAC at current target rate	\$719,400
Land Value Supported by Concept (net of closing costs and transfer tax)	\$1,757,761
Recommendation	No rate increase supportable

3.3 DENSITY BONUSING CASE STUDY RESULTS

Three case studies were prepared in areas that are subject to density bonus zoning, two in Mount Pleasant and one in False Creek Flats.

3.3.1 MOUNT PLEASANT

Case Study #9: Mount Pleasant I-1A

This site is located in Mount Pleasant's I-1A zone, which permits a base density of 3.0 FSR and allows for bonusing up to **5.0 FSR**. The redevelopment concept tested assumes that the 5.0 FSR redevelopment is split up into 1.0 FSR industrial and 4.0 FSR office. The current density bonus rate charged on net additional floor area is \$7.22 per square foot, which would yield just over \$301,000 for a maximum density redevelopment. This equates to approximately 0.4% of the total project cost excluding land.

Table 19: Mount Pleasant I-1A Zone Testing Results – Leasehold Redevelopment

Mount Pleasant I-1A Case Study	
Scenario	Max Density – Leasehold
Site Size (sq.ft.)	20,870
Rezoned Density (FSR)	5.0
Gross Floor Area	104,350
Density Bonus at Current Rate	\$301,363
Land Value Supported by Concept (net of closing costs and transfer tax)	\$13,529,000
Recommendation	No rate increase supportable

Case Study #10: Mount Pleasant I-1B

This site, also located in Mount Pleasant, is within the I-1B zone. As with I-1A, I-1B permits redevelopment at up to 5.0 FSR in exchange for a density bonus payment of \$7.22 per net additional square foot. The I-1B zone also offers the option to build additional density (up to 6.0 FSR), with the density bonus rate on the final 1.0 FSR increment set at \$51.77 per square foot.

Table 20: Mount Pleasant I-1B Zone Testing Results – Leasehold Redevelopment

Mount Pleasant I-1B Case Study	
Scenario	Max Density – Leasehold
Site Size (sq.ft.)	29,698
Rezoned Density (FSR)	6.0
Gross Floor Area	178,189
Density Bonus at Current Rate	\$1,966,316
Land Value Supported by Concept (net of closing costs and transfer tax)	\$16,454,772
Recommendation	No rate increase supportable

3.3.2 FALSE CREEK FLATS

Case Study #11: False Creek I-3 Subarea A

The final case study modelled a redevelopment on the False Creek Flats in the I-3 Subarea A zone. This zone permits development at 3.0 up to 5.0 FSR, with a density bonus rate set at \$11.49 per net additional square foot above the 3.0 base.

Table 21: False Creek Flats I-3 Subarea A Zone Testing Results – Leasehold Redevelopment

False Creek Flats I-3 Subarea A Case Study	
Scenario	Max Density – Leasehold
Site Size (sq.ft.)	26,073
Rezoned Density (FSR)	5.0
Gross Floor Area	130,365
Density Bonus at Current Rate	\$599,160
Land Value Supported by Concept (net of closing costs and transfer tax)	\$14,959,966
Recommendation	No rate increase supportable

3.4 SUMMARY RESULTS

This section presents summary tables of all the case study results for the leasehold redevelopment scenarios for all commercial linkage target and density bonus sites.

Table 22: Downtown Commercial Linkage Sites – Summary

	CBD Shoulder	CBD Core
(1) Max Value under Existing Zoning	\$22,528,806	\$49,161,532
(2) FSR after rezoning	19.5	19.5
(3) Building size after rezoning	169,611	364,225
(4) Est. Value for Leasehold Rezoning	\$20,672,144	\$49,376,541
Target Rate Increase Supportable?	No	No

Table 23: Burrard Slopes / Uptown / Fairview Commercial Linkage Sites – Summary

	Burrard Slopes	Uptown	Fairview
(1) Max Value under Existing Zoning	\$9,571,436	\$18,108,061	\$12,879,284
(2) FSR after rezoning	4.5	7.5	7.5
(3) Building size after rezoning	53,928	172,980	140,672
(4) Est. Value for Leasehold Rezoning	\$2,066,081	\$2,811,777	\$2,509,669
Target Rate increase Supportable?	No	No	No

Table 24: Mount Pleasant Commercial Linkage Sites – Summary

	Mount Pleasant 1	Mount Pleasant 2	Mount Pleasant 3
(1) Max Value under Existing Zoning	\$13,393,773	\$11,042,897	\$15,823,115
(2) FSR after rezoning	6.0	6.0	6.0
(3) Building size after rezoning	108,618	90,549	125,220
(4) Est. Value for Leasehold Rezoning	\$7,245,419	\$2,155,060	\$3,791,601
Target Rate Increase Supportable?	No	No	No

Table 25: Density Bonus Sites Summary – Leasehold Redevelopment

	I-1A	I-1B	I-3 Subarea A
(1) Max Value at Base Density	\$17,792,703	\$25,327,572	\$20,390,264
(2) FSR at max density	5.0	6.0	5.0
(3) Building size at max density	104,350	178,189	130,365
(4) Est. Value supported by max density as LEASEHOLD Projects	\$13,529,145	\$15,832,968	\$14,959,966
Density Bonus Rate Increase Supportable?	No	No	No

4.0 SYNOPSIS / CONCLUSIONS

4.1 COMMERCIAL LINKAGE TARGET AREAS

- While office redevelopment projects in the CBD Core and CBD Shoulder areas showed stronger financial performance than case studies outside of the Downtown, they did not show an ability to support higher Commercial Linkage Target rates at this time.
- Higher density leasehold office projects in non-Downtown locations (e.g., Broadway Corridor) do not show an ability to support higher commercial linkage target rates at this time.
- Mixed employment (industrial and office) redevelopments in Mount Pleasant also do not show financial justification for higher target rates under current market conditions.
- While none of the case study analyses suggest that upward movement of Commercial Linkage target rates is warranted, they also do not necessarily suggest that target rates should be lowered. The target rates account for between 0.6% and 0.9% of total project costs.

4.2 DENSITY BONUS ZONING DISTRICTS

- Higher density leasehold projects show lower land values than supported by strata projects at base density. None showed ability to support a higher density bonus rate.
- While redevelopment as higher density strata projects (not presented above) would support higher land values and may support higher density bonus rates, we caution that the strata office market is beginning to show signs of weakness that may lead to a prolonged period of stagnant or falling prices. This would impact the supported residual value of redevelopments, and decrease projects' abilities to absorb higher Density Bonus rates. Caution is warranted.
- At present, there is a rate differential between I-1A and I-1B vs. I-3 subarea A for the portion of additional floor area between 3.0 and 5.0 FSR (\$7.22 / sq.ft. vs. \$11.49 / sq.ft, respectively). This differential is not necessary, and we would encourage rate rationalization across all three of these zones. Within a strata redevelopment context, an adjustment in rate from \$7.22 to \$11.49 per square foot would not have a material impact on overall project viability.

APPENDIX D STAKEHOLDER ENGAGEMENT SUMMARY

The following is a summary of public and stakeholder engagement conducted for the 2023 CAC Target and Density Bonus Contribution Recalibration.

Key Dates in Stakeholder Engagement

Date	Event
October 2022	<ul style="list-style-type: none"> • Development Industry stakeholders notified of the CAC Target and Density Bonus recalibration • Financing Growth website updated
January 2023	<ul style="list-style-type: none"> • Testing assumptions and rate recommendations sent to development stakeholders • Stakeholder meetings with industry organizations, including: <ul style="list-style-type: none"> ○ Urban Development Institute (UDI) ○ National Association of Industrial and Office Properties (NAIOP) ○ Homebuilders Association of Vancouver (HAVAN) • Financing Growth website updated with testing assumptions and rate recommendations
February 2023	<ul style="list-style-type: none"> • Presentation to UDI Liaison Committee • Staff available to answer questions and receive feedback from industry • Requested written comments to be submitted prior to February 17, 2023

Staff collected feedback on the CAC Target and Density Bonus Recalibration from stakeholders through meetings, emails, phone calls, and letters throughout the engagement process.

The development industry (UDI and NAIOP) expressed the following concerns (letter are included in this appendix):

- Proposed rate increases are higher than inflationary increases, and these rate adversely impact financial viability of projects including affordable market housing
 - Staff response: This is not an inflationary adjustment, but instead a recalibration to ensure that land lift is being secured as per the City's CAC policy, subject to economic testing and ability to pay. The recalibration is done every 4 years which takes into account market changes that occurred since approximately 2018. The inflationary adjustment is done on an annual basis, however given the recalibration work the City will not apply the 2023 inflationary rate adjustment to CAC Targets or Density Bonus Zoning contributions.

The detailed economic testing done by third party consultants was to ensure strata residential projects had the ability to pay an increased rate while still remaining viable. Note that CAC Targets do not apply to affordable rental housing.

- Economic analysis relied on information that is up to six months old, request to review the full report and sales comparables used rather than brief slide presentation.
 - Staff response: The city, through its consultant, conducted over 40 case studies for economic analysis. This was extensive testing that was promptly shared with industry and is in line with how we've tested rates in the past. The consultant reports and findings were drafted and finalized in December 2022, with the consultant using the most recent sales data from Q3 to Q4 2022. Staff set up consultation with the development industry in January, sending the testing assumptions and results to the development industry for feedback prior to the January meeting (not in February as noted in the UDI letter). This included circulating key inputs used in the economic testing to support the recommended rate increases. Staff are bringing the report to Council for approval in April 2023. It would be very difficult for staff to expedite the process any faster in order accommodate the time needed for consultants to do the analysis, time for stakeholder engagement, and time for a report to be submitted to Council

It's important to note that when the city conducts economic site testing, it reflects a 'point in time' as it relates to market revenues and costs. The city ensures that its analysis is done as close as possible to when the rate recommendations are made. The city cannot shift this point in time without updating all the case studies which we don't think is necessary in this case.

- Interest rates used in the economic testing are too low.
 - Staff response: These testing assumptions apply to all types of developers and developments. The interest rate used in the testing was deemed to apply to most developers at that time, noting that some developers (in particularly larger developers) can get better rates than while others may be faced with higher rates. On balance, staff and consultants think this is an appropriate interest rate to use noting that a significant majority of commercial development would be built using the assumed interest rate. We would also note that the testing did not result in an increase to the commercial linkage target.

It's again important to note that the site testing reflects a point in time analysis. Looking forward, interest rates are bound to fluctuate where they may go up or go down. That being said, the economic testing used interest rates that were applicable to most new development when the site testing was done.

- Lease rates for industrial development in Mount Pleasant and False Creek Flats is too high.
 - Staff response: The rate quoted in the NAIOP letter would likely be applicable to industrial projects on a Metro Vancouver average, not necessarily for projects with mixed employment use (light industrial/office) in Vancouver's inner core that allow a wider range of uses. Staff would also note that a significant portion of the land use in these areas are for office development rather than for industrial

development. The rate assumption used was found to be appropriate at the point in time of the economic testing, confirmed by the consultant through data and interviews with developers active in this area.

- Rates should decrease to encourage development, staff should not be enforcing an artificial floor for rates.
 - Staff response: The economic testing included analyzing the ability for the City to increase established rates and this resulted in staff recommendations to maintain 17 of the existing rates and increase 9 rates. Of the 17 rates where staff recommend maintaining the rates, the testing revealed that the vast majority of these rates are supportable at the existing rate. Only a very limited number of areas were found to have rates that were not supportable at the existing rates.

However, staff do not recommend reducing rates for a number of reasons. Staff conducted a take-up analysis in each of these areas and found there was sufficient take-up in all areas indicating that the current rate was not a barrier to new development from taking place. Additionally, if these pre-set development contributions are known ahead of time, they can be more easily factored into the price of land helping to dampen land speculation and land price increases. Finally, these development contributions are important funding sources to deliver the needed public benefits to serve new development, as outlined in Public Benefit Strategies, and the costs of these public benefits have increased significantly over the years.

Staff will continue to monitor development activity in each of the pre-set contribution areas. Where staff find development activity is not occurring, then staff can go back into these areas to revisit the rate or policies to support development viability.

The following pages contains the letters received as part of the stakeholder engagement.



URBAN DEVELOPMENT INSTITUTE – PACIFIC REGION
#1100 – 1050 West Pender Street
Vancouver, British Columbia V6E 3S7 Canada
T. 604.669.9585 F. 604.689.8691
www.udi.bc.ca

February 16th, 2023

Chris Clibbon
Planner II, City-Wide and Regional Planning
City of Vancouver
453 West 12th Ave.
Vancouver, BC V5Y 1V4

Dear Mr. Clibbon,

Re: CAC Target/Density Bonus Contribution Updates

On behalf of more than 900 members of the Urban Development Institute – Pacific Region (UDI), we respectfully submit our comments on the City of Vancouver's update of existing Community Amenity Contribution (CAC) Target and Density Bonus cash contribution rates.

While many of the CAC Target and Density Bonus cash contribution rates do not have suggested changes, there are rates that have more than just inflationary increases proposed. Where the City is proposing rate increases, these rates would adversely impact the financial viability of projects, and ability to deliver any form of market housing – let alone affordable market housing. The timing of the proposed changes is particularly difficult, as high interest rates and diminishing sales numbers are already causing many projects to be paused until market conditions improve, so they can become financially viable again. UDI strongly encourages the City to reconsider proposing any CAC Target and Density Bonus cash contribution rate increases at this time.

The need for an updated analysis

As noted in UDI's discussions with the City, we are concerned that the economic analysis relies on information that is up to six months old, which, given the rapidly changing economic circumstances, was out of date market data even at the time that it was analyzed late last year. The results no longer accurately depict market conditions and costs. Given a decline in market activity then, and into the present, there is not a sufficient amount of market data to conduct an accurate analysis to provide recommendations. UDI recommends that the City go back to the consultant and have them re-run their analysis with data no more than three months old. If sufficient data does not exist, that should serve as another indicator that the City should not be proposing any changes at this time, until an accurate analysis can be undertaken. In addition, UDI would like to be able to review the full report that is submitted by Coriolis, and the sales comparables used – rather than the brief slide presentation that was provided at our February 25th meeting.

Relationship between rates and land lift value

Currently, the City calculates rates in relation to extracting 75% of the land lift value from a project for CAC Target rates, and 100% of the land lift value for Density Bonus contribution rates. If revenue from a project goes down as a result of lower sales and increasing costs, the land lift value decreases. Given the changes in the market, particularly in the last few months, UDI believes rates should be decreasing in response to the current decline in land lift values for projects. However, this issue was not addressed by the consultant because staff are reluctant to reduce CACs – even in poor market conditions – as has been done in the past with Development Cost Levies.

We are not aware of City staff having been given a direction from Council to hold rates when land lift values are lower than the existing rates. Unless specified in policy, City staff should not be enforcing an artificial floor for rates. Rather, rates should be responsive to fluctuations in the market – whether that results in an increase or decrease, to ensure CAC Target and Density Bonus cash contribution rates are not adversely impacting the ability of projects to move forward in the City. UDI members are committed to fulfilling their obligations to support complete communities, but if housing cannot be built, the City will receive no housing or funds to support execution of a Public Benefit Strategy.

While UDI does not recommend a rate increase at this time, when a future increase is supportable, the City might consider moving to a posted rate approach for CAC Target and Density Bonus cash contribution rates. The ability for rates to be adjusted to reflect fluctuating market conditions ensures that builders have greater certainty when accounting for municipal fees and charges in project proformas, while the municipality can continue to receive funds to support delivery of planned public amenities.

Prioritizing the delivery of housing over amenities

UDI believes City staff should seek direction from Council on what their priorities for community growth are – whether that be the delivery of housing, amenities, or valuing both as equally important. If housing is the priority, the City should decide whether it is willing to delay the delivery of public amenities in the short-term, if it means enabling the delivery of much needed housing supply. We would like to note the distinction of Development Cost Levies which deliver critical infrastructure and determine a project's ability to achieve occupancy, from CAC Target and Density Bonus cash contributions which deliver community amenities that generally do not prevent housing from being occupied by residents, and could be provided at a later date.

We hope that you will consider revisions to the proposals being brought to Council, in response to the concerns outlined in our letter. If you have any questions regarding our comments, please do not hesitate to contact us. UDI looks forward to continuing collaborative work with the City on this, and other issues, to promote the delivery of much needed new homes in Vancouver.

Yours sincerely,



Anne McMullin
President & CEO, Urban Development Institute



February 17, 2023

Mr. Chris Clibbon
City of Vancouver
453 West 12th Ave
Vancouver, BC V5Y 1V4

Re: NAIOP Consultation on 2023 CAC Target/Density Bonus Update; meeting January 27, 2023

Dear Mr. Clibbon:

Thank you for connecting with NAIOP Vancouver last month. Discussion following your presentation has led to two recommendations and one question:

1. **Interest Rate.** Based on current market conditions and the model prepared by Urban Systems, we note that the interest rate used for modelling was 5.5%. On new loans we are seeing interest rates in excess of 7%, often in excess of 7.5%. Revising Urban Systems' assumptions to more current figures would further highlight the difficulty to underwrite development projects in today's cost environment. We think there is a strong argument to consider reducing the current CAC rate in order to maintain a flow of projects and mitigate a severe supply constraint in the future.
2. **Lease Rate.** We also note that the Lease Rates that Urban Systems used in the economic model were extremely high (\$40/sf), and typically only realized for a very niche product (for example ground level or amenity rich areas) and in fact lease rates for industrial, mixed employment generally land around \$20/sf. If you were to average between the higher end you provide and the lower end that is more typical, we suspect a much different proforma scenario would be realized. Combining the lease rate, and interest scenario noted above, we might even be in a position that would suggest a reduction in CAC rates.
3. **Clear Heights.** With the increase in density from 3.0 to 4.5 FSR in the Broadway Plan, we encourage you to complete a review of the bulletin for clear heights and mezzanines within industrial FSR. The concern with the current bulletin stems particularly from smaller sites and is made more challenging with sloped sites where much of the main floor plate is consumed with parking ramps and loading spaces. To encourage the development of this



space and reduce barriers related to shadowing, a reduction in the industrial clear height requirements should be evaluated. <https://bylaws.vancouver.ca/bulletin/bulletin-m-i-districts-functional-industrial-space.pdf>

4. **I-1 Density.** Finally, with the coming changes to density on I-1 sites, is there any sort of financial contribution being requested to realize the increased density? Please let us know when you have a moment.

As always, we are grateful for your engagement with us and the productive relationship we have with the City of Vancouver. On behalf of our membership, we extend our sincere thanks that there are few increases contemplated at this time.

We look forward to continuing to collaborate. As always, please do not hesitate to reach out regarding industry consultation, policy, or any matter in which we may be of assistance.

Sincerely,

Paul Kool
Executive Director
NAIOP Vancouver

APPENDIX E SUMMARY OF DEVELOPMENT CONTRIBUTION TOOLS

Overview of Development Contribution Tools

1. Development Cost Levies
2. Community Amenity Contributions
3. Density Bonus Zoning

1. Development Cost Levies (DCLs)

Development Cost Levies (DCLs) are a growth-related charge collected from most new development and a significant source of funding for public amenities and infrastructure needed to serve new residents and workers. DCLs help relieve what would otherwise fall onto property taxes and other City funding.

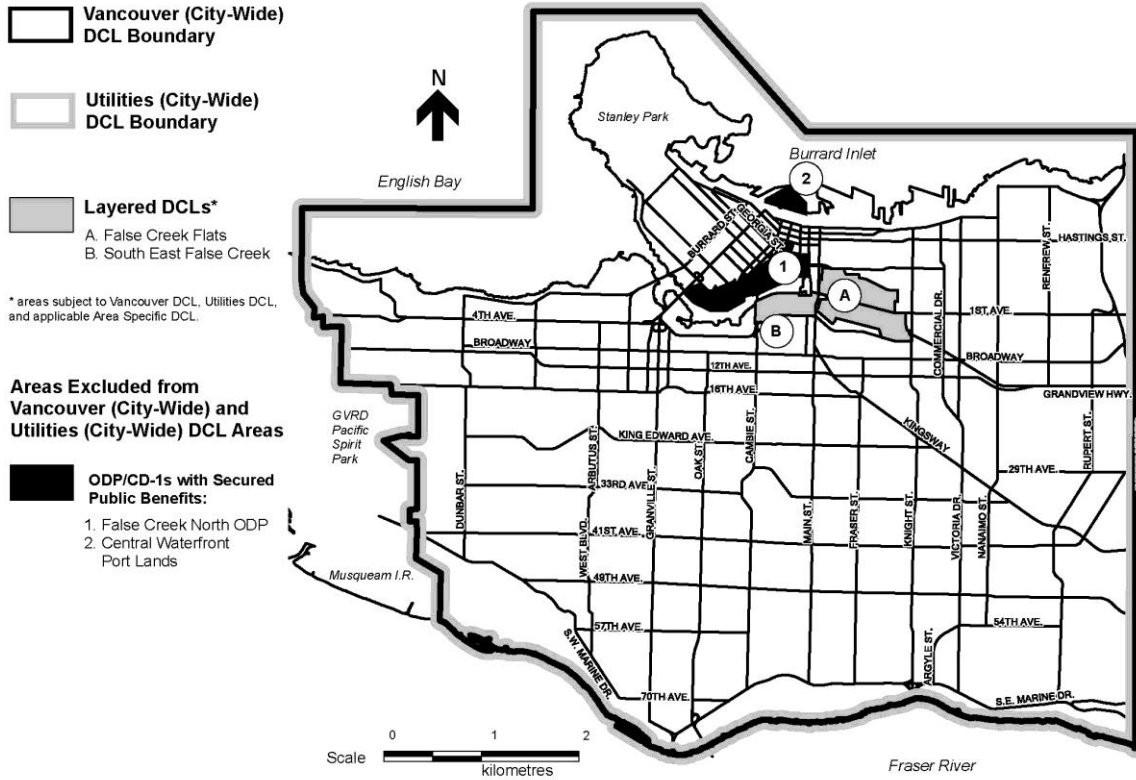
DCLs are applied on a per square foot basis and payment is due at Building Permit issuance. DCL revenues pay for specific growth-related capital projects (as permitted by the Vancouver Charter). The City-wide DCL is allocated to park development and improvements, replacement (affordable) housing, childcare facilities, transportation, and utilities (affordable housing). The Utilities DCL is fully allocated to utility infrastructure (sewer, water, and drainage).

The current DCL system consists of 4 DCL Districts (each with its own rates) and 2 additional planning areas excluded from DCLs. The Vancouver (City-wide) and Utilities DCL Districts apply to most of the city and the 2 Area Specific DCL Districts apply to smaller planning areas across Vancouver.

DCL By-laws establish area boundaries of each DCL district. Levies collected within each district must be spent within the area boundary, except for DCLs collected for replacement housing which can be spent city-wide. DCL districts are divided into two general categories:

1. **Base DCL Districts:** This includes the City-wide DCL District and the Vancouver Utilities DCL District. These districts apply across the city and most developments are subject to both DCLs.
2. **Layered DCL Districts:** These are specific geographic areas in which the Area Specific DCL, the City-wide DCL, and Utilities DCL all apply. There are two such areas shown on the map as A and B (False Creek Flats and Southeast False Creek). These are or were industrial areas where new plans identified potential for significant redevelopment and a higher need for facilities than could be covered by the City-wide DCL and Utilities DCL alone.

Current DCL Districts



note: boundaries of highlighted areas are approximate and shown for illustrative purposes only.

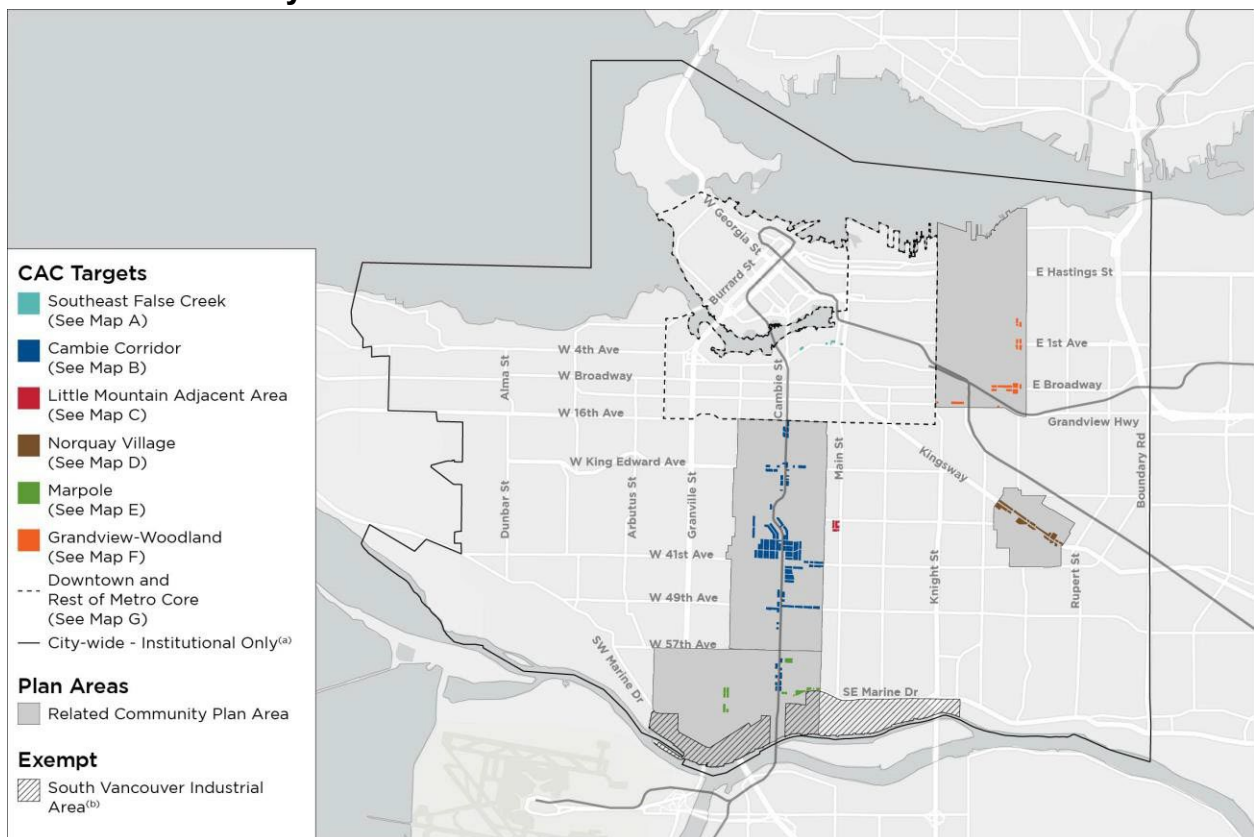
2. Community Amenity Contributions (CACs)

CACs are voluntary in-kind or cash contributions provided by development when City Council grants additional development rights through rezonings. CACs can help address the increased demands that may be placed on City facilities as a result of a rezoning (from new residents and/or employees), as well as mitigate the impacts of a rezoning on the surrounding community.

In a rezoning, CACs can be part of a public benefits package offered by the developer. In-kind (or on-site) amenity contributions can include affordable and non-market housing, childcare facilities or park space. CAC payments in-lieu may be put toward these benefits as well, but also include libraries, community centres, cultural facilities and neighbourhood houses. CAC payments in-lieu are generally applied to off-site benefits in the surrounding community. CACs are in addition to DCLs.

As new area-specific plans are approved, these areas are excluded from the City-wide CAC policy. Many of these areas have a blend of negotiated CAC and CAC target contributions from rezonings, and they are based on local public benefit needs and development economics.

Current CAC Policy Areas



3. Density Bonus Zoning Contributions

Density bonus zoning contributions are used as a zoning tool that permits developers to build additional floor space, in exchange for amenities and/or affordable housing needed by the community. Amenities can be community centres, libraries, parks, childcare centres, affordable housing and more.

Density bonus zones allow for:

- Outright density (or base density) with no density bonus contribution.
- Additional density, up to a limit set in a zone, with a contribution towards amenities and affordable housing.

Financial contributions are determined by the 'affordable housing and amenity share' contribution rate set out in Schedule F of the Zoning & Development By-law. New community plan areas are actively pursuing new Density bonus zoning contributions areas. Density bonus zoning contributions are currently approved in select zones in Norquay, Marpole, Joyce- Collingwood, Mount Pleasant Industrial Area, False Creek Flats, Grandview-Woodland, and Cambie Corridor.

In 2017, Council approved amendments to the Zoning & Development By-law and the Downtown Official Development Plan (ODP) to add Density bonus zoning contributions provisions related to heritage to select existing zones. These amended zones are functionally similar to other Density bonus zoning contributions, except that the 'amenity share' is narrowly defined as heritage conservation and that contribution rates are set out in Schedule G of the Zoning & Development By-law and Section 3.15 in the Downtown ODP.

Current Density Bonus Contribution Areas

