CITY OF VANCOUVER

REPORT

Report Date:	June 8, 2022
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Meeting Date:	June 22, 2022

Submit comments to Council

TO: Standing Committee on Policy and Strategic Priorities

FROM: General Manager of Planning, Urban Design and Sustainability

SUBJECT: Vancouver Development Cost Levy By-Law Update (2023-2032)

RECOMMENDATION

A. THAT Council approve, in principle, the amended Development Cost Levy (DCL) rates as shown in Appendix A and that these rates be phased-in as follows:

- 50% of the Vancouver (City-wide) Development Cost Levy (CWDCL) rate increase to be effective September 30, 2022, with the remaining 50% rate increase to be effective September 30, 2023; and
- 50% of the Utilities Development Cost Levy (UDCL) rate increase to be effective September 30, 2022, with the remaining 50% rate increase to be effective September 30, 2023.

B. THAT Council approve the allocation of the CWDCL revenues among DCL program categories, to be effective immediately, generally as follows:

- Replacement Housing 24.5%
- Childcare 8.0%
- Park 34.5%
- Transportation 33.0%

C. THAT Council approve, in principle, the modification of the DCL waiver for for-profit affordable rental housing in the City-wide DCL By-law, Area-Specific DCL By-law, and Secured Rental Policy, to be effective September 30, 2022.

D. THAT Council approve, in principle, the following amendments to reduce DCL rates for the following uses in the CWDCL, UDCL, and the Area-specific DCL, to be effective September 30, 2022:

- Apply a $10 per building permit for the uses shown in Appendix A; and
- Remove the reduced rates for Parking Garage and Surface Parking Lot.

E. THAT Council approve, in principle, the addition, deletion or amendment of definitions in the CWDCL, UDCL, and the Area-Specific DCL as shown in Appendix A, to be effective September 30, 2022.

F. THAT Council approve, in principle, the removal of the DCL payment by instalment option for all DCL By-laws, to be effective September 30, 2022.

G. THAT Council approve, in principle, the exemption of DCLs for micro-dwelling units under 320 square feet (29.73 square meters) in the CWDCL, UDCL, and Area-specific DCL, to be effective September 30, 2022.

H. THAT Council direct staff to report back on considerations and options regarding Area-Specific DCLs and Exempt DCL areas as part of any related area planning exercise or as part of Vancouver Plan Implementation.

I. THAT Council repeal all previous DCL Bulletins and interpretations.

J. THAT the Director of Legal Services be instructed to bring forward amendments to the Vancouver Development Cost Levy By-law No. 9755, Vancouver Utilities Development Cost Levy By-law No. 12183, and the Area Specific Development Cost Levy By-law No. 9418 as generally set out in Appendix A, to give effect to Recommendations A to G.

REPORT SUMMARY

Following a comprehensive review of forecasted new development and DCL eligible growth costs over the 2023-2032 period, this report seeks Council approval to adopt the following updates:

- CWDCL and UDCL rates;
- CWDCL allocations among replacement housing, childcare, park and transportation;
- CWDCL waiver for for-profit affordable rental; and,
- DCL By-laws.

Staff undertake a comprehensive review of DCLs every four years to align with the City's Capital Planning cycle so that DCL rates and program category allocations are up-to-date and reflect current priorities. The last comprehensive review of the CWDCL was undertaken in 2017, and in 2018 the UDCL was introduced.

As a result of the review, staff recommend that the CWDCL and UDCL rates be updated to recover a share of the growth costs associated with the forecasted 10-year DCL program. The recommended DCL rates in this report are anticipated to support approximately $1.86 billion (50%) of the contemplated net municipal growth costs over the next 10 years (2023-2032). The remaining 49% of net municipal costs are anticipated to be funded from other development contributions (e.g. Community Amenity Contributions (CACs), Density Bonus Zoning Contributions, conditions of development), and a 1% municipal assist funded by City contributions (e.g. property tax, utility fees). Similar to the 2017 comprehensive DCL review, all program areas exceeded the City's overall growth-related funding capacity and had to be rationalized as part of the capital planning process.

Stakeholders, including the development industry, non-profit operators, senior government agencies, and the Vancouver Park Board were consulted at key points in the DCL Update. Staff also took other measures to increase awareness of the DCL Update, including updates to the City website, notification in news outlets, and provided contextual materials for the 4-year capital plan public engagement. A summary of the engagement, including correspondence received, can be found in Appendix D. This report also includes two report backs on the Council motions.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

In 1992, Council approved the City's first Downtown South Area-Specific DCL District and corresponding Public Benefit Strategy.

In 2001, Council approved the False Creek Flats Area-Specific DCL District.

In 2003, Council adopted the Financing Growth Policy that sets the framework for the collection and allocation of CWDCLs to help pay for eligible public amenities and infrastructure needed for growth: replacement housing, childcare, park, and engineering infrastructure.

In 2007, Council approved the Southeast False Creek Area-Specific DCL District and a corresponding Public Benefits Strategy and Housing Strategy.

In 2009, Council adopted the annual inflationary DCL rate adjustment system for the CWDCL and Area-Specific DCLs, with the new rates effective on September 30 of each year.

In 2009, Council approved waiver of CWDCL for "for-profit affordable rental housing" as part of the Short Term Incentives for Rental program.

In 2013, Council approved the replacement of the Oakridge-Langara Area-Specific DCL with CWDCL effective March 12, 2014. In July 2015, Council approved the replacement of five Area-Specific DCLs with the CWDCL (Arbutus, Burrard Slopes, Cedar Cottage/Welwyn, Dundas/Wall and Triangle West). As a result, the number of DCL Districts reduced from 11 to 5.

In 2017, Council approved the CWDCL Update (2017-2026). The update added new DCL rate categories and new reduced DCL rates; amended DCL revenue allocations for replacement housing, childcare, park, transportation and utilities; and removed the Downtown South Area-Specific DCL. Council also approved a framework for updating the DCL program every four years to align with the City's 4-year Capital Planning cycle.

In 2018, Council approved the establishment of the UDCL. This included a two-year phase-in of the east-side residential rate category (above 1.5 FSR) and a UDCL waiver for “for-profit affordable rental housing” on an interim basis. Council also approved the removal of the Grandview-Boundary Area-Specific DCL.

In 2019, Council approved the removal of the UDCL waiver for “for-profit affordable rental housing”, effective September 30, 2020. The eligibility for CWDCL waiver was expanded to include moderate income rental projects.

In 2021, Council approved the Latecomer Policy which guides agreements for developers to recover costs associated with infrastructure improvements that benefit properties beyond their own.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing.

REPORT

Background/Context

Vancouver is a growing city with most new development occurring in areas that have undergone area planning. Population and employment growth is supported through the network of public amenities and infrastructure such as affordable housing, childcare, park and engineering infrastructure. These investments contribute to the overall liveability of our city, the health of our residents, and the needs of individuals and families who live and work here.

The City funds capital programs/projects from a range of sources:

- **City contributions** – Operating revenues (e.g. property tax, water and sewer utility fees) typically fund most maintenance and renewal of existing public amenities and infrastructure.
- **Development contributions** – Consistent with the City’s Financing Growth Policy (2003), new and expanded public amenities and infrastructure to support growth are funded in part through development contributions such as DCLs, CACs, Density Bonus Zoning Contributions, conditions of development, and utility connection charges.
- **Partnership contributions** – External funding from the federal, provincial and regional governments, 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 so as to reduce pressure on property taxes, utility fees and other City funding sources. DCLs are one of the City’s primary financing growth tools.

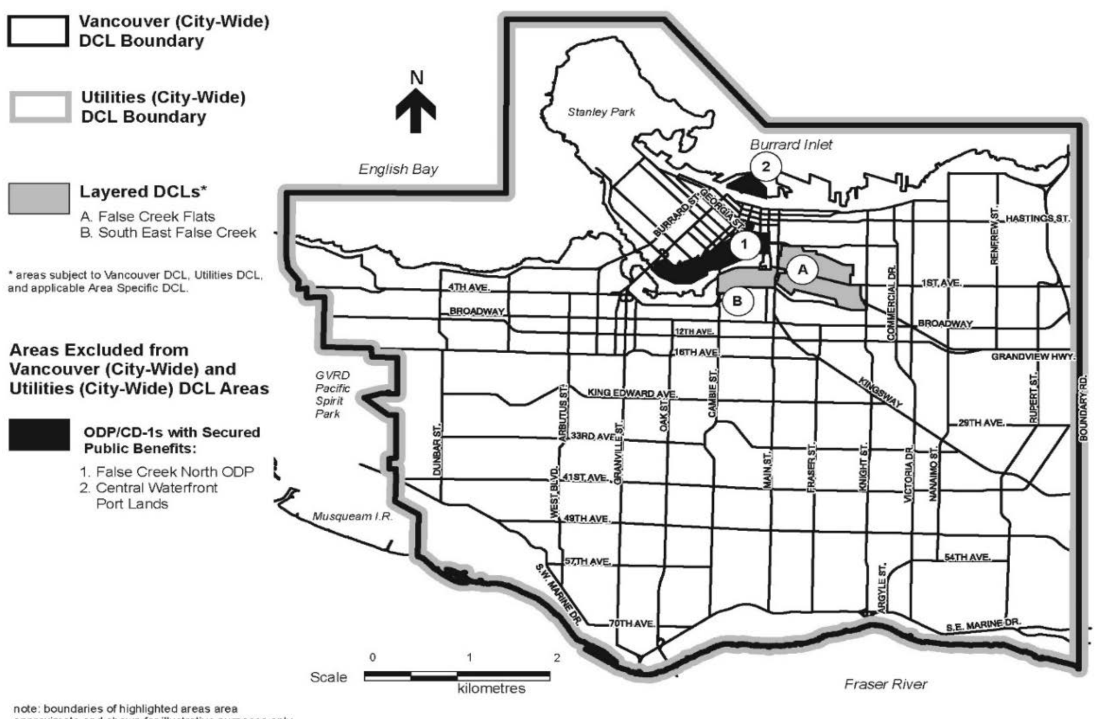
The Province of British Columbia amended the Vancouver Charter (s. 523D) in 1990, giving Council the authority to use DCLs to help fund growth-related eligible projects. The City determines specific growth-related needs and costs within the eligible program categories, as well as discretionary waivers or reductions of DCLs for specific uses.

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 currently funds the following program areas:

- replacement (affordable) housing;
- childcare facilities;
- park development and improvements;
- transportation (highway infrastructure); and
- utilities (sewer, water, and drainage).

DCL By-laws establish area boundaries of each DCL district, establishing the public amenities and infrastructure needed to accommodate future growth and the rates and necessary to pay for them. Levies collected within each district must be invested within the area boundary, except for DCLs collected for replacement housing which can be invested city-wide. The city-wide DCL districts, layered DCL districts, and exempt areas can be found in Map 1. For more information on DCLs and other development contributions, see Appendix F.

Map 1: Current DCL Districts



In 2017, Council approved a framework for updating the DCL program every four years to align with the City's 4-year Capital Planning cycle. Regular updates to the DCL Program allow the City to update its DCL By-laws to reflect updated growth forecasts, DCL program needs, investment priorities of Council, Vancouver Park Board, and the community, and recalibration of funding capacity assumptions. The last CWDCL Update was in 2017 which was the first comprehensive update to rates and allocations since its inception in 2003. The UDCL was introduced in 2018 to address the need for upgraded water, sewer, and drainage infrastructure to support growth. The next DCL update is scheduled in 2026, in advance of the next 4-year capital plan (2027-2030).

The DCL Update is based on a 10-year timeframe (2023-2032) and includes the following:

- A development forecast based primarily on in-stream development applications (as of mid-2021);
- Future growth needs based on the development forecast for DCL eligible projects; (replacement housing, childcare, park, transportation, and utilities infrastructure);
- Growth costs for DCL eligible capital programs and projects (as of February 2022);
- Updated CWDCL and UDCL rates;
- Policy considerations including the CWDCL waiver for for-profit affordable rental housing and reduced rates; and
- Updating the CWDCL, UDCL, and Area Specific DCL by-laws.

Hemson Consulting Ltd. was retained by the City to assist City staff with the DCL Update (for Hemson's background report on the DCL Update, please see Appendix B). ***Coriolis Consulting*** Corp. was retained by the City to provide an independent review of the proposed DCL rates and impact of proposed changes to the CWDCL rental waiver on development viability (for the Coriolis report, please see Appendix C). Both Hemson and Coriolis assisted with the 2017 DCL update.

Development Forecast

One of the first steps in updating the DCL rates is to forecast the type and location of anticipated development. To create the 10-year (2023-2032) development forecast, staff reviewed in-stream development applications (e.g. rezoning applications, development permits, building permits), as well as active major projects (e.g. Oakridge Centre, East Fraser Lands) and development take-up rates for lower-density forms of development within existing zoning (e.g. laneway housing, duplex, townhomes). The development forecast does not include forecasts for plan areas that have not been approved by Council (e.g. Broadway Plan, Rupert & Renfrew Station Area Plan, Jericho Lands) at the time of developing the DCL development forecast, with the exception of in-stream applications in those plan areas.

The 2023-2032 development forecast is summarized in the two tables below. The forecast anticipates approximately 56.2 million square feet of net new floor area, predominantly located in the Downtown Core, within recent community plan areas, and along major transit lines. Of the residential floor area, 12% is forecasted to be non-market housing, 33% rental housing, and the remaining 55% ownership/strata. For a detailed review of the development forecast including maps, refer to the Hemson Background Study in Appendix B of this report.

Table 1: Forecasted Residential Net Floor Area (2023-2032)

Residential Categories	Forecasted Floor Area (million sq.ft.)
Low Density Residential (Laneway, Duplex, Townhouse)	4.0
Medium Density Residential (Stacked Townhouse, Low-Rise Apartment)	2.0
Higher Density Residential (Mid- and High-Rise Apartment)	35.9
Total Residential	**41.9**

Table 2: Forecasted Non-Residential Net Floor Area (2023-2032)

Residential Categories	Forecasted Floor Area (million sq.ft.)
Commercial & Other Uses (Including Office, Retail, Institutional, Hotel)	10.6
Mixed Employment (Light Industrial)	1.4
Industrial (Heavy Industrial)	2.3
Total Non-Residential	**14.3**

DCL Program

Based on the 10-year development forecast, City departments developed DCL-eligible capital programs to support the anticipated growth. In determining the net DCL-eligible costs, assumptions were made with regards to anticipated funding from senior governments and other partners, as well as other development contributions (e.g. in-kind and cash CACs) and City contributions (e.g. Empty Homes Tax). Where applicable, renewal costs are included in the capital programs, but only the growth-related components are eligible for DCLs.

The following is a high-level summary of the anticipated programs/projects included in the DCL project lists:

- **Replacement Housing:** DCLs will contribute to the development of up to 4,900 replacement housing units (affordable housing) for people displaced by growth and unable to afford comparable housing in that area. Replacement Housing DCLs will be used to fund land acquisition for future affordable housing, as well as capital grants to non-profit operators.

- **Childcare:** DCLs will contribute to the development of approximately 1,200 childcare spaces, including spaces integrated within civic facilities, through capital grants to non-profit and Indigenous led non-profit operators, as well as converting existing spaces from part-time to full-time.

- **Park:** DCLs will contribute to approximately 5.3 ha of parkland acquisition, several park developments and improvements, as well as seawall and urban forest enhancements.

- **Transportation:** DCLs will contribute to the development of active transportation and complete street infrastructure including AAA bikeways, pedestrian infrastructure, signals and street lights, safety and accessibility improvements, public plazas within the road right-of-way, transit integration improvements and planning, and bridge upgrades.

- **Utilities**: DCLs will contribute to the development of neighbourhood-serving utilities infrastructure, including over 20 km of sewer and sanitary pipes, pump stations, drainage projects, water upgrades, and capacity models to support growth.

Table 3 provides a summary of the cost allocations for each DCL program category over a 10-year period (2023-2032). The gross capital program costs amount to $9.72B. Adjustments have been made to account for:

- any benefit to existing or renewal components;
- senior government and partner funding;
- other development contributions (e.g. in-kind and cash CACs, Density Bonus Zoning Contributions, conditions of development);
- existing DCL reserves (including CWDCL, UDCL, and Layered DCL); and
- other City funding (e.g. Empty Homes Tax).

Staff have also developed a Utilities financing framework to outline the role of different utilities funding tools, including UDCLs and conditions of development (see Appendix E for more information).

The net recoverable DCL cost is $1.86B, which is the amount expected to be recovered through DCL revenues over the next 10 years. For a detailed review of capital projects by program area, please see the Hemson Background Study in Appendix B.

Table 3: Summary of Overall 10-year Capital Program (2023-2032)

Service	Gross Project Costs ($000)	Senior Gov. / Partners ($000)	Post-Period (2033+) ($000)	Benefit to Existing ($000)	Net Growth-Related Costs ($000)	Growth Costs Funded from Other Sources[1] ($000)	DCL Eligible Costs 2023-2032: Net DCL Eligible Costs ($000)	Less Municipal Assist[2] 1% ($000)	DCL Rate Supported 2023-2032 ($000)
1.0 Parks	$539,413	$0	$0	$39,250	$500,163	$78,994	$421,169	$4,322	$416,847
2.0 Childcare	$347,738	$63,570	$0	$18,900	$265,268	$165,944	$99,324	$1,273	$98,052
3.0 Housing	$5,220,034	$3,383,179	$0	$35,688	$1,801,167	$1,502,490	$298,677	$3,207	$295,470
4.0 Transportation	$1,515,359	$362,850	$0	$699,635	$452,874	$48,826	$404,048	$4,194	$399,855
5.0 Utility Services									
Water	*$38,711*	*$0*	*$5,932*	*$494*	*$32,285*	*$19,333*	*$12,951*	*$135*	*$12,816*
Sewer	*$2,059,850*	*$18,500*	*$605,010*	*$737,450*	*$698,890*	*$55,251*	*$643,639*	*$6,693*	*$636,946*
Sub-Total Utilties	$2,098,561	$18,500	$610,942	$737,945	$731,174	$74,584	$656,590	$6,828	$649,762
TOTAL CAPITAL PROGRAM	**$9,721,104**	**$3,828,099**	**$610,942**	**$1,531,417**	**$3,750,646**	**$1,870,837**	**$1,879,809**	**$19,823**	**$1,859,985**

Notes
1) Other Funding Sources Include: DCL Reserves, CACs, conditions of development, Empty Homes Tax, Layered DCL and other.
2) Municipal Assist: has been set as a % of overall program level 2023-2032 funding needs.

As new community planning and development occurs over time, the capital program may need to be updated, including any change to the timing and substitution of projects.

The 10-year Development Forecast and 10-year DCL Capital Project Lists are two key inputs into determining the DCL rate calculations, as outlined in the following section.

Strategic Analysis

This section provides the analysis to support the recommendations around DCL rates, DCL allocations, the CWDCL waiver, reduced rates, and other policy considerations.

Recommendation A: Amended CWDCL and UDCL rates

To deliver the required DCL programs/projects needed to support the anticipated growth within the 10-year development forecast, the recommended CWDCL and UDCL rate increases are shown in Table 4 and Table 5 respectively. To calculate the updated DCL rates, the growth-related capital costs were divided into the gross floor space forecast to arrive at the base DCL charge. For more details on the rate calculation process, see the Hemson Background Report in Appendix B.

Based on feedback received from development stakeholders (see Appendix D), staff are proposing to phase-in the increase of DCLs over two years, where 50% of the increase would be effective September 30, 2022, and the remaining 50% increase would be effective September 30, 2023. This phase-in allows more time for the development industry to adjust to and factor in the increased DCL rates in their land acquisition and development. The rate phase-in provides further protection for in-stream applications. The financial implications of the phase-in of the DCL rate increases over 2 years is anticipated to be $15-20M, or approximately 1% of the overall 2023-2032 DCL program. Notwithstanding the phase-in, the City’s annual inflationary index will be applied to all DCL rates.

Table 4: Recommended Rate Adjustments for the City-wide DCL

Rate Category	Current Rate	Full DCL Update Adjustment	Recommended DCL Rate Sept 30, 2022 (50% phase-in)	Recommended DCL Rate Sept 30, 2023 (remaining 50% phase-in)
Residential in development over 1.5 FSR	$18.24/ft^2	$3.56/ft^2	**$20.02/ft^2**	**$21.80/ft^2**
Medium density residential above 1.2 FSR to 1.5 FSR	$9.11/ft^2	$1.78/ft^2	**$10.00/ft^2**	**$10.89/ft^2**
Residential at or below 1.2 FSR and laneway house	$4.23/ft^2	$0.83/ft^2	**$4.65/ft^2**	**$5.06/ft^2**
Commercial and most other uses	$15.39/ft^2	$6.41 /ft^2	**$18.60/ft^2**	**$21.80/ft^2**
Industrial	$6.14/ft^2	$2.58/ft^2	**$7.43/ft^2**	**$8.72/ft^2**

Mixed Employment (Light Industrial)	$11.55/ft^2	$4.79/ft^2	**$13.95/ft^2**	**$16.34/ft^2**

Table 5: Recommended Rate Adjustments for the Vancouver Utilities DCL

Rate Category	Current Rate	Full DCL Update Adjustment	Recommended DCL Rate Sept 30, 2022 (50% phase-in)	Recommended DCL Rate Sept 30, 2023 (Remaining 50% phase-in)
Residential development over 1.5 FSR	$10.13/ft^2	$3.53/ft^2	**$11.90/ft^2**	**$13.66/ft^2**
Medium density residential above 1.2 FSR to 1.5 FSR	$5.06/ft^2	$1.77/ft^2	**$5.95/ft^2**	**$6.83/ft^2**
Residential at or below 1.2 FSR and laneway house	$2.33/ft^2	$0.84/ft^2	**$2.75/ft^2**	**$3.17/ft^2**
Commercial and most other uses	$5.32/ft^2	$1.51/ft^2	**$6.08/ft^2**	**$6.83/ft^2**
Industrial	$2.14/ft^2	$0.59/ft^2	**$2.44/ft^2**	**$2.73/ft^2**
Mixed Employment (Light Industrial)	$4.00/ft^2	$1.12/ft^2	**$4.56/ft^2**	**$5.12/ft^2**

Coriolis Consulting tested the rates on several hypothetical development sites and determined that the proposed DCL rates would not impact development viability. For more information on the economic testing, please see Appendix C.

This year's CWDCL update shows a larger increase for the non-residential categories. This is due in part to the commercial market uncertainty in 2017 and the decision at the time to not increase the non-residential rates. Since 2017, the commercial and industrial markets have consistently shown strong fundamentals (e.g. increasing lease rates, continued development proposals) and the economic testing indicates these markets are able to accommodate the proposed rates. The 50% DCL rate phase-in will protect and support in-stream non-residential applications.

The Vancouver Charter requires a 12 month in-stream rate protection for applications in the approval process. To qualify for in-stream rate protection, an application would need to be submitted prior to September 30, 2022 (rezoning application, development permit, or building permit), and obtain building permit issuance prior to September 30, 2023.

Recommendation B: Revised CWDCL allocations

The recommended adjustment to the CWDCL allocations reflects the capital programs detailed above for replacement housing, childcare, park, and transportation.

Table 6: Recommended Allocation of CWDCL Revenue (2023-2032)

Project Category	DCL Rate Supported Cost ($millions)	Recommended Allocation	Current Allocation
Replacement Housing	$295.5	24.5%	36%
Childcare	$98.1	8.0%	13%
Park	$416.8	34.5%	18%
Transportation	$399.9	33.0%	25%
Utilities	**replaced by UDCL**		8%
Total	**$1,210.2**	**100%**	**100%**

The recommended allocations represent a shift from 2017 when allocations were last updated. After a substantial increase in allocation as part of the 2017 CWDCL update, the current proposed allocations to Replacement Housing and Childcare have decreased as the City anticipates additional funding commitments from senior levels of government. Instead, staff recommend increasing allocation to Park and Transportation as these are core city services and additional DCL funding in these areas will contribute towards achieving climate mitigation and adaptation goals.

The UDCL contribute to the development of water, sewer, and drainage infrastructure. As part of this update, utilities infrastructure will now be fully funded under the UDCL By-law, allowing the 8% utilities allocation to be removed from the CWDCL. In July 2019, Council approved altering the 8% utilities allocation within the CWDCL towards utilities upgrades triggered by affordable housing developments on an interim basis. Staff created the Affordable Housing Utilities DCL (AHUDCL) funding program to support in-stream social housing and moderate-income rental housing pilot projects. As part of the recommended CWDCL allocations, staff are phasing out the AHUDCL funding program as housing projects typically have enough time to plan for the necessary utilities costs and other funding mechanisms (e.g. capital grants, senior government funding) are now available. The AHUDCL reserve will continue to support eligible affordable housing projects until such time as the DCL funds are depleted. Staff will continue to monitor and rationalize the need for utilities upgrades for affordable housing.

Recommendation C: Modify the DCL waiver for for-profit affordable rental housing

This report recommends an adjustment to the CWDCL waiver for for-profit affordable rental housing. Council removed the UDCL waiver in 2020, however eligible rental can currently benefit from the CWDCL and Area-Specific DCL waivers. To be eligible for the rental waiver, projects either need to have average rents at or below new market rents as reported annually by the CMHC, or 20% of the floor area needs to be secured at or Below Market rents.[1]

As noted in the Financing Growth policy, all development including both strata and rental residential creates demand on public amenities and infrastructure and should contribute towards growth costs. Over the last 10 years, about 45% of rental-only projects paid full DCLs while the remaining 55% utilized the DCL waiver. This has resulted in the City waiving over $60M in DCLs, which represents 6% of the total DCL revenue collected over that period. A significant amount of DCLs were waived in 2021 ($29M), which was due to a very active year for development of secured market rental and moderate income rental housing projects, particularly

[1] Below Market rental requirements would be met by projects enabled through policies such as the Below-Market Rental Housing Policy for Rezonings, Moderate Income Rental Housing Pilot Program, and the Secured Rental Policy.

in advance of the removal of the UDCL waiver along with its in-stream rate protection which ended in 2021. Additionally, there has been an increasing number of moderate income rental projects seeking the waiver. In the future, it is anticipated that rental housing will continue to represent a significant share of residential development, and as such the 10-year development forecast accounts for 1/3 of the residential floor area being rental.

The DCL waiver is an important incentive to encourage rental housing development to achieve the City's housing goals across the housing continuum. Economic testing has indicated that rental development is marginally viable in most parts of the city. The CWDCL waiver improves the financial viability of rental housing and increases the annual yield by approximately 2-3%, which can tip some projects over from being unviable to financially viable. Over the last 10 years, the DCL waiver has contributed to the delivery of approximately 4,700 secured rental units.

To balance the need to support rental viability while also recognizing the need for rental development to contribute towards growth costs, staff are recommending the waiver program be adjusted to create two tiers:

- Under the first tier, market rental housing with rents at or below CMHC average rents for units in newer market rental buildings would be eligible for an 86.24% waiver, but would pay the remaining 13.76% (equivalent to a $3.00/ft^2 CWDCL charge). The recommended phase-in of the DCL rates would result in a $2.75/ft^2 CWDCL in year 1, and $3.00/ft^2 in year 2.

- Under the second tier, a 100% waiver would be provided for rental where at least 20% of the floor area is secured at below-market rents. Below-market rental projects are more reliant on the DCL waiver and preserving the full DCL waiver is important to incentivizing this type of rental housing that has deeper and permanently secured affordability.

Notwithstanding the phase-in of the City-wide DCL waiver amendment, the City's annual inflationary index will be applied to DCL rates.

These recommended adjustments to the DCL waiver would continue to support rental viability, as the economic testing shows a $3.00/ft^2 rate will have a minimal impact on rental development (See Appendix C on the economic testing, also note that in-stream applications are able to benefit from in-stream rate protection). The adjustment is projected to generate $15M in DCLs over 10 years to be used towards public amenities and infrastructure. Staff are considering an incremental approach to phase out the DCL waiver for for-profit affordable rental housing. This approach builds upon the UDCL waiver removal in 2020 and provides time for industry adjustment and transition, further supported by the phase-in of the DCL rates which would also apply to the amended CWDCL rental waiver. Staff will continue to monitor the impacts of removal of the waiver and the feasibility of these housing projects. Staff will also continue to monitor rental housing approvals, uptake of the DCL waiver, and changes in market conditions that impact viability of rental projects, and report back with results and recommended adjustments with the next DCL update or a related housing initiative.

This recommendation also addresses the Council directed report back on Streamlining Rental Around Local Shopping Areas from November 2021 (RTS 14500). This motion sought direction around implementing a CAC Target for rental development. At this time, staff are not recommending the implementation of a CAC Target, but instead a reduced CWDCL waiver. The reduced waiver is equivalent to a $3.00/ft^2 City-wide DCL. Staff are recommending this approach as it applies to rental development within existing zoning and through rezoning, whereas a CAC would only apply to rezonings.

In addition to these adjustments, staff are proposing some minor housekeeping amendments to improve the administration of the DCL waiver, including better alignment with current below-market rental policies and clarification around the process for when applicants request the waiver. The proposed amendments to the DCL By-laws can be found in Appendix A.

Recommendation D: Adjusting the Reduced DCL Rates

The City provides a number of reduced DCL rates, primarily at a nominal rate, for certain uses. These are typically social and cultural uses that serve as public amenities or have limited impact on DCL-funded infrastructure. One of the changes in this update is to streamline the reduced rates provided across all DCL districts (CWDCL, UDCL, False Creek Flats, and Southeast False Creek).

There are a number of uses that benefit from reduced DCL rates. This update recommends expanding the reduced rates to Community Energy Centres in the False Creek Flats DCL, and Works Yard in the CWDCL, UDCL, and Southeast False Creek DCL. Staff are also recommending a reduced rate for Cultural Facility, which would include uses such as Artist Studios (Class A and B – currently benefits from a reduced rate), galleries, halls, museums or archives, live theatres, and production or rehearsal studio spaces for performing arts.

Staff are recommending removal of the long-standing reduced rate for Parking Garages and Surface Parking lots. These at/above-grade parking uses occur infrequently, and are better suited to the Commercial and Other rate category. Note that underground parking garages are not considered floor area and therefore not subject to DCLs.

As part of the DCL Update, staff reviewed adjusting the School (K-12) reduced rate that are applicable to both public and private schools and are not proposing changes at this time. Staff will monitor the School reduced rate and continue to engage with the Vancouver School Board and other K-12 school providers with the intention to adjust the School reduced rate as part of the 2026 DCL update.

Recommendation E, F, and G: Other DCL By-Law Amendments

Recommendations E to G represent other minor amendments.

Recommendation E includes a number of definition adjustments, primarily aligning DCL By-laws with definitions in the Zoning & Development By-law or other documents. Other definition adjustments include the following:

- Adding a definition for Cultural Facility;
- Adding a definition for Alteration to clarify that any development involving significant primary structural retention of an existing building would not be subject to DCL on the existing floor area, but DCL would be applicable on any new floor area added; and,
- Adjusting the definition of Industrial and Mixed Employment so that any industrial zoning that allows for residential development (IC-3, MC-1, MC-2) would be subject to the

industrial rate for the industrial floor area, and the applicable residential rate for the residential floor area.

Recommendation F includes removing the option to pay DCLs in phases. Typically DCLs are paid in full prior to building permit issuance. As an alternative, applicants can choose to pay $100 and provide a Letter of Credit prior to building permit issuance, and make subsequent payments with interest (Prime + 2%). Over the years, staff received a number of inquiries about this phased payment option which involves significant staff time and effort reviewing and developing project-specific phased payment and Letter of Credit requirements, only to not have the applicant proceed often due to the high interest costs and security requirements. Since this option is rarely used, staff recommend removing the phased DCL payment option.

Recommendation G includes a minor adjustment for the DCL exemption for micro-dwelling units. The Vancouver Charter currently exempts a development where each residential unit is less than 29 square meters (~300 ft^2). The City's micro-dwelling guidelines allows for unit sizes up to 320 ft^2. To align with the City's micro-dwelling guidelines, staff recommend adding a clause to the DCL By-laws to increase the size exemption by 0.73 m^2 (20 ft^2) for micro-dwelling developments.

Recommendation H: Report back on Area-Specific DCLs and DCL Exempt Areas

In the last 10 years, the City has simplified the DCL system by unwinding previously established Area-Specific DCL districts and DCL exempt areas. Moving towards a city-wide DCL system allows for a more uniform DCL charge across the city, as well as providing flexibility to invest DCLs across the city.

The City currently has two remaining Area-Specific DCLs (Southeast False Creek and False Creek Flats) and two remaining DCL exempt areas (Central Waterfront and False Creek North). Staff are recommending to report back on the Area-Specific and exempt DCL areas through a related area planning exercise, or through the Vancouver Plan's Public Investment Approach as the City moves towards a city-wide public investment strategy. As the City updates these planning programs, staff will be able to determine the role of the Area-Specific DCL and funding strategy for the required public amenities and infrastructure, and may include adjustment of the rates, allocations, and/or retirement of the Area-Specific/exempt area.

Report back on Public Amenities and Equity in DCL-Waiver and Rental Rezoning

On March 10, 2020, Council approved a motion entitled "Public Amenities and Equity in DCL-Waiver and Rental Re-Zoning Hot-Zones".

To date, staff have taken a number of steps to address this motion:

- A list and map of DCL waivers and CAC exemptions are included in the annual DCL report and CAC/Density Bonusing report respectively (please refer to the 2021 DCL Annual Report and 2021 CAC and Density Bonusing report distributed to Council on April 27, 2022).
- The City has delivered/will deliver the following city-wide needs assessments:
    - 10-year DCL Program (2023-2032) for the eligible investment categories (Replacement Housing, Childcare, Park, Transportation and Utilities) is meant to address the needs of forecasted development arising from all tenures/uses

(strata, rental, social housing, non-residential), as shown in the 10-year Development Forecast. The funding strategy for the 10-year DCL Programs includes other funding sources, such as partner contributions, cash & in-kind CACs, conditions of development, and other City funding sources. The 10-year DCL programs include a mix of specific capital projects and high-level capital programs.

- 4-year Capital Plan (2023-2026) provides a more detailed and refined list of capital projects, which incorporates needs identified within the DCL program as well as DCL funding allocation.
- Individual Council reports also include a summary of local school capacity, nearby neighbourhood amenities, and a Public Benefits Tracker if located within a recent community plan.

As recommended in this report and in past DCL reports (UDCL), staff are proposing to reduce the CWDCL waivers for for-profit affordable rental housing, recognizing growth costs triggered by strata and rental residential development are similar. The recommended reduction in the CWDCL rental waiver (resulting in a $3.00/ft^2 CWDCL rate) is in addition to the Council-approved removal of the UDCL waiver in 2020.

As part of the proposed Vancouver Plan implementation strategy and Public Investment Approach, staff will explore creating a framework for city-wide public benefits which would take into account the comprehensive needs across the city.

Public/Civic Agency Input

The DCL Update was developed with input from various stakeholders, including the Vancouver Park Board, development industry, non-profit sector stakeholders, and senior government agencies who are involved in delivering DCL-eligible public benefits.

Initial consultation was undertaken in February 2022 with a number of stakeholder meetings. After drafting DCL Update directions, including DCL rates, allocations, and policy changes, staff completed another round of engagement with stakeholders in May 2022. Consultation on the DCL Update was also incorporated in the Capital Planning process to solicit feedback from the general public on use of development contributions to fund growth. Further information on the engagement, including letters from the Urban Development Institute, NAIOP, and Landlord BC, can be found in Appendix D.

Financial Implications

Implications for the City

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

Should Council approve the proposed DCL rate adjustments, and assuming development activity level remains steady, it is anticipated that over the next 10 years (2023-2032) an additional $350 to $400 million in DCL revenue could be generated totalling $1.75 billion. This estimate has taken into consideration the foregone DCL revenue over a 10-year period arising from the following:

- $15-20 million from the recommended phase-in approach
- $10-15 million from in-stream rate protection
- $60-65 million from the adjusted City-wide rental waiver
- $15-20 million from the amended reduced rates

The recommended DCL rates in this report are anticipated to generate approximately $1.86 billion (not including foregone revenue noted above) that will help fund approximately 50% of the contemplated growth costs over the next 10 years (2023-2032).

Staffing and other resources required to implement the contemplated growth-related public amenities and infrastructure programs funded by DCLs and other development contributions will be considered as part of the City's capital planning and budgeting processes.

Implications for Development

As part of the DCL review and update, the City retained Coriolis to undertake an assessment of the potential impact of DCL rate changes, arising from the review on the quantum, rate and location of development in the city.

Based on its evaluation of the financial ability of new development projects in Vancouver to accommodate increased DCL rates, Coriolis found minimal direct impact on project viability associated with the proposed rate increases. While the analysis demonstrated that all new residential development can absorb the DCL increases, it was noted that some new residential development on the east side of the city may have less ability to absorb the new costs without directly impacting development viability. The economic testing found that rental development viability is often marginal across the city, the adjusted CWDCL waiver had minimal impact on viability. For more information, see the Coriolis Economic Testing Reports in Appendix C.

The City's Financing Growth policies are based upon the principle development contributions should not deter development or harm housing affordability. Independent review of the market impacts of development contributions found the primary impact of these in Vancouver is to put downward pressure on the value of land for redevelopment. Affordability should not be negatively affected as long as rates are set so they do not impede the steady supply of development sites. Given current and recent development activity levels there is little evidence that this supply has been or will be affected by the proposed rates. Coriolis found that the impact of DCL increases can be absorbed into lower land acquisition costs. However for those properties that are already purchased or the land cannot be acquired at reduced value to off-set the increased DCL, the developer either proceeds with lower profit margins or does not proceed. The proposed rate phase-in and in-stream rate protection will help to mitigate impacts for projects where properties are already acquired and/or projects in the development approvals process.

Based on a review of comparable regional municipalities, Vancouver's proposed combined DCL rates continue to be in-line with development cost charges in the Metro Vancouver region for low to medium density residential and industrial uses. For the high density residential and commercial, Vancouver's DCL rates are at the higher end of regional rates.

CONCLUSION

The 2023-2032 DCL Update reflects the growth demands and required public amenities and infrastructure, and the funding required from DCLs over the next 10 years. This update includes a 10-year development forecast, revised capital programs for replacement housing, childcare, park, transportation, and utilities to reflect the anticipated growth, revised City-wide DCL Program Category allocations, and updated DCL rates to fund the revised capital programs. The update also includes an adjustment to the CWDCL waiver for for-profit affordable rental housing, along with other by-law amendments for reduced rates and administration. This update was developed through an inter-departmental team, along with consultation with the development industry, senior government agencies, and non-profit sector. The City is committed to reviewing and updating the DCL program every 4 years, and will provide another DCL update ahead of the next 4-year capital plan (2027-2030).

* * * * *

A By-law to amend the Vancouver Development Cost Levy By-law regarding administrative and levy matters

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the Vancouver Development Cost Levy By-law.

2. Council strikes the entire "Table of Contents" and replaces it as follows:

"

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SECTION 4
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4.1 Repeal
4.2 Force and effect

SCHEDULES

Schedule A - Part 1
- Part 2
- Part 3 ”

3. Council inserts the following new definitions in section 1.2 in correct alphabetical order:

““Alteration” means any physical change to a building or structure that includes significant retention of primary structural elements, but does not include demolition and replacement of the structure, or façade-only retention without significant retention of other primary structural elements;”;

““Community Energy Centre” means the use of premises as an energy supply facility that provides heat energy in the form of hot water to buildings across different parcels through a distribution system;”;

““Cultural Facility” means the use of premises for delivering arts and culture programs and services, including Artist Studio (Class A and B), gallery, halls, museum or archives, theatre limited to live theatre, production or rehearsal studio limited to the rehearsal of dance, music or drama, and necessary and customarily incidental uses to support the primary use of the Cultural Facility;”;

““floor space ratio” (FSR) means the figure obtained when the area of the floors of the buildings on a site is divided by the area of the site in accordance with the Zoning and Development By-law;”;

““micro dwelling” means a micro dwelling as defined in the Zoning and Development By-law;”;

““social service centre” means the use of premises by a non-profit society:

(a) providing information, referral, counselling, advocacy or health care services; or

(b) dispensing aid in the nature of food or clothing; or

(c) providing drop in or activity space, but does not include premises used for residential purposes or detoxification centre;” and

““works yard” means the use of a partially enclosed building, or a portion thereof, for the storing, repairing, or cleaning of supplies, materials, equipment, or vehicles of any business which conducts construction, installation, cleaning, repair or other industrial trade services off-site.”.

4. Council strikes the definition of “industrial zone” in section 1.2 and replaces it as follows:

“"industrial" means:

(a) any zoning district designated as “Industrial” by section 9.1 of the Zoning and Development By-law, and includes the following zones: I-2, M-1, M-1A, M-1B, M-2 zoning districts;

(b) the land zoned by CD-1 By-law No. 6654 with respect only to those uses that the by-law permitted on the date of its enactment; and

(c) for all other zones involving industrial uses including MC-1, MC-2, and IC-3, DCLs to be applied based on land use category where industrial means any manufacturing use, transportation and storage use, and wholesale use as defined in the Zoning and Development By-law;”.

5. Council strikes the definition of “mixed employment (light industrial)” from section 1.2 and replaces it as follows:

“"mixed-employment (light industrial)" means the following zones: (IC-1, IC-2, I-1, I-3, I-4, I-1A, I-1B and I-1C zoning districts and the land zoned as CD-1 (803) By-law 13257 with respect only to those uses that the CD-1 by-law permitted on January 25, 2022 ;”.

6. Council strikes the definition of “temporary building” from section 1.2 and replaces it as follows:

“"temporary building" means a temporary building, structure, or shelter erected for a period not exceeding twelve months for which a building permit is necessary under the Building By-law; and”.

7. Council strikes the definition of “parking garage” from section 1.2.

8. Council strikes section 2.2 and replaces it as follows:

“2.2 Development cost levies are imposed under this by-law for the purpose of providing funds to assist the City in paying the capital cost of providing, constructing, altering, or expanding highway facilities, replacement housing, childcare, and providing and improving parkland.”.

9. Council strikes section 3.1A and replaces it as follows:

“Waiver or reduction for for-profit-affordable housing

3.1A Notwithstanding section 3.1, Council waives or reduces the levy otherwise required under Schedule C by the rates set out therein for construction of for-profit affordable rental housing, which shall mean housing where:

(a) all dwelling units in the building are rental units;

(b) no dwelling units are strata units;

(c) the average size of the dwelling units of each unit type is not greater than:

Bedroom Type	Apartment Unit	Townhouse Unit
Studio	42 square meters	----------
One Bedroom	56 square meters	56 square meters
Two Bedroom	77 square meters	90 square meters
Three Bedroom	97 square meters	112 square meters
Four Bedroom	----------	125 square meters

except that the average sizes for townhouse units of two or more storeys with stairways may add 4 square meters to the maximums listed in the table;

(d) At least 20% of the residential floor area that is counted in the calculation of the floor space ratio consists of units with average rents per unit type for initial occupancy that do not exceed a rate that is 10% less than the average rents for studio units, one bedroom units, two bedroom units and units with three or more bedrooms in the city, as published by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables in the previous calendar year, or where instead of complying with (d);

(e) agreed upon average rents per unit type for initial occupancy do not exceed the average rents for studio units, one bedroom units, two bedroom units and units with three or more bedrooms built in the City since 2005, as published by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables in the previous calendar year, except that such rents may be 10% higher than the rents otherwise stipulated under this section if the housing is located in the West Area as shown on the map attached to this By-law as Appendix “A”, and rents shall also be adjusted annually on January 1:

(i) for all studio units, one bedroom units, two bedroom units and units with three or more bedrooms to reflect the change in average rents for studio units, one bedroom units, two bedroom units, and units with three or more bedrooms built in the City since 2005, as those rents are set out by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables published in the previous calendar year, or the most recently published data for the newest building age category for private rental apartment units published in the Canada Mortgage and Housing Corporation’s Rental Market Survey Data Tables; or

(ii) when the average rent data for any bedroom type is not reported in the Canada Mortgage and Housing Corporation’s Rental Market Survey Data Tables, the change in average rents will reflect the average rents for the most recent building age category available in the Canada Mortgage and Housing Corporation’s Housing Market Information Portal, as those rents are set out for the previous calendar year,

(f) the owner of the property on which such housing is situate has registered against title to that property an instrument, in form and substance, and with priority of registration, satisfactory to the Director of Legal Services, ensuring the initial rents are in accordance with 3.1A (d) or 3.1A (e), and otherwise in compliance with this By-law, and restricting the tenure of such housing to rental for:

(i) the longer of the life of the building in which they are situate and 60 years, or

(ii) such other term to which the City and owner may agree; and

(g) class A for-profit affordable rental housing shall mean housing in compliance with subsections (a), (b), (c), (d) and (f), and class B for-profit affordable rental housing shall mean housing in compliance with subsections (a), (b), (c), (e) and (f).”.

10. Council strikes section 3.1B and replaces it as follows:

“Administration of waiver

3.1B The waiver under section 3.1A shall be administered as follows:

(a) rents to be agreed upon shall not exceed the rents stipulated in section 3.1A and this By-law at the time of Council’s approval in principle of any zoning by-law required to authorize the development of the site, or at the time the ‘prior-to permit issuance’ letter related to the development permit is issued if no new zoning by-law is required to authorize development of the site, and for clarity, the rents to be agreed upon may be lower than the rents stipulated under this By-law, but may not exceed the rents stipulated under this By-law;

(b) if a new zoning by-law was required to authorize the development of the site, the rents to be agreed upon should be stipulated in the conditions of enactment of the zoning by-law approved by Council following the public hearing;

(c) notwithstanding sections 3.1B (a) and (b), if a new zoning by-law was required to authorize the development of the site and the tenure of the residential area of the building for which a waiver is being sought was not secured as rental housing as a condition of enactment, the rents to be agreed upon shall not exceed the rents stipulated in section 3.1A and this By-law at the time the ‘prior-to permit issuance’ letter related to the development permit is issued and do not need to be stipulated in accordance with 3.1B (b);

(d) notwithstanding sections 3.1B (a), (b) and (c), the rents that may be charged at initial occupancy may be increased annually from the time that the rents are agreed upon at the applicable triggering event specified in section 3.1B (a) and (c) until initial occupancy in accordance with the annual maximum increases authorized by the province of British Columbia under section 22 of the Residential Tenancy Regulation, B.C. Reg. 477/2003;

(e) any waiver of a development cost levy authorized under section 3.1A is to be calculated and determined at the time of issuance of a building permit authorizing construction of the building subject to the waiver;

(f) a building that qualifies under section 3.1A for a development cost levy waiver shall not forfeit the waiver because other housing otherwise exempt from development costs levies under City by-laws or the Vancouver Charter is also located in the building; and

(g) all units of all unit types must meet all the requirements in section 3.1A (a) and (b), all units of all unit types must be used to calculate the averages specified in 3.1A (c), all units of all unit types that comprise the 20% of residential floor area used to calculate 3.1A (d) must meet the rents specified in 3.1A (d), and all units of all units types must be used to calculate the average rents specified in 3.1A (e), except that a building that contains studio units, one bedroom units and two bedroom units that meet all requirements in 3.1A (a),(b),(c), and (e) qualifies for a waiver for all those units in each of those unit types on a pro rata basis even if the building contains units with three or more bedrooms that do not meet the requirements in section 3.1A (e), in which case none of the units with three or more bedrooms qualifies for the waiver.”.

11. Council strikes and replaces section 3.6 as follows:

“Staged building permit

“3.6 If a building permit is issued in stages, a levy is payable prior to issuance of the first building permit.”

12. Council re-numbers the previous section 3.6 as 3.7.

13. Council inserts a new section 3.8 as follows:

“Micro dwellings

3.8 No levy is payable for micro dwelling units that measure no more than 29.7 m^2, and are built in accordance with a building permit.”.

14. Council strikes sections 3.7 to 3.9 inclusive.

15. Council re-numbers section 3.10, 3.11 and 3.12 as 3.9, 3.10 and 3.11 respectively.

16. Council strikes Schedule A – Part 1 and replaces it with the new Schedule A – Part 1 attached as Exhibit “A”.

17. Council strikes Schedule “C’ and replaces it with the new Schedule “C” attached as Exhibit “B”.

18. 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.

19. This By-law is to come into force and take effect on September 30, 2022, except that the provisions set out in section 10 of this By-law governing the administration of the for-profit affordable rental housing waiver do not, unless agreed to, come into force or take effect with regard to any rezoning applications that are approved in principle by Council before September 30, 2022, or if no new zoning by-law was required to authorize the development, any development permit applications where a 'prior-to permit issuance' letter is issued before September 30, 2022.

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ENACTED by Council this day of , 2022

Mayor

City Clerk

EXHBIIT “A”

SCHEDULE A - PART 1

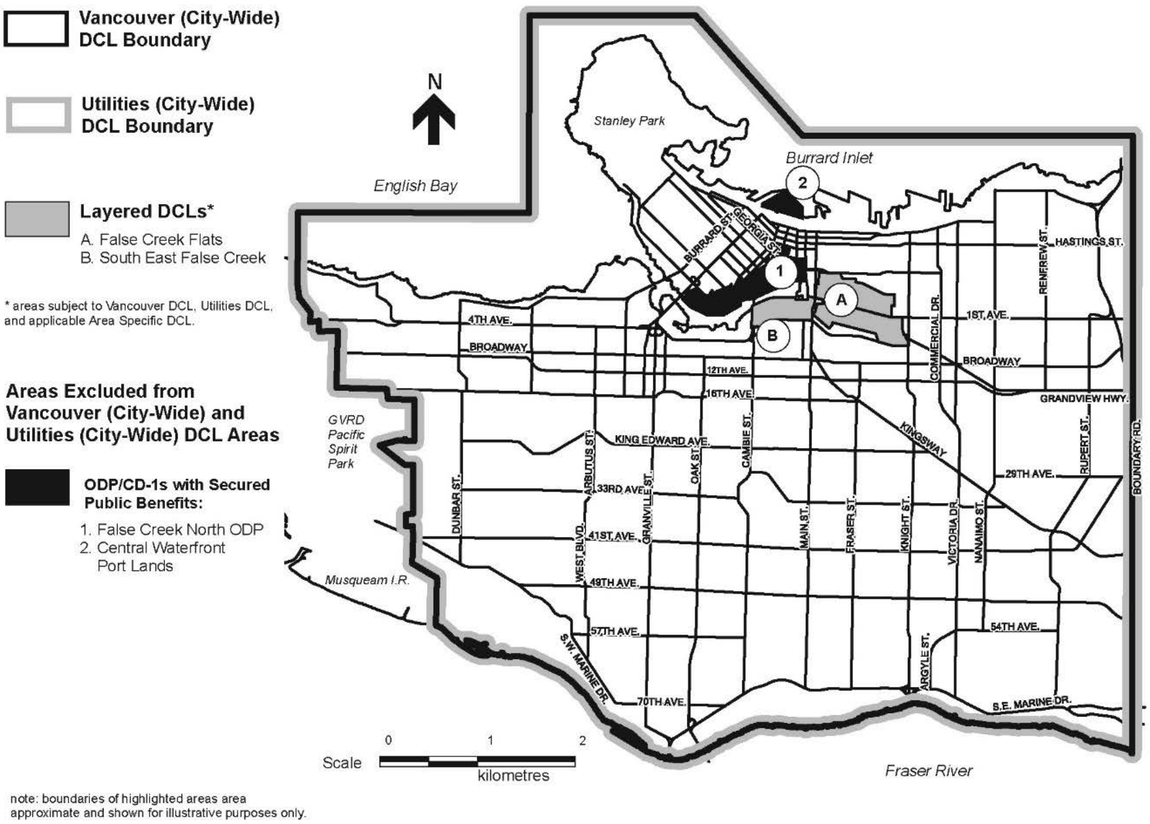

EXHIBIT “B”

SCHEDULE “C”

Category/Use	Total Development Cost Levy (Effective September 30, 2022)	Unit/ area cost
RESIDENTIAL		
Residential at or below 1.2 FSR and Laneway House	$50.01	Per m^2
Medium Density Residential Above 1.2 to 1.5 FSR	$107.63	Per m^2
Higher Density Residential Above 1.5 FSR	$215.49	Per m^2
NON-RESIDENTIAL		
Industrial	$80.00	Per m^2
Mixed-Employment (Light Industrial)	$150.09	Per m^2
Commercial & Other	$200.18	Per m^2

Category/Use	Total Development Cost Levy Waiver
For-Profit Affordable Rental Housing – Class A	100%
For-Profit Affordable Rental Housing – Class B	86.24%

Category/Use	Rate	Unit/ Area cost
School use	$5.49	Per m^2
Childcare Use	$10.00	Per building permit
Temporary Building	$10.00	
Community Energy Centre	$10.00	
Cultural Facility	$10.00	
Community Centre/ Neighbourhood House	$10.00	
Library	$10.00	
Public Authority Use	$10.00	
Social Service Centre	$10.00	
Works Yard	$10.00	

BY-LAW NO. _____

A By-law to amend the Vancouver Utilities Development Cost Levy By-law regarding administrative and levy matters

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the Vancouver Utilities Development Cost Levy By-law.

2. Council strikes the entire "Table of Contents" and replaces it as follows:

"

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3.9 Micro-dwellings
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3.11 Change in use of excluded land or development
3.12 Rate for LOCH increases

SECTION 4
ENACTMENT

4.1 Force and effect

SCHEDULES

Schedule A - Part 1
- Part 2
- Part 3
- Part 4 "

3. Council inserts the following new definitions in section 1.2 in correct alphabetical order:

""Alteration" means any physical change to a building or structure that includes significant retention of primary structural elements, but does not include demolition and replacement of the structure, or façade-only retention without significant retention of other primary structural elements;";

""Community Energy Centre" means the use of premises as an energy supply facility that provides heat energy in the form of hot water to buildings across different parcels through a distribution system;";

""Cultural Facility" means the use of premises for delivering arts and culture programs and services, including Artist Studio (Class A and B), gallery, halls, museum or archives, theatre limited to live theatre, production or rehearsal studio limited to the rehearsal of dance, music or drama, and necessary and customarily incidental uses to support the primary use of the Cultural Facility;";

""micro dwelling" means a micro dwelling as defined in the Zoning and Development By-law;";

""social service centre" means the use of premises by a non-profit society:

(a) providing information, referral, counselling, advocacy or health care services; or

(b) dispensing aid in the nature of food or clothing; or

(c) providing drop in or activity space, but does not include premises used for residential purposes or detoxification centre;" and

""works yard" means the use of a partially enclosed building, or a portion thereof, for the storing, repairing, or cleaning of supplies, materials, equipment, or vehicles of any business which conducts construction, installation, cleaning, repair or other industrial trade services off-site.".

4. Council strikes the definition of "FSR" in section 1.2 and replace sit as follows:

““floor space ratio” (FSR) means the figure obtained when the area of the floors of the buildings on a site is divided by the area of the site in accordance with the Zoning and Development By-law;”;

5. Council strikes the definition of “industrial zone” in section 1.2 and replaces it as follows:

“"industrial" means:

(a) any zoning district designated as “Industrial” by section 9.1 of the Zoning and Development By-law, and includes the following zones: I-2, M-1, M-1A, M-1B, M-2zoning districts;

(b) the land zoned by CD-1 By-law No. 6654 with respect only to those uses that the by-law permitted on the date of its enactment; and

(c) for all other zones involving industrial uses including MC-1, MC-2, and IC-3, DCLs to be applied based on land use category where industrial means any manufacturing use, transportation and storage use, and wholesale use as defined in the Zoning and Development By-law;”.

6. Council strikes the definition of “mixed employment (light industrial)” from section 1.2 and replaces it as follows:

“"mixed-employment (light industrial)" means the following zones: (IC-1, IC-2, I-1, I-3, I-4, I-1A, I-1B and I-1C zoning districts and the land zoned as CD-1 (803) By-law 13257 with respect only to those uses that the CD-1 by-law permitted on January 25, 2022 ;”.

7. Council strikes the definition of “temporary building” from section 1.2 and replaces it as follows:

“"temporary building" means a temporary building, structure, or shelter erected for a period not exceeding twelve months for which a building permit is necessary under the Building By-law; and”.

8. Council strikes the definition of “parking garage” from section 1.2.

9. Council inserts a new section 3.7 as follows:

“Staged building permit

“3.7 If a building permit is issued in stages, a levy is payable prior to issuance of the first building permit.”.

10. Council re-numbers the previous section 3.7 as 3.8.

11. Council inserts a new section 3.9 as follows:

“Micro dwellings

3.9 No levy is payable for micro dwelling units that measure no more than 29.7 m^2, and are built in accordance with a building permit.”.

12. Council strikes the existing sections 3.8 to 3.10 inclusive.

13. Council re-numbers the existing section 3.11, 3.12 and 3.13 as 3.10, 3.11 and 3.12 respectively.

14. Council strikes Schedule “C’ and replaces it with the new Schedule “C” attached as Exhibit “A”.

15. 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.

16. This By-law is to come into force and take effect on September 30, 2022.

ENACTED by Council this day of , 2022

Mayor

City Clerk

EXHIBIT “A”

SCHEDULE “C”

Category/Use	Total Development Cost Levy (Effective September 30, 2022)	Unit/ area cost
RESIDENTIAL		
Residential at or below 1.2 FSR and Laneway House	\$29.59	Per m^2
Medium Density Residential Above 1.2 to 1.5 FSR	\$64.00	Per m^2
Higher Density Residential Above 1.5 FSR	\$128.05	Per m^2
NON-RESIDENTIAL		
Industrial	\$26.19	Per m^2
Mixed-Employment (Light Industrial)	\$49.07	Per m^2
Commercial & Other	\$65.41	Per m^2

Category/Use	Rate	Unit/ Area cost
School use	\$5.49	Per m^2
Childcare Use	\$10.00	Per building permit
Temporary Building	\$10.00	
Community Energy Centre	\$10.00	
Cultural Facility	\$10.00	
Community Centre/ Neighbourhood House	\$10.00	
Library	\$10.00	
Public Authority Use	\$10.00	
Social Service Centre	\$10.00	
Works Yard	\$10.00	

APPENDIX A: DCL BY-LAW AMENDMENTS

BY-LAW NO. _____

A By-law to amend the Area Specific Development Costs Levy By-law regarding administrative and levy matters

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This by-law amends the Area Specific Development Cost Levy By-law.

2. Council inserts the following new definitions in section 1.2 in correct alphabetical order:

""Alteration" means any physical change to a building or structure that includes significant retention of primary structural elements, but does not include demolition and replacement of the structure, or façade-only retention without significant retention of other primary structural elements;";

""Community Energy Centre" means the use of premises as an energy supply facility that provides heat energy in the form of hot water to buildings across different parcels through a distribution system;";

""Cultural Facility" means the use of premises for delivering arts and culture programs and services, including Artist Studio (Class A and B), gallery, halls, museum or archives, theatre limited to live theatre, production or rehearsal studio limited to the rehearsal of dance, music or drama, and necessary and customarily incidental uses to support the primary use of the Cultural Facility;";

""floor space ratio" (FSR) means the figure obtained when the area of the floors of the buildings on a site is divided by the area of the site in accordance with the Zoning and Development By-law;";

""industrial" means:

(a) any zoning district designated as "Industrial" by section 9.1 of the Zoning and Development By-law, and includes the following zones: I-2, M-1, M-1A, M-1B, M-2 zoning districts;

(b) the land zoned by CD-1 By-law No. 6654 with respect only to those uses that the by-law permitted on the date of its enactment; and

(c) for all other zones involving industrial uses including MC-1, MC-2, and IC-3, DCLs to be applied based on land use category where industrial means any manufacturing use, transportation and storage use, and wholesale use as defined in the Zoning and Development By-law;";

""micro dwelling" means a micro dwelling as defined in the Zoning and Development By-law;";

""social service centre" means the use of premises by a non-profit society:

(a) providing information, referral, counselling, advocacy or health care services; or

(b) dispensing aid in the nature of food or clothing; or

(c) providing drop in or activity space, but does not include premises used for residential purposes or detoxification centre;"; and

""works yard" means the use of a partially enclosed building, or a portion thereof, for the storing, repairing, or cleaning of supplies, materials, equipment, or vehicles of any business which conducts construction, installation, cleaning, repair or other industrial trade services off-site.".

3. Council strikes the definition of "industrial use" from section 1.2.

4. Council strikes the definition of "parking garage" from section 1.2.

5. Council strikes the definition of "temporary building" from section 1.2 and replaces it as follows:

""temporary building" means a temporary building, structure, or shelter erected for a period not exceeding twelve months for which a building permit is necessary under the Building By-law; and".

6. Council strikes section 3.1A and replaces it as follows:

"Waiver or reduction for for-profit-affordable housing

3.1A Notwithstanding section 3.1, Council waives or reduces the levy otherwise required under this By-law for the construction of for-profit affordable rental housing, which shall mean housing where:

(a) all dwelling units in the building are rental units;

(b) no dwelling units are strata units;

(c) the average size of the dwelling units of each unit type is not greater than:

Bedroom Type	Apartment Unit	Townhouse Unit
Studio	42 square meters	----------
One Bedroom	56 square meters	56 square meters
Two Bedroom	77 square meters	90 square meters
Three Bedroom	97 square meters	112 square meters
Four Bedroom	----------	125 square meters

except that the average sizes for townhouse units of two or more storeys with stairways may add 4 square meters to the maximums listed in the table;

(d) At least 20% of the residential floor area that is counted in the calculation of the floor space ratio consists of units with average rents per unit type for initial occupancy that do not exceed a rate that is 10% less than the average rents for studio units, one bedroom units, two bedroom units and units with three or more bedrooms in the city, as published by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables in the previous calendar year, or where instead of complying with (d);

(e) agreed upon average rents per unit type for initial occupancy do not exceed the average rents for studio units, one bedroom units, two bedroom units and units with three or more bedrooms built in the City since 2005, as published by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables in the previous calendar year, except that such rents may be 10% higher than the rents otherwise stipulated under this section if the housing is located in the West Area as shown on the map attached to this By-law as Appendix "A", and rents shall also be adjusted annually on January 1:

(i) for all studio units, one bedroom units, two bedroom units and units with three or more bedrooms to reflect the change in average rents for studio units, one bedroom units, two bedroom units, and units with three or more bedrooms built in the City since 2005, as those rents are set out by the Canada Mortgage and Housing Corporation in the Rental Market Survey Data Tables published in the previous calendar year, or the most recently published data for the newest building age category for private rental apartment units published in the Canada Mortgage and Housing Corporation's Rental Market Survey Data Tables; or

(ii) when the average rent data for any bedroom type is not reported in the Canada Mortgage and Housing Corporation's Rental Market Survey Data Tables, the change in average rents will reflect the average rents for the most recent building age category available in the Canada Mortgage and Housing Corporation's Housing Market Information Portal, as those rents are set out for the previous calendar year,

(f) the owner of the property on which such housing is situate has registered against title to that property an instrument, in form and substance, and with priority of registration, satisfactory to the Director of Legal Services, ensuring the initial rents are in accordance with 3.1A (d) or 3.1A (e), and otherwise in compliance with this By-law, and restricting the tenure of such housing to rental for:

(i) the longer of the life of the building in which they are situate and 60 years, or

(ii) such other term to which the City and owner may agree; and

(g) class A for-profit affordable rental housing shall mean housing in compliance with subsections (a), (b), (c), (d) and (f), and class B for-profit affordable rental housing shall mean housing in compliance with subsections (a), (b), (c), (e) and (f).”.

7. Council strikes section 3.1B and replaces it as follows:

“Administration of waiver

3.1B The waiver under section 3.1A shall be administered as follows:

(a) rents to be agreed upon shall not exceed the rents stipulated in section 3.1A and this By-law at the time of Council’s approval in principle of any zoning by-law required to authorize the development of the site, or at the time the ‘prior-to permit issuance’ letter related to the development permit is issued if no new zoning by-law is required to authorize development of the site, and for clarity, the rents to be agreed upon may be lower than the rents stipulated under this By-law, but may not exceed the rents stipulated under this By-law;

(b) if a new zoning by-law was required to authorize the development of the site, the rents to be agreed upon should be stipulated in the conditions of enactment of the zoning by-law approved by Council following the public hearing;

(c) notwithstanding sections 3.1B (a) and (b), if a new zoning by-law was required to authorize the development of the site and the tenure of the residential area of the building for which a waiver is being sought was not secured as rental housing as a condition of enactment, the rents to be agreed upon shall not exceed the rents stipulated in section 3.1A and this By-law at the time the ‘prior-to permit issuance’ letter related to the development permit is issued and do not need to be stipulated in accordance with 3.1B (b);

(d) notwithstanding sections 3.1B (a), (b) and (c), the rents that may be charged at initial occupancy may be increased annually from the time that the rents are agreed upon at the applicable triggering event specified in section 3.1B (a) and (c) until initial occupancy in accordance with the annual maximum increases authorized by the province of British Columbia under section 22 of the Residential Tenancy Regulation, B.C. Reg. 477/2003;

(e) any waiver of a development cost levy authorized under section 3.1A is to be calculated and determined at the time of issuance of a building permit authorizing construction of the building subject to the waiver;

(f) a building that qualifies under section 3.1A for a development cost levy waiver shall not forfeit the waiver because other housing otherwise exempt from development costs levies under City by-laws or the Vancouver Charter is also located in the building; and

(g) all units of all unit types must meet all the requirements in section 3.1A (a) and (b), all units of all unit types must be used to calculate the averages specified in 3.1A (c), all units of all unit types that comprise the 20% of residential floor area used to calculate 3.1A (d) must meet the rents specified in 3.1A (d), and all units of all units types must be used to calculate the average rents specified in 3.1A (e), except that a building that contains studio units, one bedroom units and two bedroom units that meet all requirements in 3.1A (a),(b),(c), and (e) qualifies for a waiver for all those units in each of those unit types on a pro rata basis even if the building contains units with three or more bedrooms that do not meet the requirements in section 3.1A (e), in which case none of the units with three or more bedrooms qualifies for the waiver.”.

8. Council inserts a new section 3.1C as follows:

“Extent of waiver

3.1C Every class A for-profit affordable rental housing project shall be entitled to a waiver of 100% of the development costs levies otherwise payable under this By-law, and every class B for-profit affordable rental housing project shall be entitled to a waiver of 86.24% of the development costs levies otherwise payable under this By-law.”.

9. Council strikes “industrial use” from subsections 3.2(a), 3.3(a) and 3.4(c) and replaces it with “industrial”.

10. Council strikes and replaces section 3.7 as follows:

“False Creek Flats levies

3.7 The levy for the False Creek Flats area is $70.16 for each square metre of floor area in the development authorized for construction under the building permit, except that for a:

(a) works yard, the levy is $10.00 in respect of each building permit;

(b) school use, the levy is $5.49 for each square metre of such floor area;

(c) child care, the levy is $10.00 in respect of each building permit;

(d) temporary building, the levy is $10.00 in respect of each building permit;

(e) Cultural Facility, the levy is $10.00 in respect of each building permit;

(f) Community Centre/Neighbourhood House, the levy is $10.00 in respect of each building permit;

(g) Community Energy Centre, the levy is $10.00 in respect of each building permit;

(h) library, the levy is $10.00 in respect of each building permit;

(i) public authority use, the levy is $10.00 in respect of each building permit; and

(j) social service centre, the levy is $10.00 in respect of each building permit.”.

11. Council strikes and replaces section 3.10 as follows:

“South East False Creek levies

3.10 The levy for the South East False Creek area is $216.91 for each square metre of floor area in the development authorized for construction under the building permit, except that for:

(a) Industrial, the levy is $34.64 for each square metre of such floor area;

(b) a temporary building, the levy is $10.00 in respect of each building permit;

(c) a community energy centre, the levy is to be $10.00 in respect of each building permit;

(d) a Cultural Facility, the levy is $10.00 in respect of each building permit;

(e) a child care, the levy is $10.00 in respect of each building permit

(g) a Community Centre/Neighbourhood House, is $10.00 in respect of each building permit;

(g) a library, the levy is $10.00 in respect of each building permit;

(h) a public authority use, the levy is $10.00 in respect of each building permit;

(i) a social service centre, the levy is $10.00 in respect of each building permit; and

(j) a works yard, the levy is $10.00 in respect of each building permit.”.

12. Council strikes and replaces section 3.12 as follows:

“Application of levy to less than four dwelling units

3.12 A levy is payable where a building permit authorizes the construction, alteration, or extension of a building that, after the construction, alteration, or extension, will:

(a) contain less than four self-contained dwelling units;

(b) be put to no other use other than residential use in those dwelling units; and

(c) in the case of an alteration or extension, except for the alteration or extension of a garage into a laneway house, include an addition of 46.5 m^2 or more of floor area.”.

13. Council inserts a new section 3.15 as follows:

"Staged building permit

3.15 If a building permit is issued in stages, a levy is payable prior to issuance of the first building permit.".

14. Council renumbers section 3.15 as section 3.16.

15. Council inserts a new section 3.17 as follows:

"Micro dwellings

3.17 No levy is payable for micro dwelling units that measure no more than 29.7 m^2, and are built in accordance with a building permit.".

16. Council strikes the existing sections 3.16, 3.17 and 3.18.

17. Council re-numbers the existing section 3.19 as 3.18.

18. Council re-numbers the existing section 3.20 as 3.19.

19. 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.

20. This By-law is to come into force and take effect on September 30, 2022, except that the provisions set out in section 7 of this By-law governing the administration of the for-profit affordable rental housing waiver do not, unless agreed to, come into force or take effect with regard to any rezoning applications that are approved in principle by Council before September 30, 2022, or if no new zoning by-law was required to authorize the development, any development permit applications where a 'prior-to permit issuance' letter is issued before September 30, 2022.

ENACTED by Council this day of , 2022

Mayor

City Clerk

FINAL REPORT

PREPARED BY HEMSON & ERPIE ADVISORY INC. FOR THE CITY OF VANCOUVER

CITY-WIDE AND UTILITIES DEVELOPMENT COST LEVY UPDATE

BACKGROUND STUDY

June 3, 2022

HEMSON

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Executive Summary

The City of Vancouver has been experiencing consistent growth and development over recent years, which places pressure on the City's infrastructure. Development Cost Levies (DCLs) are a primary tool used by the City to fund the growth-related capital projects that are needed to service development. The City, with Hemson and Erpie Advisory Inc., has completed a comprehensive review and update of its City-wide and Utilities DCLs. This Background Study sets out the information and analysis upon which the proposed development cost levies are based.

The resulting calculated rates are shown below. Overall, the calculated residential DCLs are approximately 25% higher than the current rates in force. The calculated non-residential DCLs are approximately 38% higher than the current rates in force.

Development Type	Curent DCL Rates[1] Charge / Sq.Ft.	Calculated DCL Rates Charge / Sq.Ft.	Difference in Charge	
Residential Development				
Low Density *Below 1.2 FSR & Laneway*	$6.56	$8.23	$1.67	25%
Medium Density *Development between 1.2 & 1.5 FSR*	$14.17	$17.72	$3.55	25%
High Density *Development Above 1.5 FSR*	$28.37	$35.46	$7.09	25%
Non-Residential Development				
Industrial	$8.28	$11.45	$3.17	38%
Mixed Employment	$15.55	$21.46	$5.91	38%
Commercial & Other	$20.71	$28.63	$7.92	38%

1) Rates effective September 30, 2021

Staff are recommending a phase-in of the DCL rate increase with 50% of the increase to take effect on September 30, 2022, and the remaining 50% of the increase to come into force on September 30, 2023. Additionally, in-stream rate protection will continue to be offered for applications submitted prior to the rate change.

1. INTRODUCTION

The City of Vancouver has been experiencing consistent growth and development over recent years, which places pressure on the City's infrastructure. Development Cost Levies (DCLs) are a primary tool used by the City to fund the growth-related capital projects that are needed to service development. The City has completed a comprehensive review and update of its City-wide and Utilities DCLs.

In the context of DCLs or similar municipal fees, the reference to growth relates to any development that occurs within a municipality that has the effect of increasing the population and/or employment base, thus increasing demand placed on municipal infrastructure and servicing. Growth, or new development, should be responsible for paying its share of capital costs required to service the infrastructure and servicing investments required to service the development as the City grows overall.

This background study presents the results of the review to determine the required servicing works and associated capital costs attributable to new development that is forecast to occur in the City of Vancouver between 2023 and 2032. These development-related capital costs are recovered against residential and non-residential development on a uniform City-wide basis.

The study sets out the information and analysis upon which the proposed development cost levies are based.

Section 2 provides context with a discussion of the purpose of the review, an overview of the current DCL rate structure in Vancouver, and some information on the legislative and regulatory climate governing the process.

Section 3 outlines the study process that was undertaken in order to calculate new DCL rates and the resulting by-law to be brought forward to Council. The overall project timeline, key milestones, and consultation schedule is discussed.

Section 4 presents a summary of the forecast of residential and non-residential development expected to occur across the City over a ten-year planning period, from 2023 to 2032. Additional detail is included in Appendix A.

Section 5 provides a discussion of financing growth concepts in Vancouver, including a summary of the calculation of applicable development cost levies and the resulting calculated charges by class and type of development based on the allocation of costs.

Sections 6 to 10 provide more detail for each eligible service category, including standards of municipal service delivery, the development-related capital projects, cost allocations and the resulting DCL rates calculated for each service. Further detail on the capital programs and cost allocations is included in the appendices.

Finally, **Section 11** discusses the recommended administration and implementation practices for the new DCL by-law, including exemptions, collection practices, and regular reporting.

2. BACKGROUND

Development and redevelopment of land drives the need for increased infrastructure and municipal servicing. The type of capital investment required is driven by many critical factors, including the amount, type and location of development. These factors influence the nature and quantum of capital investment required. In addition, there are influential factors that include: municipal standards and desired levels of service; the regulatory requirements and infrastructure of senior governments; topography; timing of development; available capacity already in place to service new development or redevelopment; demographic and socio-economic change; and the way in which municipalities plan for growth and the provision of services.

Once the capital investments required to service development have been identified, a municipality is also responsible for determining how facilities and infrastructure will be provided and/or funded. The question of who should pay for growth is a critical issue for many fast growing jurisdictions across North America.

The imposition of fees on development to pay for the increased cost of municipal servicing is intended to maintain a city's livability while accommodating growth and protecting the existing population's municipal service provision levels. DCLs are one of the City of Vancouver's primary tools for financing growth, and are fees paid by new development in Vancouver; these fees are used to help finance the initial capital costs of new, expanded and upgraded facilities needed to support growth. It is noted that the City has additional tools available to fund growth-related infrastructure including, but not limited to, partner funding (including grants from upper levels of government), development conditions, Community Amenity Charges (CACs), and density bonusing; the available of these other funding sources has been considered and accounted for in determining new DCL rates.

Development cost levies in Vancouver are intended to meet the following criteria:

- Help maintain livability of the City;
- Based directly on growth-related capital costs of new development;
- Not have a negative economic impact or deter desired types of development;
- Not harm housing affordability;
- Be consistent with City policies;
- Distribute costs fairly among types of development and between DCLs, property taxes, and other funding tools;
- Provide certainty and stability, be understandable, simple and transparent; and
- Be developed with informed input from all parties.

A. BACKGROUND AND PURPOSE OF THIS REVIEW

The *Vancouver Charter* allows the City of Vancouver to recover growth-related capital costs from new development related to a limited number of services. In compliance with this legislation, this 2022 DCL Background Study is provided as a step in a process that leads to the approval of updated City-wide DCL & Utilities DCL bylaws for the City of Vancouver.

DCLs in Vancouver are one of the City's primary fiscal tools used to fund development-related infrastructure and the expansion of municipal servicing. The calculation and administration of DCLs is intended to advance the financial and policy planning priorities of Council, consistent with the Charter limitations, focused in the following areas:

- Parks (Parkland acquisition and improvements)
- Replacement Housing
- Childcare
- Transportation
- Utilities

The last comprehensive review of the City of Vancouver's City-wide DCL rate was undertaken in 2017, the purpose of which was to re-examine the way in which the City expected to grow, and the capital works required to service that new development. A Utilities DCL study was subsequently undertaken in 2018, which led to adoption of the City's Utilities DCL by-law. The 2022 review is an update to both the 2017 City-wide and 2018 Utilities DCL work, reflecting the current four-year cycle for DCL updates aligned with the City's capital planning process to ensure reflection of infrastructure priorities.

B. DCL RATE STRUCTURE IN VANCOUVER

DCLs, as established by the City's DCL by-laws, are typically paid by developers upon building permit and the funds are used to undertake development-related projects. The City currently maintains three DCL by-laws pertaining to different types of charges as follows:

- The **City-wide DCL By-law** establishes DCLs that apply to development in most areas of the city. These DCLs recover for City-wide capital costs related to parkland, replacement housing, childcare, and highway facilities (roads and related infrastructure), as well as water, sewer, and drainage infrastructure costs.

- The **Utilities DCL By-law** was established in 2018 and imposes charges for the recovery of a comprehensive water, sewer, and drainage capital program. These DCLs are also applicable to most areas of the city.

- The **Area-specific DCL By-law** applies only to certain areas of the city, including False Creek Flats and the Southeast False Creek districts. Area-specific DCLs are "layered" on top of the City-wide and Utilities DCLs in these locations. These DCLs recover for a variety of area-specific capital costs, including parkland, replacement housing, childcare, highway facilities, and utilities. These areas were originally set up as "layers" because they were transition areas or former low density industrial lands converting to more intensive mixed use areas, and they lacked significant infrastructure (e.g. roads, utilities, parks) and thus required additional DCL funding to realize these needs. As part of any DCL update, the City reviews these layered DCL areas and determines whether it is time to fold these areas into the City-wide DCL/UDCL.

- Finally, **Exempt DCL Areas** applying to False Creek North and Central Waterfront are not subject to DCLs as there are other mechanisms to deliver required public benefits.

Prior to the 2017 City-wide DCL update, the City had not undertaken a comprehensive DCL study since 2003. The 2017 study led to several key changes to Vancouver's overall DCL framework, including the introduction of some level of water, sewer, and drainage charges. This was further expanded upon with the introduction of the 2018 Utilities DCL by-law. The City now aims to undertake comprehensive City-wide and Utilities DCL reviews every four years, in alignment with updates to the 10-year Capital Strategic Outlook.

DCL rates are determined based on a number of factors including development forecasts, growth-related amenity requirements and cost estimates. Generally, DCLs are not expected to cover all costs required by development, and the City is required to fund a share. Those shares not recovered through DCLs come from the Municipal Assist Factor (MAF), shares of development-related projects that benefit the existing community, as well as any alternative funding sources available for a particular project. These shares will be funded from other tools available to the municipality, including CACs and in-kind developer contributions, conditions of development, property tax and utility fees, or contributions from senior governments or other funding partners.

DCLs in Vancouver are levied based on the Gross Floor Area (GFA) of a development. Rates vary by type of development – residential (at or below 1.2 FSR/laneway house or above 1.2 FSR), commercial, and industrial, and by DCL district. As outlined in s.523.D(13) of the *Vancouver Charter*, the DCL shall not exceed 10% of the value of the development, which is determined by the Building Bylaw. Payment is due at building permit issuance and the levy is calculated at the rate in effect on the date of issuance, unless in-stream rate protection applies.

Certain types of development are exempt from payment of DCLs through the provisions of the *Vancouver Charter*. The City maintains a number of additional DCL waivers or reductions. The cost to the City of these waivers or reductions must be funded through non-DCL sources (e.g. property taxes, utility rates). Further detail regarding exemptions, waivers, and reductions is provided in Section 11.

C. LEGISLATIVE AND REGULATORY BACKGROUND

The City of Vancouver is permitted to calculate and charge DCLs to new development to pay for the capital costs required to service growth. A series of governing legislation at the local and provincial level enables this practice with a guide to ensure clarity for application of rules.

i. Local Government Act

Division 19 of British Columbia's *Local Government Act* (LGA) provides the primary legal framework for the recovery of development-related costs. In particular, section 559 of the LGA provides the legislative authority to implement a development cost charge (DCC) bylaw. With the exception of the City of Vancouver and certain resort municipalities (e.g. Whistler), all municipalities in British Columbia are governed by this provincial legislation. Vancouver is governed by its own legislation, the *Vancouver Charter.*

ii. Vancouver Charter

The City of Vancouver is regulated by the provincial *Vancouver Charter*, which contains various rules that govern how the City operates. The Charter sets out Vancouver's authority with respect to property taxation, local improvements, planning and development approvals and development conditioning, as well as the use of DCLs which was introduced in 1990.

Section 523D gives Council the authority to use DCLs to help fund eligible public infrastructure and amenities needed for growth in the City. DCLs are payable on most new development, including development through the rezoning of lands. The Charter sets out eligible projects and services for Vancouver, which include:

- Sewage, water, drainage and highway facilities;
- Park land acquisitions and improvements;
- Leased or owned day care facilities and associated property acquisitions; and
- Replacement housing.

The authority to levy DCLs for affordable housing and childcare is unique to Vancouver within BC. The City is responsible for determining growth-related need and costs for each of these services and whether or not to use DCL revenues for their funding. The Charter further sets out statutory exemptions, as well as rules regarding the waivers or reductions of DCLs.

iii. DCC Best Practices Guide for British Columbia

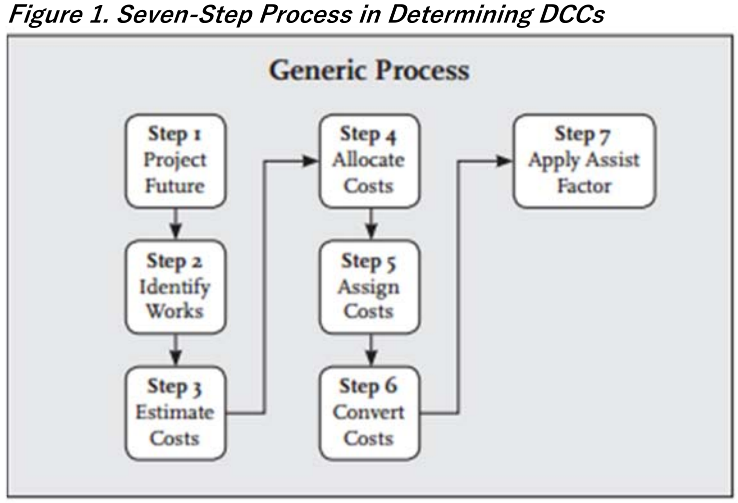
Since the introduction of development cost charges (DCCs), the British Columbia Provincial government has published several guides with suggested approaches to implementing development cost charges. For instance, the *DCC Guide for Elected Officials* and the *Development Cost Charge Best Practices Guide* are intended to provide additional insight to the use of DCCs and advise on calculation and policy planning methodology.

The *DCC Best Practices Guide* is a provincial tool and advisory report intended to standardize the formulation and administration of DCC by-laws among local municipalities in British Columbia. The guide is based on the provisions of the LGA.

While the methodology for calculating the charges may vary by municipality, generally there are seven sequential steps that are important in the DCC calculation, recommended in the *DCC Guide for Elected Officials* and as shown in Figure 1. These are summarized as follows:

1. Project future growth;
2. Identified required works;
3. Estimate infrastructure costs;
4. Allocate costs between growth and existing users;
5. Assign costs to land use types;
6. Convert costs into DCC rates; and
7. Apply assist factor.

Figure 1. Seven-Step Process in Determining DCCs



D. DCLS LEVIED IN THE CITY OF VANCOUVER

i. City of Vancouver DCL By-laws

The City of Vancouver maintains three DCL by-laws for the City-wide DCL, the Utilities DCL and the Area-specific DCLs. Figure 1 shows the current DCL rates imposed in the City of Vancouver as of September 30, 2021.

Figure 2. Current DCL Rates by Area (effective Sept. 30, 2021)

<table>
<tr><th colspan="2"></th><th colspan="3">Base[1]</th><th colspan="2">Layered[2]</th></tr>
<tr><th colspan="2"></th><th>City-wide DCL (A)</th><th>City-wide Utilities DCL (B)</th><th>TOTAL City-wide DCLs (A+B)</th><th>False Creek Flats</th><th>South East False Creek</th></tr>
<tr><td rowspan="3">Residential</td><td>Residential at or below 1.2 FSR and Laneway House</td><td>$45.54/m^2 ($4.23/ft^2)</td><td>$25.06/m^2 ($2.33/ft^2)</td><td>$70.60/m^2 ($6.56/ft^2)</td><td rowspan="6">$70.16/m^2 ($6.52/ft^2)</td><td rowspan="4">$216.91/m^2 ($20.15/ft^2)</td></tr>
<tr><td>Medium Density Residential above 1.2 FSR to 1.5 FSR</td><td>$98.05/m^2 ($9.11/ft^2)</td><td>$54.47/m^2 ($5.06/ft^2)</td><td>$152.52/m^2 ($14.17/ft^2)</td></tr>
<tr><td>Higher Density Residential above 1.5 FSR</td><td>$196.32/m^2 ($18.24/ft^2)</td><td>$109.05/m^2 ($10.13/ft^2)</td><td>$305.37/m^2 ($28.37/ft^2)</td></tr>
<tr><td rowspan="3">Non-Residential</td><td>Commercial and Most Other Uses[3]</td><td>$165.70/m^2 ($15.39/ft^2)</td><td>$57.30/m^2 ($5.32/ft^2)</td><td>$223.00/m^2 ($20.71/ft^2)</td></tr>
<tr><td>Industrial[4]</td><td>$66.13/m^2 ($6.14/ft^2)</td><td>$22.99/m^2 ($2.14/ft^2)</td><td>$89.12/m^2 ($8.28/ft^2)</td><td rowspan="2">$34.64/m^2 ($3.22/ft^2)</td></tr>
<tr><td>Mixed Employment (Light Industrial)[5]</td><td>$124.30/m^2 ($11.55/ft^2)</td><td>$43.03/m^2 ($4.00/ft^2)</td><td>$167.33/m^2 ($15.55/ft^2)</td></tr>
<tr><td rowspan="5">Other Rates[6]</td><td>Artist Studio (Class A&B)
Childcare
Community Centre/ Neighbourhood House
Library
Public Authority Use
Social Service Centre
Temporary Buildings</td><td>$10.00/BP[7]</td><td>$10.00/BP</td><td>$20.00/BP</td><td>$10.00/BP</td><td>$10.00/BP</td></tr>
<tr><td>Community Energy Centre</td><td>$10.00/BP</td><td>$10.00/BP</td><td>$20.00/BP</td><td>N/A</td><td>$10.00/BP</td></tr>
<tr><td>Parking garage</td><td>$1.08/m2 ($0.10/ft2)</td><td>$1.08/m2 ($0.10/ft2)</td><td>$2.16/m2 ($0.20/ft2)</td><td>$1.08/m2 ($0.10/ft2)</td><td>$1.08/m2 ($0.10/ft2)</td></tr>
<tr><td>School (K-12, Public)</td><td>$5.49/m2 ($0.51/ft2)</td><td>$5.49/m2 ($0.51/ft2)</td><td>$10.98/m2 ($1.02/ft2)</td><td>$5.49/m2 ($0.51/ft2)</td><td>N/A</td></tr>
<tr><td>Works Yard</td><td>N/A</td><td>N/A</td><td>N/A</td><td>$1.00/m2 ($0.09/ft2)</td><td>N/A</td></tr>
</table>

For a map of the DCL Districts, please see Map 1 in Appendix A.

[1] In the Base DCL areas, the City-wide Utilities DCL applies ***in addition*** to the City-wide Vancouver DCL.
[2] In the Layered DCL areas, DCLs apply ***in addition to*** the City-wide DCL and City-wide Utilities DCL.
[3] All uses, except for those specified here, are subject to the Commercial DCL rate.
[4] Industrial in the City-wide Vancouver DCL and City-wide Utilities DCL apply to development in the I-2, M-1, M-1A, M-1B, M-2, MC-1, MC-2 zoning districts. See DCL By-laws for definitions.
[5] Mixed Employment (Light Industrial) in the City-wide Vancouver DCL and City-wide Utilities DCL apply to IC-1, IC-2, IC-3, I-1, I-1A, I-1B, I-1C, I-3 and I-4 zoning districts. See DCL By-laws for definitions.
[6] Refer to DCL By-law and Zoning & Development By-law for use definitions.
[7] BP stands for Building Permit.

ii. Metro Vancouver DCCs

In addition to the City of Vancouver's DCLs, the City also collects a separate regional DCC on behalf of the Greater Vancouver Sewerage and Drainage District (GVS & DD) for expansion of sewerage facilities required by regional growth. The GVS & DD has two service areas in the City of Vancouver. There are different rates for each area and type of development, with the proposed 2022 rates shown here. These rates are currently with the Inspector of Municipalities for review after approval by the GVS & DD Board in July 2021:

	Vancouver Sewage Area	**Fraser Sewage Area**
Single Family Residential ($/unit)	$3,335	$6,254
Townhouse Residential ($/unit)	$2,983	$5,390
Apartment Residential ($/unit)	$1,988	$4,269
Non-Residential ($/square foot)	$1.63	$3.30

Metro Vancouver is in the engagement phase of establishing a new DCC for regional water infrastructure which will provide a revenue stream distinct from the current user fees which have traditionally been the sole source of funding for the Greater Vancouver Water District. The expectation is the DCC bylaw will be finalized and implemented in Fall/Winter 2022.

iii. TransLink DCCs

In 2018, TransLink introduced DCCs to recover for growth-related transit expansion costs; these DCCs are layered on top of Vancouver's DCLs and Metro Vancouver DCCs. TransLink recently passed a new by-law, bringing the following rates into effect as of January 2022:

Single Family Dwelling ($/unit)	$2,993
Duplex or Townhouse Dwelling Unit ($/unit)	$2,485
Apartment Dwelling Unit ($/unit)	$1,554
Retail/Service ($/square foot)	$1.26
Office ($/square foot)	$1.01
Institutional ($/square foot)	$0.50
Industrial ($/square foot)	$0.30

3. STUDY PROCESS

The City of Vancouver committed to a four-year cycle for updates to DCLs that aligns with the Capital Planning Process to ensure City priorities are reflected. The simplification and modernization of the City's DCL regime over the last several years has provided the ability for allocation of DCL funding across the City where it is needed based on capital planning. This update included validation of the financing framework, review of the growth forecast and capital plan and estimated costs that support the City's growth.

A. PROJECT TIMELINE

The study process was initiated in September 2021 and is to conclude with a by-law presented to Council in June 2022. The resulting DCL rates are anticipated to take effect in September 2022. The study process has included a number of phases, which are described below.

- **Development Forecast:** A forecast of new development over the 2023 to 2032 period was prepared by staff, in line with BC's DCC Best Practices Guide. A floor space forecast by type of residential (low, medium, and high density) and non-residential (industrial, mixed employment, and commercial/other) development was prepared. The forecast was primarily based on development pipeline data and was reviewed and validated by Hemson.

- **Capital program:** The Steering Committee and consultants worked extensively with department staff to assemble growth-related capital programs containing projects required to service development between 2023 and 2032. Projects were identified as well as their associated costs, growth-related shares, benefitting time period and alternative funding sources (e.g. senior government shares, development conditions, CACs and density bonusing). Capital programs and project details were closely aligned with the City's Capital Strategic Outlook.

- **Rate calculation:** This phase involved inputting all assumptions into a financial model and calculating development cost levies to be recommended to Council.

- **Policy considerations**: This phase included support staff on a review of DCL policies within the By-laws, including a review of the City-wide DCL waiver for for-profit affordable rental housing, reduced rates, and other administrative considerations.

- **Implementation:** This phase of the process will continue once the by-law is passed in June 2022. City staff will be tasked with maintaining and administering the by-law, and working with departmental staff to ensure that growth-related projects are funded by DCLs to the extent permitted by the legislation and as stipulated in the rate calculations in this background study. This process will continue until the by-law is updated, which should occur in 2026 based on the framework in place.

B. CONSULTATION WITH CITY STAFF

The study process was designed to engage City staff at key phases of the project. Three key working groups were engaged throughout the course of the assignment.

Steering Committee: This committee was composed of staff dedicated to financing growth policy. Staff from planning, finance, and engineering were available to provide input at all phases of the study process, attend all meetings and consultation sessions, and to assist in the calculation of DCL rates.

Technical Team: Composed of representatives from all eligible service departments, the team was consulted at key phases of the study and responsible for developing the capital programs and providing project costs.

Senior Staff and Elected Officials: The City's Capital Planning and Delivery Oversight Committee, Park Board, and Council were consulted at key stages of the process. These meetings were held to communicate the findings of the initial background research and recommendations, study results including the development forecast, capital programs, and rate calculations, and to ensure continued support for the recommended rates and policy directions.

C. STAKEHOLDER ENGAGEMENT PROCESS

Development industry, non-profit, and government agency stakeholders were consulted at two key points in the study process. In February 2022, stakeholders were updated on the study background and process, development forecast results, and policy considerations and were offered an opportunity for initial input. In May 2022, the draft capital programs, calculated DCL rates, economic testing, and recommended policy directions were presented and discussed. Discussions followed through May, and the capital programs and rate calculations were finalized in consideration of stakeholder comments.

D. ASSESSMENT OF IMPACT OF DCL RATE CHANGES

As part of the DCL review and update, the City retained Coriolis Consulting Corp. to undertake an assessment of the potential consequence or impact of DCL rate changes, including an evaluation of the financial ability of new development projects in the city to support increased DCL rates. The Coriolis analysis supported the recommended rates and may continue to be used to inform the implementation process moving forward. The Coriolis analysis is available under separate cover.

4. Development Forecast

The anticipated residential and non-residential development in the City of Vancouver between 2023 and 2032 will increase demand on all municipal services. The City utilizes DCLs as a key tool in funding development-related infrastructure that is necessary to allow development to proceed, in a fiscally responsible manner.

Development cost levy calculations are rooted in a number of assumptions about the way in which a municipality is anticipated to grow. The first step in calculating a charge is to forecast the type and location of anticipated development against which the charges will apply. The City's development forecast uses in-stream application statistics (development pipeline) from the City's permitting system and BC Assessment 2020 data is used for base building floor area figures. New development completion data is estimated based on historical City processing timeline trends. For the purposes of the DCL Update Study, this growth forecast is updated to reflect the 2023-2032 planning period and reflects current policy plans and in-stream development projects. Importantly, this development forecast is then used by City Departments that receive DCL funding to determine the location, nature and cost of infrastructure to meet the needs arising from the development forecast.

Early in the DCL Update process, Hemson undertook a review of the City's development forecast. Hemson concluded that the methodology and assumptions used were sound, and that the projection outputs represented a reasonable basis for the purpose of supporting the DCL modeling.

This section provides the basis for the development forecasts used in calculating the development charges, as well as a summary of the forecast results. A more detailed summary, including mapping of the forecasts by geographic area, is provided in Appendix A.

A. RESIDENTIAL DEVELOPMENT PROJECTIONS

Development cost levies are charged to residential development as a fee per square foot of building Gross Floor Area (GFA). The residential forecast includes a projection of new residential building space.

The building space forecasts in this development cost levy study include forecasts for both net and GFA growth. The City of Vancouver levies DCLs on new development based on GFA. As such, the growth-related capital costs are applied to the GFA forecasts between 2023 and 2032 in order to calculate the DCL rate.

Table 1 provides a summary of the residential forecast for the ten-year planning period from 2023 to 2032. The net increase in residential floor area across the City over the planning period amounts to 41.9 million square feet. The GFA growth forecast totals 56.2 million square feet of residential space.

B. NON-RESIDENTIAL FORECAST

Development cost levies are also charged on non-residential development on a per-square-foot basis. Similar to the residential forecast, the non-residential forecast includes a projection of new non-residential floor space that will be built in the City.

The non-residential forecast projects an increase of 14.3 million square feet of net new non-residential building space. The gross non-residential GFA growth over the ten-year planning period totals 18.3 million square feet, of which 70% will be commercial floor space.

TABLE 1

CITY OF VANCOUVER
2022 DEVELOPMENT COST LEVY UPDATE
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
CITY-WIDE DEVELOPMENT FORECAST

City-wide Residential Growth Forecast	2023-2032 Growth
Residential Floor Area Net Growth (sq.ft.)	*41,862,851*
Below 1.2 FSR (LWH, Duplex)	*3,956,316*
1.2-1.5 FSR (Townhouse)	*1,964,864*
FSR 1.5 and more (Apartment)	*35,941,670*
Residential Floor Area Gross Growth (sq.ft.) (1)	*56,210,460*
Below 1.2 FSR (LWH, Duplex)	*20,033,875*
1.2-1.5 FSR (Townhouse)	*2,481,155*
FSR 1.5 and more (Apartment)	*33,695,430*

City-wide Non-Residential Growth Forecast	2023-2032 Growth
Non-Residential Floor Area Net Growth (sq.ft.)	14,289,765
Commercial	*9,681,005*
Industrial	*2,348,925*
Mixed Employment	*1,412,943*
Reduced Rate	*846,892*
Non-Residential Floor Area Gross Growth (sq.ft.)	18,328,677
Commercial	*12,821,065*
Industrial	*2,898,416*
Mixed Employment	*1,762,304*
Reduced Rate	*846,892*

Notes

1) Residential GFA excludes social housing as per the Vancouver Charter exemption.

C. GROSS FLOOR SPACE WEIGHTING FOR DCL RATE CALCULATION

There is a final adjustment to the gross floor space for the purpose of the DCL rate calculations. The demand for City services funded by DCLs is generally driven by population and employment increases, while the charges are levied on added gross floor area. To reflect differences in needs arising from ground-related units and higher density built form, the residential gross floor areas have been weighted for the purpose of the DCL calculations. These weighting factors are expressed in relation to the apartment units and the same factors are used to establish the differentiated residential rates by floor space ratio (FSR) category.

A similar adjustment is made to the non-residential gross floor area to reflect differences in the typical floor space per worker (FSW) by land use type, as well as differences in demand needs arising from different employment types. The weighting factors are expressed in relation to the commercial floor space and the same factors are used to establish the differentiated non-residential rates. It is noted that distinct weighting factors are applied to the non-residential classes for Utility services, reflecting different demand placed by workers on water, sanitary, and drainage infrastructure than the residential population, as compared to the other City-wide DCL services.

Table 2 provides the equivalency factors and shows the calculations of the weighted gross floor area. The total residential weighted GFA used for the DCL calculations is 39.6 million square feet. The total non-residential weighted GFA used for the calculation of the City-wide DCLs (Parks, Childcare, Housing, and Transportation) is 15.9 million square feet. The total non-residential weighted GFA used for the calculation of Utilities DCLs is 8.0 million square feet.

TABLE 2

CITY OF VANCOUVER
2022 DEVELOPMENT COST LEVY UPDATE
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL WEIGHTED GROSS GFA FOR DCL CALCULATIONS

City-wide Growth Forecast 2023-2032	Total Gross Floor Area (1) (sq.ft)	Gross Floor Weighted to Apartment/Commercial Equivalent (2)			
		City-Wide DCL		Utilities DCL	
		Equiv. Factor	GFA (sq.ft.) (3)	Equiv. Factor	GFA (sq.ft.) (3)
Residential Floor Area Gross Growth	**56,210,460**		**39,588,200**		**39,588,200**
Below 1.2 FSR (LWH, Duplex)	*20,033,875*	0.232	4,652,200	0.232	4,652,200
1.2-1.5 FSR (Townhouse)	*2,481,155*	0.500	1,240,600	0.500	1,240,600
FSR 1.5 and more (Apartment)	*33,695,430*	*1.000*	33,695,400	1.000	33,695,400
Non-Residential Floor Area Gross Growth	**18,328,677**		**15,937,400**		**7,968,700**
Commercial	*12,821,065*	*1.000*	12,821,100	*0.500*	6,410,500
Industrial	*2,898,416*	*0.400*	1,159,400	*0.200*	579,700
Mixed Employment	*1,762,304*	*0.750*	1,321,700	*0.375*	660,900
Reduced Rate	*846,892*	*0.750*	635,200	*0.375*	317,600
Total Gross Floor Area	***74,539,137***		**55,525,600**		**47,556,900**

Notes

(1) Source: Table 1

(2) See Appendix for discussion of the equalization of the gross floor area. The Equivalency Factors are also used to set the DCL rates by type of development.

(3) Weighted GFA rounded to the nearest hundred for the purpose of the DCL rate calculations.

5. Financing Growth in Vancouver

Several key steps are required when calculating any development fee. However, specific circumstances arise in each municipality that must be reflected in the calculation. Therefore, the study has been tailored specifically for the City of Vancouver. The approach to the proposed development cost levies is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. The study uses a City-wide approach for all services, which is consistent with past practice, and is deemed the best approach to align development-related costs and benefits.

A. RELATIONSHIP TO OTHER MUNICIPAL DOCUMENTS

The DCL study has been undertaken as part of a larger initiative to review financing growth policies at the City and to examine the way in which capital planning predicts and responds to the evolving needs of development. The inputs, assumptions, development forecasts and capital programs were developed in consideration of the following legislation, plans and policies:

- Vancouver Charter;
- British Columbia Development Cost Charges Best Practices Guide;
- Previous DCL studies and by-laws;
- Capital planning documents; and
- Various master plans.

B. DCL TIME FRAME

The DCL study is based on meeting the needs of development over a ten-year planning period, between 2023 and 2032, in alignment with the City's capital planning framework. This planning period was determined to be a reasonable period upon which to base the capital programs for each service category, and estimate the future needs of development.

C. CITY-WIDE AND AREA-SPECIFIC DCL CHARGES

The City of Vancouver provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The

Vancouver Charter provides the City with the flexibility to designate the areas to which charges for eligible services will apply, based on the nature and location of the development necessitating the works. Development Cost Levies may apply to all lands in the City or to other designated development areas as specified in a municipal by-law.

The City of Vancouver levies both area-specific and City-wide DCLs. This background study and analysis is limited to update the City-wide charges only (City-wide DCL and Utilities DCL). No adjustments to the layered or area-specific charges are suggested or recommended as part of this study process. For all of the eligible services that the City provides City-wide, the full range of capital facilities, land, equipment and infrastructure is available throughout the City.

The following services are included in the City-wide development cost levy calculation:

- Parks;
- Childcare;
- Replacement Housing
- Transportation; and
- Utility Services, including Water and Sanitary & Drainage.

These services form a reasonable basis upon which to plan and administer the City-wide development cost levies. The resulting DCL for these services is to be imposed against all development anywhere in the City.

D. DCL RECOVERABLE COSTS

A development-related capital forecast has been prepared by the City's departments as part of the present study. The forecast for each eligible service category identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the *Vancouver Charter.* The capital forecast acts as the cornerstone upon which development cost levies are based.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents and businesses in Vancouver. These portions of projects and their associated net costs are the funding responsibility of the City from non-DCL sources, such as property taxes and utility rates. The amount of City funding for such shares is also identified as part of the preparation of the capital forecast.

Table 3 provides a summary of the cost allocations for each service category. As shown, the total capital project costs for works required to service new development in

Vancouver amount to $9.72 billion. A number of deductions have been made to remove costs not eligible for inclusion in the DCL calculation.

E. ALLOCATION OF COSTS

For each DCL eligible service category, the development-related costs of necessary infrastructure projects have been identified. The capital costs are allocated between existing and future development, and alternative funding sources are identified.

As shown on Table 3, $3.83 billion in anticipated senior government or partner shares has been deducted from the gross project costs. A further $610.94 million is deemed to benefit development occurring beyond the 2023-2032 planning period; this share may be considered as part of future DCL updates. Approximately $1.53 billion in “benefit to existing” shares, related to replacement costs or other shares or projects deemed to address existing needs, has also been removed from the DCL rate funding consideration.

After these deductions, a total net growth-related amount of $3.75 billion remains. However, $1.87 billion of this amount is anticipated to be funded through other growth funding sources such as available DCL reserves, CACs, development conditions, and layered DCLs. Of the remaining $1.88 billion, a 1% municipal assist share is deducted as per the requirements of the Vancouver Charter. The remaining DCL rate supported amount for the 2023-2032 period is calculated at $1.86 billion.

TABLE 3

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
SUMMARY OF OVERALL 10-YEAR CAPITAL PROGRAM 2023-2031

Service	Gross Project Costs ($000)	Senior Gov. / Partners ($000)	Post-Period (2033+) ($000)	Benefit to Existing ($000)	Net Growth-Related Costs ($000)	Growth Costs Funded from Other City Sources[1] ($000)	DCL Eligible Costs 2023-2032		
							Net DCL Eligible Costs ($000)	Less Municipal Assist[2] 1% ($000)	DCL Rate Supported 2023-2032 ($000)
1.0 Parks	$539,413	$0	$0	$39,250	$500,163	$78,994	$421,169	$4,322	$416,847
2.0 Childcare	$347,738	$63,570	$0	$18,900	$265,268	$165,944	$99,324	$1,273	$98,052
3.0 Housing	$5,220,034	$3,383,179	$0	$35,688	$1,801,167	$1,502,490	$298,677	$3,207	$295,470
4.0 Transportation	$1,515,359	$362,850	$0	$699,635	$452,874	$48,826	$404,048	$4,194	$399,855
5.0 Utility Services									
Water	*$38,711*	*$0*	*$5,932*	*$494*	*$32,285*	*$19,333*	*$12,951*	*$135*	*$12,816*
Sewer	*$2,059,850*	*$18,500*	*$605,010*	*$737,450*	*$698,890*	*$55,251*	*$643,639*	*$6,693*	*$636,946*
Sub-Total Utilties	$2,098,561	$18,500	$610,942	$737,945	$731,174	$74,584	$656,590	$6,828	$649,762
TOTAL 10 YEAR CAPITAL PROGRAM	**$9,721,104**	**$3,828,099**	**$610,942**	**$1,531,417**	**$3,750,646**	**$1,870,837**	**$1,879,809**	**$19,823**	**$1,859,985**

Notes
1) Other Funding Sources Include: DCL Reserves, CACs, conditions of development, Empty Homes Tax, Layered DCL and other.
2) Municipal Assist: has been set as a % of overall program level 2023-2032 funding needs.

F. CALCULATION OF BASE DCL RATE

The growth-related capital program proposed to be funded by DCLs for each service is divided by the weighted gross floor space forecast to arrive at the base DCL charge. Since different weighting factors are applied to the growth forecast for the purposes of the Utility Services calculations, the charges are calculated on a service-specific basis.

For Parks, Childcare, Housing, and Transportation, the DCL rate supported capital costs are divided by the weighted gross floor area of 55.53 million square feet. For example, the Parks rate support amount of $416.85 million is divided by the weighted gross floor area to arrive at a base DCL charge of $7.51 per square foot.

For Utilities, the DCL rate supported capital costs, which total $649.76 million, are divided by the weighted gross floor area of 47.56 million square feet. This results in a base DCL charge of $13.66 per square foot.

Table 4 shows the base DCL Rate calculation for all services. The base charge is then multiplied by the weighting factors to arrive at the DCL charges by type of development. The calculations are shown below.

Further details by service are provided in the following sections of this report, as well as the appendices.

TABLE 4

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
CALCULATION OF BASE DCL RATE

10 Year Increase in Weighted Gross Floor Area (sq.ft.)	
City-Wide DCL	*55,525,600*
Utilities DCL	*47,556,900*

Service	2023-2032 Net DCL Rate Supported ($000)	Calculated Base DCL Per Square Foot
1.0 Parks	$416,846.9	$7.51
2.0 Childcare	$98,051.5	$1.77
3.0 Housing	$295,470.1	$5.32
4.0 Transportation	$399,854.5	$7.20
5.0 Utility Services		
Water	*$12,815.9*	*$0.27*
Sewer	*$636,946.5*	*$13.39*
Sub-Total Utility Services	$649,762.4	$13.66
TOTAL CAPITAL PROGRAM	**$1,859,985.4**	**$35.46**

Development Cost Levy Calculation					
	City-wide DCL		Utilities DCL		Total
Type of Development	**Weighting Factor**	**DCL Rate (/sq.ft.)**	**Weighting Factor**	**DCL Rate (/sq.ft.)**	**DCL Rate (/sq.ft.)**
Low Density Residential	0.232	$5.06	0.232	$3.17	**$8.23**
Medium Density Residential	0.500	$10.89	0.500	$6.83	**$17.72**
High Density Residential	1.000	$21.80	1.000	$13.66	**$35.46**
Industrial (Heavy)	0.400	$8.72	0.200	$2.73	**$11.45**
Mixed Employment (Light Industrial)	0.750	$16.34	0.375	$5.12	**$21.46**
Commercial & Other	1.000	$21.80	0.500	$6.83	**$28.63**

6. Parks Development Cost Levies

A. MUNICIPAL SERVICE DELIVERY

The Parks and Recreation branch of the City of Vancouver's Parks, Recreation and Culture department is overseen by an elected Park Board. The City provides a host of outdoor parks and recreation amenity space for residents, employees and visitors to enjoy. Within the city's boundaries, there are 250 municipal parks and beaches, including the 404-hectare Stanley Park in the heart of the City as well as ten oceanside beaches, one freshwater lake beach, and 22 kilometres of Seawall.

The *Vancouver Charter* permits the inclusion of capital costs related to:

a) Acquiring park land and or reclaiming land as park land,

b) Providing fencing, landscaping, drainage and irrigation, trails, restrooms, changing rooms and playground and playing field equipment on park land. (523D, s.17.1)

B. PARKS GROWTH-RELATED CAPITAL PROGRAM

The 2023-2032 Parks DCL capital program is primarily based on VanPlay, the Park Board's Parks and Recreation Services Master Plan, which identifies future needs related to growth and development in the city, as well as the Capital Strategic Outlook.

The ten-year parks capital program includes projects that fall within the following categories:

- Parkland acquisition;
- Seawall and waterfront projects;
- Urban forest and natural areas;
- Park amenities (design and development); and
- Buildings and infrastructure.

The Park Board has established a $539.41 million gross capital budget, which provides for approximately 5.3 hectares of parkland acquisition in addition to various park development projects and amenities. After deducting benefit to existing shares, CAC / density bonusing shares, layered DCL shares, available DCL reserves, and the municipal assist factor, $416.85 million remains to be funded through DCLs over the ten-year planning period.

An overview of the program is provided in Table 5. Further details of the capital program are listed in Appendix B.

TABLE 5

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: PARKS

Parks Capital Program	Park Area	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(ha)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Parkland Aquisition[1]	5.30	$165,280	$0	$0	$165,280	$0	$1,653	$163,627
Seawall & Waterfront		$26,000	$0	$12,000	$14,000	$5,000	$90	$8,910
Urban Forest & Natural Areas		$107,800	$0	$0	$107,800	$134	$1,077	$106,589
Park Amenities (Design & Development)		$172,500	$0	$22,100	$150,400	$60,340	$901	$89,160
Buildings & Infrastructure		$39,650	$0	$5,150	$34,500	$2,500	$320	$31,680
Emerging Priorities		$28,183	$0	$0	$28,183	$0	$282	$27,901
Available DCL Reserves		$0	$0	$0	$0	$11,020	$0	-$11,020
Total Parks		**$539,413**	**$0**	**$39,250**	**$500,163**	**$78,994**	**$4,322**	**$416,847**

1)The Park Board has additional parkland acquisition needs, beyond the 5.3 ha, to meet the increased demands arising from development over the period 2023-2032. These additional needs will be achieved through in-kind CAC contribution from major development projects, and are not valued in this table.

C. PARKS DCL RATE CALCULATION

The DCL funded share of Parks capital program, $416.85 million, translates to a cost of $7.51 per square foot of new development that is to be levied on all new development in the City of Vancouver. Using the equivalency factors, the rates to be levied on each type of development for parks are calculated as follows:

Parks City-Wide DCL	
Low Density Residential	$1.74/ sq.ft.
Medium Density Residential	$3.75 / sq.ft.
High Density Residential	$7.51 / sq.ft.
Industrial	$3.00 / sq.ft.
Mixed Employment	$5.63 / sq.ft.
Commercial & Other	$7.51 / sq.ft.

7. Childcare Development Cost Levies

A. MUNICIPAL SERVICE DELIVERY

The City of Vancouver works with the Province of British Columbia and other partners to provide childcare servicing to residents of Vancouver. The City works to:

- Partner with non-profit organizations to deliver quality, affordable, and accessible childcare;
- Facilitate the development of infrastructure to support integrated childcare services, including licensed group care and other family support services;
- Use financial tools to leverage facilities and land, and offset some operating costs; and
- Encourage senior governments to uphold their responsibility for childcare.

The *Vancouver Charter* permits the inclusion of capital costs related to:

> Establishing day care facilities in premises leased or owned, and acquiring property for such facilities. (523D, s.1)

B. CHILDCARE GROWTH-RELATED CAPITAL PROGRAM

The projects included in the childcare capital program were designed to accommodate the increased demands on the service imposed by development in the City. As growth occurs, and the population and employment base grows, additional childcare spaces must be made available. The number and type of spaces included in the program are tied directly to the City's development forecast provided by planning.

The ten-year childcare capital program includes the development of childcare spaces in both independent facilities and in schools and community centres. The capital program distinguishes childcare spaces for children aged 0-4 years and 5-12 years old. Benefit to existing shares are identified, which relate to the replacement of some existing spaces through the redevelopment or relocation of certain facilities in the program.

The needs analysis identifies the provision of 1,895 new child spaces over the ten-year planning period of 2023-2032 at a gross cost of $347.74 million. After deducting anticipated senior government or partner shares, replacement shares, other funding sources (CACs and density bonusing, layered DCLs, available DCL reserves), and the municipal assist factor, the remaining DCL rate funded amount for 2023-2032 is $98.05 million.

An overview of the program is provided in Table 6. Further details of the capital program are listed in Appendix C.

TABLE 6

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: CHILDCARE

Childcare Capital Program	Net New Spaces[1]	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(#)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Spaces for Ages 0-4								
Civic Buildings (e.g. Community Centres)	716	$149,710	$25,040	$18,900	$105,770	$17,790	$880	$87,100
Developer-Led, In-Kind	450	$94,500	$0	$0	$94,500	$90,615	$39	$3,846
NPO-Led, In-Kind	188	$39,480	$13,810	$0	$25,670	$19,380	$63	$6,227
Conversion from Part-Day to Full-Day	180	$1,800	$0	$0	$1,800	$0	$18	$1,782
Indigenous-Led, Capital Grant	74	$15,540	$2,960	$0	$12,580	$0	$126	$12,454
NPO-Led, Capital Grant	147	$25,110	$17,760	$0	$7,350	$1,800	$56	$5,495
Part-Day Preschool, In-Kind	40	$8,400	$0	$0	$8,400	$8,400	$0	$0
Sub-Total Spaces for Ages 0-4	**1,795**	**$334,540**	**$59,570**	**$18,900**	**$256,070**	**$137,985**	**$1,181**	**$116,904**
Spaces for Ages 5-12								
OOSC / Indigenous-Led	100	$5,000	$4,000	$0	$1,000	$0	$10	$990
Sub-Total Spaces for Ages 5-12	**100**	**$5,000**	**$4,000**	**$0**	**$1,000**	**$0**	**$10**	**$990**
Emerging Priorities		$8,198	$0	$0	$8,198	$0	$82	$8,116
Available DCL Reserves		$0	$0	$0	$0	$27,959	$0	-$27,959
Total Childcare	**1,895**	**$347,738**	**$63,570**	**$18,900**	**$265,268**	**$165,944**	**$1,273**	**$98,052**

Notes:
1) Childcare spaces shown are fully growth-related. The City will add additional spaces to address existing needs and those spaces, and associated costs are not reflected above.

C. CHILDCARE DCL RATE CALCULATION

The $98.05 million in DCL funded costs translates to a DCL rate of $1.77 per square foot of new development. Using the equivalency factors, the rates to be levied on each type of development for childcare are calculated as follows:

Childcare City-Wide DCL	
Low Density Residential	$0.41 / sq.ft.
Medium Density Residential	$0.88 / sq.ft.
High Density Residential	$1.77 / sq.ft.
Industrial	$0.71 / sq.ft.
Mixed Employment	$1.32 / sq.ft.
Commercial & Other	$1.77 / sq.ft.

8. Replacement Housing Development Cost Levies

A. MUNICIPAL SERVICE DELIVERY

The City of Vancouver Housing department is tasked with ensuring that a range of housing options are available to residents that are affordable, accessible, and suitable to a range of needs. The Housing Vancouver strategy provides a foundation and action plan for the City to build more affordable housing, address over-inflation in land costs, ensure the right types of homes are built, protect and renew existing affordable rental housing, provide housing and support to Vancouver's most vulnerable residents, and streamline City processes for faster housing development.

The *Vancouver Charter* permits the inclusion of capital costs related to "Replacement Housing", as indicated below:

> (2) Council may impose a development cost levy for the purpose of assisting in providing Replacement Housing in such a manner as it deems appropriate and assisting in providing such housing shall be deemed to be a capital project.
>
>> (2.2) For the purposes of this section, Replacement Housing means housing which Council reasonably anticipates will, as a result of development in the area in which a development cost levy is imposed, be necessary to house persons displaced and unable to afford comparable accommodation in that area and, in anticipating the housing required, Council may look to development anticipated during a 20 year period commencing on the date the by-law imposing the development cost levy is imposed. (523D, s.2.1)

As such, costs related to providing affordable housing options for residents that are displaced as a result of development can be recovered in part through DCLs.

B. REPLACEMENT HOUSING GROWTH-RELATED CAPITAL PROGRAM

The projects included in the replacement housing capital program are designed to increase the supply of affordable housing and to replace those affordable units that are lost through redevelopment. As neighborhoods in Vancouver gentrify and property values increase, the number of units available to medium to low-income households diminish as well. DCLs are collected to contribute towards the construction of new affordable units to replace those lost through the redevelopment of the certain Vancouver areas.

The goals and objectives of the Housing department are outlined in the Housing Vancouver Strategy, which identifies targets for additional units required. The projects in the DCL capital program (2023-2032) include the construction of 9,125 new units, which includes land acquisitions, as well as contributions toward non-profit and developer led projects. In terms of the Replacement Housing calculation of estimated units lost between 2023-2032, DCL funding will be used to fund up to 4,900 units.

The total growth-related capital program costs amount to $5.22 billion, of which $295.47 million is to be funded from DCLs after deducting significant senior government and partner funding shares, benefit to existing shares, other funding sources (CACs and density bonusing, empty homes tax amounts, and available DCL reserves), as well as the 1% municipal assist factor.

An overview of the program is provided in Table 7. Further details of the capital program are listed in Appendix D.

TABLE 7

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: REPLACEMENT HOUSING

Replacement Housing Capital Program	Net New Units[1]	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(#)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Land Acquisition (VAHEF)	1,750	$1,013,100	$711,954	$13,800	$287,346	$160,250	$1,271	$125,825
Non-Profit-Led, Capital Grant	5,125	$3,005,613	$2,671,225	$21,888	$312,500	$143,750	$1,688	$167,063
In-Kind Projects	2,250	$1,176,450	$0	$0	$1,176,450	$1,176,450	$0	$0
Emerging Priorities		$24,871	$0	$0	$24,871	$0	$249	$24,623
Available DCL Reserves		$0	$0	$0	$0	$22,040	$0	-$22,040
Total Replacement Housing	**9,125**	**$5,220,034**	**$3,383,179**	**$35,688**	**$1,801,167**	**$1,502,490**	**$3,207**	**$295,470**

Notes:
1) DCL funding will be used to fund up to 4,900 as per the Replacement Housing calculation.

C. REPLACEMENT HOUSING DCL RATE CALCULATION

The $295.47 million in DCL funded costs translates to a base DCL rate of $5.32 per square foot. Using the equivalency factors, the rates to be levied on each type of development for replacement housing are calculated as follows:

Replacement Housing City-Wide DCL	
Low Density Residential	$1.24 / sq.ft.
Medium Density Residential	$2.66 / sq.ft.
High Density Residential	$5.32 / sq.ft.
Industrial	$2.13 / sq.ft.
Mixed Employment	$3.99 / sq.ft.
Commercial & Other	$5.32 / sq.ft.

9. TRANSPORTATION DEVELOPMENT COST LEVIES

A. MUNICIPAL SERVICE DELIVERY

The City of Vancouver's Engineering Services are responsible for upgrading and maintaining the City's transportation infrastructure. The City works with other partners (such as TransLink and other Metro Vancouver municipalities) to build and maintain an integrated transportation system that moves people and goods throughout the City and region.

Development activity places increased demands on the transportation network in Vancouver, by adding additional people and employees that use various forms of transportation to get around. The department must plan and budget to accommodate the increasing use of the City's roads, sidewalks, bike lanes, parking options, and public transit. Ensuring intersections are safe and efficient, bridges are properly maintained, and pedestrian infrastructure is effective and accessible are all key components of properly servicing growth in Vancouver.

B. TRANSPORTATION GROWTH-RELATED CAPITAL PROGRAM

The ten-year capital needs identified to service growth in Vancouver from a transportation perspective are extensive. City staff has identified the growth-related transportation needs between 2023 and 2032 in line with the capital planning exercises, and in consideration of the goals and targets set out by the City's Transportation 2040 plan.

The ten-year growth-related transportation capital program primarily relates to expansion of active transportation and transit-related infrastructure. Projects are grouped into the following categories:

- Building a Resilient Network (bridges and structures, traffic signals and street lights)
- Improving Mobility (transit integrations, active transportation, safety and accessibility); and
- Supporting Public Life (streetscaping and placemaking)

The total growth-related capital program amounts to $1.52 billion. After deducting senior government and partner shares, benefit to existing or replacement components, other funding sources (development conditions, CACs and density bonusing, and available DCL reserves), and the 1% municipal assist factor, $399.86 million in DCL rate funded costs remain for the 2023-2032 planning period.

An overview of the program is provided in Table 8. Further details of the capital program are listed in Appendix E.

TABLE 8

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: TRANSPORTATION

Transportation Services	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Building a Resilient Network							
Bridges & Structures (Excl. Seawall Structures)	$351,000	$77,000	$249,000	$25,000	$0	$250	$24,750
Pavement & Sidewalks	$218,000	$50,000	$168,000	$0	$0	$0	$0
Traffic Signals & Street Lights	$314,890	$1,500	$262,200	$51,190	$3,150	$480	$47,560
Subtotal Building a Resilient Network	**$883,890**	**$128,500**	**$679,200**	**$76,190**	**$3,150**	**$730**	**$72,310**
Improving Mobility							
Transit Integration & Reliability	$84,010	$53,600	$3,800	$26,610	$0	$266	$26,344
Active Transportation & Complete Streets	$365,280	$176,500	$0	$188,780	$25,000	$1,638	$162,142
Transportation Safety & Accessibility	$92,270	$4,250	$16,635	$71,385	$370	$710	$70,305
Subtotal Improving Mobility	**$541,560**	**$234,350**	**$20,435**	**$286,775**	**$25,370**	**$2,614**	**$258,791**
Supporting Public Life							
Public Gathering & Placemaking	$39,375	$0	$0	$39,375	$0	$394	$38,981
Commercial High Street Corridors	$23,130	$0	$0	$23,130	$5,000	$181	$17,949
Subtotal Improving Mobility	**$62,505**	**$0**	**$0**	**$62,505**	**$5,000**	**$575**	**$56,930**
Emerging Priorities	$27,404	$0	$0	$27,404	$0	$274	$27,130
Available DCL Reserves	$0	$0	$0	$0	$15,306	$0	-$15,306
Total Transportation Services	**$1,515,359**	**$362,850**	**$699,635**	**$452,874**	**$48,826**	**$4,194**	**$399,855**

C. TRANSPORTATION DCL RATE CALCULATION

The $399.86 million in DCL-eligible costs associated with the transportation program translates to a base DCL rate of $7.20 per square foot of new development. Using the equivalency factors, the rates to be levied on each type of development for transportation are calculated as follows:

Transportation City-Wide DCL	
Low Density Residential	$1.67 / sq.ft.
Medium Density Residential	$3.60 / sq.ft.
High Density Residential	$7.20 / sq.ft.
Industrial	$2.88 / sq.ft.
Mixed Employment	$5.40 / sq.ft.
Commercial & Other	$7.20 / sq.ft.

10. Utilities Development Cost Levies

A. MUNICIPAL SERVICE DELIVERY

Utility services at the City of Vancouver include the provision of water distribution, sanitary sewers and storm water drainage needs, including green infrastructure.

The region of Metro Vancouver owns and operates the water source, treatment and regional water transmission system, while the City is responsible for local water distribution system to supply water to residents and businesses. The Water DCL addresses the water infrastructure that is the responsibility of the City of Vancouver, namely the local distribution system, including water mains and related infrastructure.

The region of Metro Vancouver owns and operates the regional trunk sewers and major wastewater treatment plants while the City is responsible for the local sewers to collect sewage from residents and businesses. The Sanitary and Drainage DCLs address the sewer infrastructure that is the responsibility of the City of Vancouver, namely the local collection system, sewer mains, and storm water systems, including green infrastructure to address growth needs related to drainage.

B. UTILITY SERVICES GROWTH-RELATED CAPITAL PROGRAMS

The following section provides an overview of Utility Services growth-related capital program, including both the Water program and the Sanitary and Drainage program. Further details of the capital program are listed in Appendix F.

i. Water Services

The City's Engineering department has identified $38.71 million in gross capital costs related to various water system upgrades, as well as hydraulic modelling, over the period 2023 to 2032. Some of these gross project costs ($5.9 million) have been identified as relating to development beyond the ten-year planning period. After deducting benefit to existing or replacement shares, growth-related shares to be funded through other sources (development conditions, available DCL reserves), as well as the municipal assist factor, $12.82 million in DCL rate funded costs remain for recovery over the 2023-2032 period.

An overview of the program is provided in Table 9.

TABLE 9

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: WATER SERVICES

Water Services	Total Gross Cost	Senior Gov. / Partners	Post-Period (2033+)	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Water System Upgrades	$37,155	$0	$5,932	$397	$30,826	$18,760	$121	$11,945
Hydraulic Model	$390	$0	$0	$98	$293	$0	$3	$290
Emerging Priorities	$1,166	$0	$0	$0	$1,166	$0	$12	$1,154
Available DCL Reserves	$0	$0	$0	$0	$0	$573	$0	-$573
Total Water Services	**$38,711**	**$0**	**$5,932**	**$494**	**$32,285**	**$19,333**	**$135**	**$12,816**

ii. Sanitary and Drainage

The City has a significant Sanitary and Drainage growth-related capital program, totaling $2.06 billion in gross costs. Projects in the Sanitary and Drainage capital program include extensive sewer and green infrastructure upgrades serving the Broadway and Cambie corridors, as well as other growing areas throughout the city. The program also includes growth-related pump stations, hydraulic modelling and monitoring initiatives, planning and other studies.

A significant share of the program, $605.01 million, has been identified as "post-period", or related to growth that is anticipated to occur beyond the 2023-2032 planning period, and is removed from the DCL calculation. Senior government and partner-funded shares, benefit to existing or replacement shares, shares to be funded through development conditions and available DCL reserves, and the municipal assist share have also been deducted from the gross costs. The remaining amount eligible for funding through DCLs collected over the 2023-2032 period is $636.95 million.

An overview of the program is provided in Table 10.

TABLE 10

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES UPDATE STUDY
10-YEAR CAPITAL PROGRAM 2023-2032: SANITARY & DRAINAGE

Sanitary & Drainage	Total Gross Cost	Senior Gov. / Partners	Post-Period (2033+)	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Cambie Projects (Sanitary & Drainage Upgrades)	$223,511	$2,000	$80,000	$7,274	$134,237	$12,940	$1,213	$120,084
Broadway Projects (Sanitary & Drainage Upgrades)	$267,130	$2,100	$140,370	$15,790	$108,870	$0	$1,089	$107,781
City Wide Projects (Sanitary & Drainage Upgrades)	$1,296,709	$14,400	$384,640	$638,026	$259,643	$16,695	$2,429	$240,519
Pump Stations	$67,125	$0	$0	$36,000	$31,125	$0	$311	$30,814
Hydraulic Model & Monitoring	$75,450	$0	$0	$35,500	$39,950	$0	$400	$39,551
Planning & Other Studies	$79,300	$0	$0	$4,860	$74,440	$0	$744	$73,696
Emerging Priorities	$50,624	$0	$0	$0	$50,624	$0	$506	$50,118
Available DCL Reserves	$0	$0	$0	$0	$0	$25,616	$0	-$25,616
Total Sanitary & Drainage	**$2,059,850**	**$18,500**	**$605,010**	**$737,450**	**$698,890**	**$55,251**	**$6,693**	**$636,946**

C. UTILITY SERVICES DCL RATE CALCULATION

The Utility Services DCL funding of the water service, $12.82 million, combined with the $636.95 million DCL-eligible sewer and drainage costs yields a total amount of $649.76 million. This translates to a base DCL rate of $13.66 per square foot of new development. Using the equivalency factors, the rates to be levied on each type of development for Utility Services are calculated as follows:

Utility Services City-Wide DCL	
Low Density Residential	$3.17 / sq.ft.
Medium Density Residential	$6.83 / sq.ft.
High Density Residential	$13.66 / sq.ft.
Industrial	$2.73 / sq.ft.
Mixed Employment	$5.12 / sq.ft.
Commercial & Other	$6.83 / sq.ft.

11. DCL Rate Summary and Implementation

A. SUMMARY OF CALCULATED DCL RATES

The rate calculation as a general fee per square foot is shown on Table 4 within Section 5. The net DCL recoverable costs for each service category are divided by the increase in both residential and non-residential weighted GFA to derive a cost per square foot. As shown, the overall City-wide charge is calculated at $35.46 per square foot.

For both residential and non-residential development, the DCL to be charged is converted to a variable rate by development type based on equivalency factors, which are explained further in Section 5.

The calculated residential DCLs are shown on Table 11. The residential rate for low density built form is calculated at $8.23 per square foot. Low density refers to development with a Floor Space Ratio (FSR) of 1.2 or less, or laneway houses. These are most often in the form of single and semi-detached housing. Medium density residential refers to units with an FSR between 1.2 and 1.5, generally consistent with townhouse development. The calculated rate for medium density residential development is $17.72 per square foot. Higher density residential, largely apartment units with an FSR of above 1.5, will pay $35.46 per square foot of GFA.

The calculated non-residential City-wide DCLs are summarized on Table 12. Similar to the residential rates, the non-residential charges will vary by development type. The rate for heavy industrial is calculated at $11.45 per square foot. This category is relevant to the zoning district within which development is to occur. Mixed employment, also referred to as 'light industrial' which includes a mix of office and industrial uses, would be subject to a charge of $21.46 per square foot of GFA. Lastly, the charge for commercial development, or all other non-residential growth that does not fit within the industrial categories is calculated at $28.63 per square foot.

It is noted that the calculation of the development cost levies does not include any provision for waivers or discounts which are at the discretion of Council, such as the treatment of rental housing or reduced rates. Such waivers or discounts that Council may choose to provide will result in loss of DCL revenue for the affected types of development. However, any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

TABLE 11

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES
RESIDENTIAL DEVELOPMENT COST LEVIES

Service	**Calculated Charge Per Square Foot**	**Residential Charge By Square Foot[1]**		
		Low Density Residential *Below 1.2 FSR & Laneway*	**Medium Density Residential** *Beteween 1.2 and 1.5 FSR*	**High Density Residential** *Above 1.5 FSR*
Parks	$7.51	$1.74	$3.75	$7.51
Childcare	$1.77	$0.41	$0.88	$1.77
Housing	$5.32	$1.24	$2.66	$5.32
Transportation	$7.20	$1.67	$3.60	$7.20
Utility Services				
Water	*$0.27*	*$0.06*	*$0.13*	*$0.27*
Sewer	*$13.39*	*$3.11*	*$6.70*	*$13.39*
Sub-Total Utility Services	$13.66	$3.17	$6.83	$13.66
TOTAL CHARGE PER SQ.FT.	**$35.46**	**$8.23**	**$17.72**	**$35.46**

1) Based on Equivalent Factor Of:

City-Wide DCL	*0.232*	*0.500*	*1.000*
Utilities DCL	*0.232*	*0.500*	*1.000*

TABLE 12

CITY OF VANCOUVER
DEVELOPMENT COST LEVIES
NON-RESIDENTIAL DEVELOPMENT COST LEVIES

Service	Calculated Charge Per Square Foot	Non-Residential Charge By Square Foot[1]		
		Industrial[2]	Mixed Employment[3]	Commercial & Other
Parks	$7.51	$3.00	$5.63	$7.51
Childcare	$1.77	$0.71	$1.32	$1.77
Housing	$5.32	$2.13	$3.99	$5.32
Transportation	$7.20	$2.88	$5.40	$7.20
Utility Services				
Water	*$0.27*	*$0.05*	*$0.10*	*$0.13*
Sewer	*$13.39*	*$2.68*	*$5.02*	*$6.70*
Sub-Total Utility Services	$13.66	$2.73	$5.12	$6.83
TOTAL CHARGE PER SQ.FT.	**$35.46**	**$11.45**	**$21.46**	**$28.63**

1) Based on Equivalent Factor Of:

	Industrial	Mixed Employment	Commercial & Other
City-Wide DCL	*0.400*	*0.750*	*1.000*
Utilities DCL	*0.200*	*0.375*	*0.500*

2) Industrial applies to I-2, M-1, M-1A, M-1B, M-2, MC-1, MC-2 zoning districts
3) Mixed Employment (Light Industrial) applies to IC-1, IC-2, IC-3, I-1, I-3 and I-4 zoning districts

B. COMPARISON WITH CURRENT RATES IN FORCE

Table 13 presents a comparison of the newly calculated residential and non-residential development cost levies with the City’s current charges (as at September 30, 2021).

Overall, the calculated residential DCLs are approximately 25% higher than the current rates in force. The calculated non-residential DCLs are approximately 38% higher than the current rates in force. The higher non-residential increase is due to the City historically and currently charging non-residential DCL rates that are less than full cost recovery.

TABLE 13

CITY OF VANCOUVER
COMPARISON OF CURRENT AND CALCULATED
DCLS - CITY-WIDE

Development Type	Curent DCL Rates[1] Charge / Sq.Ft.	Calculated DCL Rates Charge / Sq.Ft.	Difference in Charge	
Residential Development				
Low Density *Below 1.2 FSR & Laneway*	$6.56	$8.23	$1.67	25%
Medium Density *Development between 1.2 & 1.5 FSR*	$14.17	$17.72	$3.55	25%
High Density *Development Above 1.5 FSR*	$28.37	$35.46	$7.09	25%
Non-Residential Development				
Industrial	$8.28	$11.45	$3.17	38%
Mixed Employment	$15.55	$21.46	$5.91	38%
Commercial & Other	$20.71	$28.63	$7.92	38%

1) Rates effective September 30, 2021

C. RECOMMENDED PHASE-IN

Staff is making recommendations, for Council's consideration, on the implementation of the new DCL By-law. These recommendations include a phase-in of the DCL rate increase, with 50% of the rate increase taking effect on September 30, 2022, and the remaining 50% coming into force on September 30, 2023.

In addition to this recommended DCL rate phase-in, the City offers 12 months of in-stream DCL rate protection (as required through the legislation): applications submitted prior to a DCL rate change can avoid paying the DCL rate increase if a building permit is issued prior to next year's rate change.

Staff are of the opinion that the rate phase-in combined with the in-stream rate protection offers an adequate amount of time for new development to adjust to the new rates.

D. BY-LAW EXEMPTIONS AND RATE REDUCTIONS

The City of Vancouver, through the *Vancouver Charter* and the City's by-laws, will continue to exempt the following development from the payment of DCLs:

- Alterations to existing buildings where the total floor area is not increased;
- Social housing;
- Churches exempt from taxation;
- Renovations;
- Additions smaller than 500 square feet to existing buildings containing fewer than 4 residential units and no other use; and
- Small residential units of 29.7 square metres (320 square feet) or less, subject to Council approval.

The City currently provides City-wide DCL waivers for market rental housing. Utilities DCL waivers are not offered for rental. The lost revenue associated with the City-wide DCL waiver must be funded from other sources, which largely comes from the property tax base or utility fees. With significant recent strengthening of the rental market in Vancouver, staff are recommending a change in the City-wide DCL waiver for for-profit market rents to an 86% DCL reduction. The 100% City-wide DCL waiver would be maintained for for-profit rental that has a 20% below-market component.

The City also offers reduced DCL rates for various uses, including various institutional uses (childcare, community centre, community energy centre, cultural facility, library, public authority use, social service centre, school) as well as temporary buildings, works yards, and parking garages. City staff are proposing to:

- Remove the above ground parking garage reduced rate; and

- Add an expanded reduced rate for cultural facilities which includes artist studios, galleries, halls, museums or archives, theatres, and performance are production or rehearsal studios.

E. COLLECTION OF CHARGES

DCLs in the City of Vancouver are payable at the issuance of building permit. This practice is recommended to continue.

The City currently offers a payment of DCLs by installments option. This option is administratively complex, with little uptake. Staff are recommending to remove the payment of levy by installments options.

F. IN-STREAM RATE PROTECTION

In order to ensure fairness to applications that have been submitted prior to the adoption of DCL By-law rate adjustments, in-stream rate protection is offered as mandated by the Vancouver Charter. Building permits issued within 12 months of a DCL By-law amendment are exempt from that DCL rate increase, provided there was a precursor application (rezoning, development permit or building permit application) that was in-stream on the date of that increase, and provided that:

- The applicant has submitted an application in a form satisfactory to the City; and
- The applicant has paid the applicable application fee to the City.

If a related building permit application is not issued within the 12-month period, the rate protection expires and new DCL rates take effect.

G. DCL MONITORING AND REPORTING

The City currently undertakes annual reporting on DCL revenues and expenditures. It is recommended that that this practice continue to ensure transparency and facilitates regular updates to the calculation.

Appendix A

Development Forecast

Development Forecast

This appendix provides details of the development forecast used to prepare the 2022 City-wide and Utilities Development Cost Levy Update Background Study (DCL Update Study) for the City of Vancouver. The planning period being used for the DCL is the ten-year period of 2023 to 2032.

A. BACKGROUND AND METHODOLOGY

Consistent with BC's DCC Best Practices Guide, the development forecast includes a forecast of new floor space development over the ten-year DCL planning period of 2023-2032. The development forecast was prepared by the City's planning department using:

- Development pipeline data (rezoning and development permit applications in-stream);
- Assumptions related to the percentage of major projects to be built out over the ten-year timeframe, including active major project sites city-wide (e.g. Oakridge Centre, East Fraser Lands, Little Mountain, Jericho); and
- Recent development trends related to low density residential development including laneways, duplexes, and townhouses.

B. FORECAST RESULTS

i. Residential Forecast

Over the next ten years, the forecasted net increase in residential floor area across the City is 41.9 million square feet. The residential GFA growth forecast totals 56.2 million square feet of residential space.

Map 1 illustrates the anticipated distribution of residential growth across the city over the 2023-2032 planning period. Much of the new growth is anticipated in the downtown area, central corridor, and the east side of the city.

City-wide Residential Growth Forecast	**2023-2032 Growth**
Residential Floor Area Net Growth (sq.ft.)	*41,862,851*
Below 1.2 FSR (LWH, Duplex)	*3,956,316*
1.2-1.5 FSR (Townhouse)	*1,964,864*
FSR 1.5 and more (Apartment)	*35,941,670*
Residential Floor Area Gross Growth (sq.ft.) (1)	*56,210,460*
Below 1.2 FSR (LWH, Duplex)	*20,033,875*
1.2-1.5 FSR (Townhouse)	*2,481,155*
FSR 1.5 and more (Apartment)	*33,695,430*

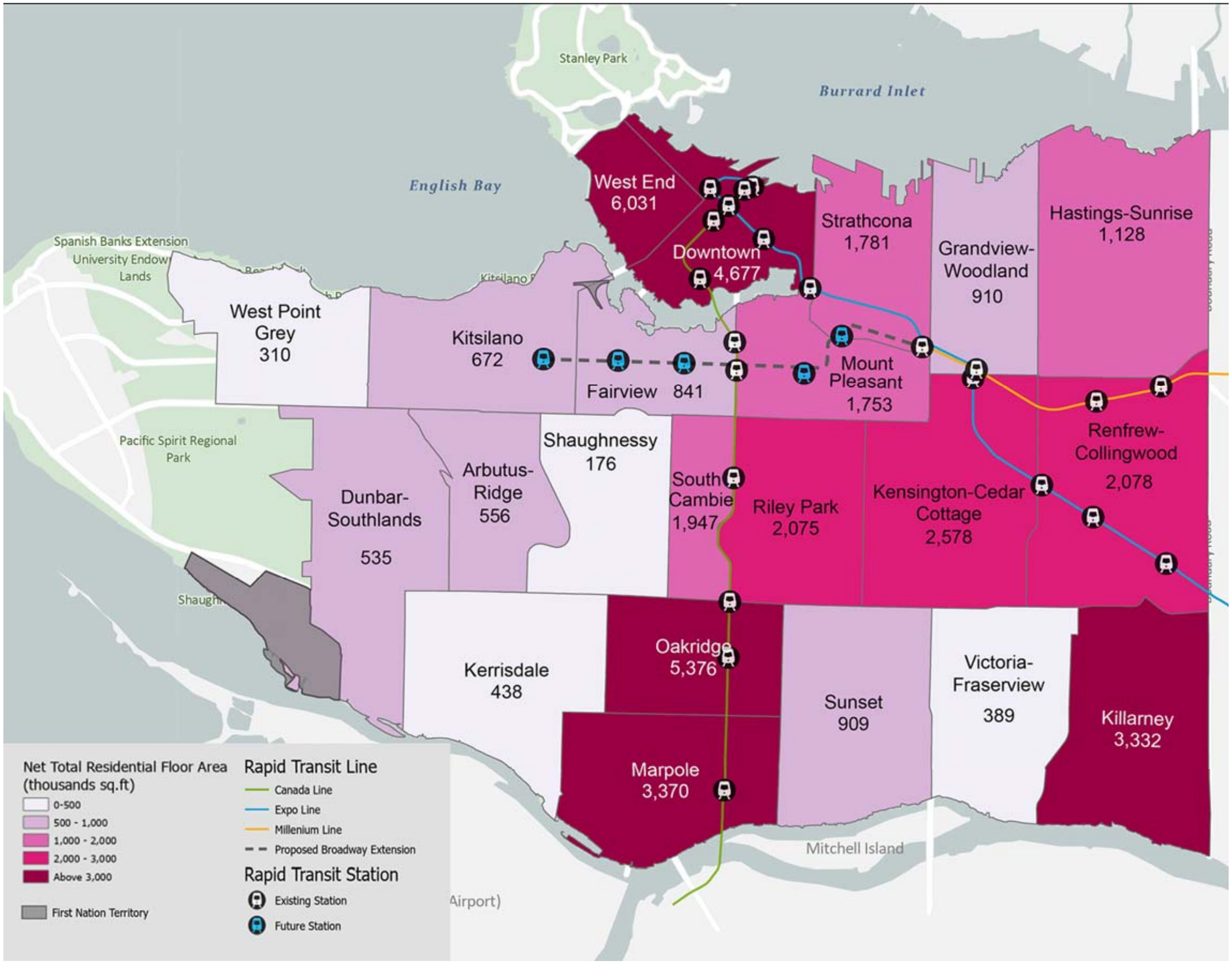
ii. Non-Residential Forecast

The non-residential forecast projects an increase of 14.3 million square feet of net new non-residential building space. The gross non-residential GFA growth over the ten-year planning period totals 18.3 million square feet, of which 70% will be commercial floor space.

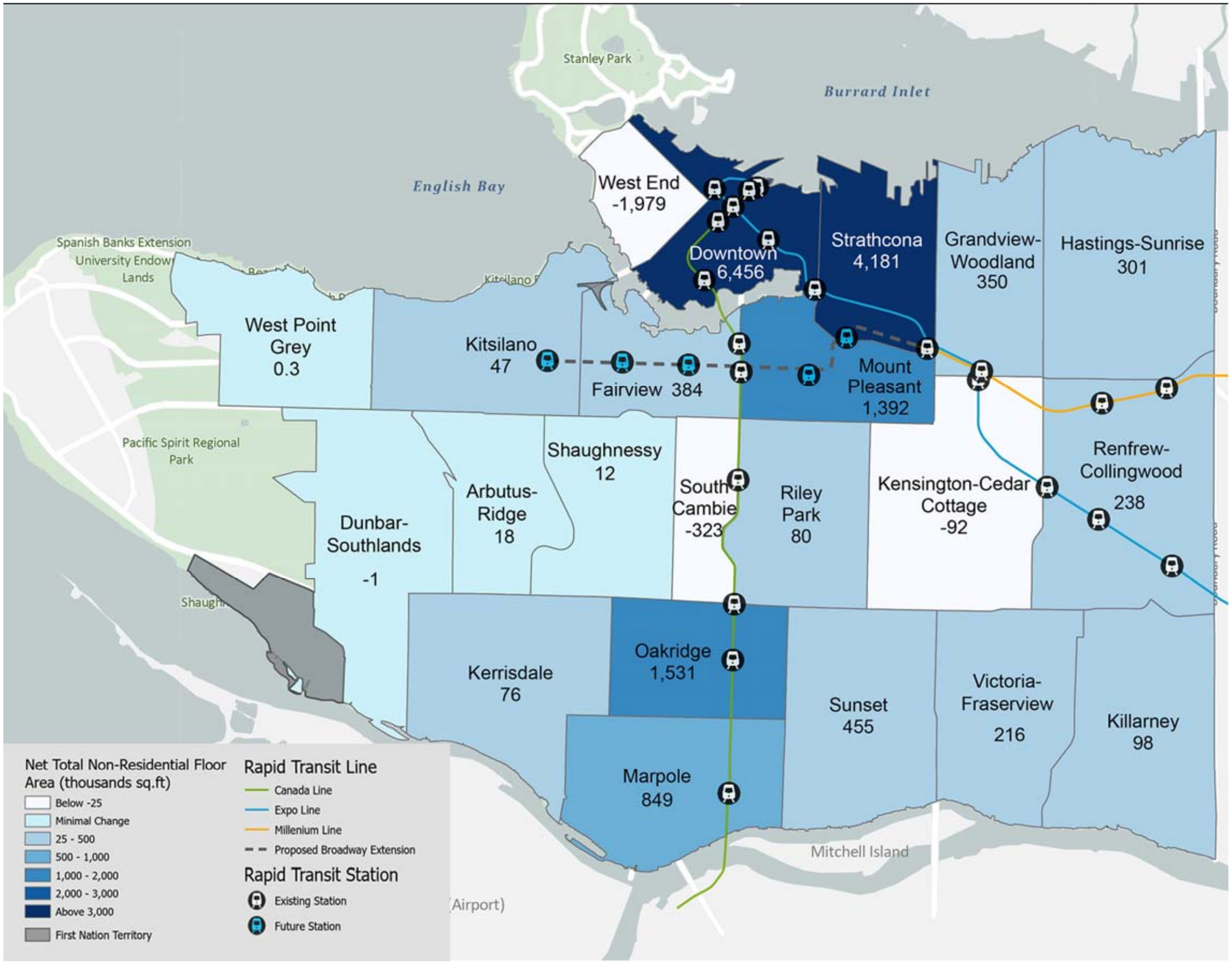
Map 2 illustrates the distribution of the anticipated non-residential floor space growth across the city. Much of this growth is anticipated in the downtown area in the form of major commercial office projects. The map also reflects the relocation of St. Paul's Hospital from the West End to Strathcona. Significant growth is also anticipated in the Oakridge and Mount Pleasant areas.

City-wide Non-Residential Growth Forecast	2023-2032 Growth
Non-Residential Floor Area Net Growth (sq.ft.)	14,289,765
Commercial	*9,681,005*
Industrial	*2,348,925*
Mixed Employment	*1,412,943*
Reduced Rate	*846,892*
Non-Residential Floor Area Gross Growth (sq.ft.)	18,328,677
Commercial	*12,821,065*
Industrial	*2,898,416*
Mixed Employment	*1,762,304*
Reduced Rate	*846,892*

Map 1. Residential Development Forecast (2023-2032): Net Increase of Residential Floor Area (thousands sq.ft.)



Map 2. Non-Residential Development Forecast (2023-2032): Net Increase of Non-Residential Floor Area (thousands sq.ft.)



APPENDIX B

PARKS DCL CAPITAL PROGRAM

PARKS DCL CAPITAL PROGRAM

A. ESTABLISHING THE DEMAND FOR SERVICE

Park Board decision-making is guided by VanPlay, the Parks and Recreation Master Plan which was completed in 2018. The City maintains a target provision of 1.1 hectares of neighbourhood parkland for every 1,000 residents, supplemented by the goal of providing a green space within a five-minute walk of all residents. Currently 73% of residents live within a five minute walk of green space, and 99% live within a ten minute walk. These goals are challenging given the limited availability and high cost of land in Vancouver.

B. CAPITAL PROGRAM

The capital program includes 5.30 hectares of parkland acquisitions at a total gross cost of $165.28 million. The parkland acquisitions include areas such as Sunset, Kensington-Cedar Cottage, Kitsilano, Marpole, Mount Pleasant, and Renfrew-Collingwood, among others.

Growth-related Seawall and waterfront projects include expansions and improvements to the Seaside Greenway, new and upgraded marine assets, and coastal resiliency projects. These projects are attributed a total gross cost of $26.00 million.

Urban forest and natural areas projects total $107.80 million in gross costs. They include natural area expansions, biodiversity planning, tree planting, local food assets, and other enhancements.

The capital program includes the design and development of parkland amenity additions and enhancements to various parks across the City. These gross costs total $172.50 million.

Buildings and infrastructure projects total $39.65 million in gross costs and include 20 new public washrooms as well as lighting installations, signage, furnishings, pathway improvements, in-park green infrastructure projects, and various infrastructure upgrades.

Finally, $28.18 million has been included to cover emerging priorities to meet location-specific needs driven by development as it occurs.

In total, the Parks capital program includes $539.41 million in gross costs. No senior government or partner-funded shares have been identified. Approximately $39.25 million is considered to benefit existing development (e.g. replacement shares), leaving $500.16 million in net growth-related costs.

Of the net growth related amount, $43.80 is anticipated to be provided through CACs and density bonusing and has been removed from the DCL calculation. A further $35.19 million will be funded by layered DCLs, as well as available DCL reserves. The 1% municipal assist factor, equal to $4.32 million, has also been removed from the DCL calculations and must be funded by other City sources such as property taxes. After these deductions, the remaining DCL-recoverable amount of $416.85 million is brought forward to the DCL rate calculations.

Parks Capital Program	Park Area (ha)	Total Gross Cost ($000)	Senior Gov. / Partners ($000)	Benefit to Existing ($000)	Net Growth-Related Costs ($000)	CAC / Density Bonusing ($000)	Other City Funding Sources ($000)	Municipal Assist ($000)	DCL Rate Funded 2023-2032 ($000)
Parkland Acquisition[1] Kensington-Cedar Cottage Kitsilano Marpole Mount Pleasant Renfrew-Collingwood Sunset Other parkland	**5.30**	**$165,280**	**$0**	**$0**	**$165,280**	**$0**	**$0**	**$1,653**	**$163,627**
Seawall & Waterfront		**$26,000**	**$0**	**$12,000**	**$14,000**	**$5,000**	**$0**	**$90**	**$8,910**
Expansion/Improvements Seaside Greenway		$4,000	$0	$1,000	$3,000	$0	$0	$30	$2,970
New/Upgraded Marine Assets		$6,000	$0	$3,000	$3,000	$0	$0	$30	$2,970
Coastal Resiliency Planning & Projects		$16,000	$0	$8,000	$8,000	$5,000	$0	$30	$2,970
Urban Forest & Natural Areas		**$107,800**	**$0**	**$0**	**$107,800**	**$0**	**$134**	**$1,077**	**$106,589**
Natural Area Expansion		$11,500	$0	$0	$11,500	$0	$0	$115	$11,385
Stream Daylighting, Wetlands, & Enhancements (Still Creek, Canyon Creek, Hastings Park Stream, Beaconsfield Park, Gibbys, Hasitngs Park, Charleson)		$25,500	$0	$0	$25,500	$0	$134	$255	$25,111
Biodiversity Strategy & Planning		$2,000	$0	$0	$2,000	$0	$0	$20	$1,980
Tree Planting in Parks		$47,000	$0	$0	$47,000	$0	$0	$470	$46,530
Local Food Assets		$1,800	$0	$0	$1,800	$0	$0	$18	$1,782
Convert Parkland to healthy habitat		$20,000	$0	$0	$20,000	$0	$0	$200	$19,800

Parks Capital Program	Park Area	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	CAC / Density Bonusing	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(ha)	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Park Amenities (Design & Dev't)		**$172,500**	**$0**	**$22,100**	**$150,400**	**$36,303**	**$24,037**	**$901**	**$89,160**
East Park (SEFC)		$41,800	$0	$0	$41,800	$0	$18,990	$228	$22,582
7th & Main		$1,000	$0	$0	$1,000	$0	$0	$10	$990
Burrard Slopes		$14,000	$0	$0	$14,000	$0	$0	$140	$13,860
East Fraser Lands (various parks)		$19,100	$0	$0	$19,100	$0	$0	$191	$18,909
Nicola & Alberni		$3,000	$0	$0	$3,000	$0	$3,000	$0	$0
Little Mountain		$250	$0	$0	$250	$0	$0	$3	$248
Pearson Dogwood		$3,350	$0	$0	$3,350	$3,350	$0	$0	$0
Upgraded Park Amenities		$65,000	$0	$22,100	$42,900	$32,953	$2,047	$79	$7,821
Other new parks/expansions		$25,000	$0	$0	$25,000	$0	$0	$250	$24,750
Buildings & Infrastructure		**$39,650**	**$0**	**$5,150**	**$34,500**	**$2,500**	**$0**	**$320**	**$31,680**
New park washrooms (20)		$18,000	$0	$0	$18,000	$0	$0	$180	$17,820
Electrical Distribution Systems Upgrades		$1,000	$0	$750	$250	$0	$0	$3	$248
Lighting installations (turf fields & other)		$4,500	$0	$0	$4,500	$2,500	$0	$20	$1,980
Park signage		$800	$0	$400	$400	$0	$0	$4	$396
New park furnishings		$600	$0	$0	$600	$0	$0	$6	$594
Pathway improvements & Other		$1,600	$0	$0	$1,600	$0	$0	$16	$1,584
Infrastructure upgrades		$6,000	$0	$3,000	$3,000	$0	$0	$30	$2,970
In-park GI Projects		$2,000	$0	$0	$2,000	$0	$0	$20	$1,980
Park electrification		$3,150	$0	$0	$3,150	$0	$0	$32	$3,119
Universal access improvements		$2,000	$0	$1,000	$1,000	$0	$0	$10	$990
Emerging Priorities		$28,183	$0	$0	$28,183	$0	$0	$282	$27,901
Available DCL Reserves		$0	$0	$0	$0	$0	$11,020	$0	-$11,020
Total Parks		**$539,413**	**$0**	**$39,250**	**$500,163**	**$43,803**	**$35,191**	**$4,322**	**$416,847**

APPENDIX C

CHILDCARE DCL CAPITAL PROGRAM

CHILDCARE DCL CAPITAL PROGRAM

A. ESTABLISHING THE DEMAND FOR SERVICE

The projects included in the childcare capital program were designed to accommodate the increased demands on the service imposed by development in the City. The number and type of spaces included in the program are tied directly to the City's development forecasts: as growth occurs, and the population and employment base grows, additional childcare spaces must be made available.

The City uses three methods to calculate demand for childcare spaces: the Childcare Calculator for new developments, a simple childcare space ratio to determine relative shortfall, and the Supply/Demand model based on a study by Mab Oloman (2010). The need for childcare spaces is driven by the amount of residential development, the forecasted age-profile of those in the childcare age ranges, and growth in employment (as not all employees that work in the City also reside in the City and therefore a segment of increased childcare need is not captured by residential growth and population changes). The City aims to maintain one daycare space per 100 employees as well as one space for 50% of pre-school aged children with working mothers.

B. CAPITAL PROGRAM

The needs analysis identifies the provision of 1,895 new child spaces over the ten-year planning period of 2023-2032 at a gross cost of $347.74 million. Of these spaces, 1,795 are for ages 0 through 4, at a total gross cost of $334.54 million. These include 716 spaces to be provided through Civic Buildings such as Community Centres distributed widely across the city to align with need. The capital program also includes conversions from part-day to full-day daycare, adding capacity to the system. The remaining 899 spaces will be provided through partnerships and granting, and include developer-led, NPO-led, and indigenous-led projects as well as other in-kind contributions.

Another 100 spaces will provide out of school care for ages 5 through 12, provided through two projects at a total gross cost of $5.00 million. The capital program allows for an additional $8.20 million to fund emerging priorities as development occurs.

Of the total gross costs, $63.57 million is anticipated to be funded through senior government or partner shares. Another $18.90 million is related to the replacement of existing childcare spaces and is therefore not considered to be growth-related. After these deductions, $265.27 million in net growth-related costs remains.

Approximately $123.78 million of the growth-related capital costs will be provided through CACs and density bonusing. Another $42.17 million will be funded through layered DCLs and the available City-wide DCL reserve balance. The 1% municipal assist share, equal to $1.27, will be funded through other City sources such as property taxes. The remaining $98.05 million is brought forward to the DCL rate calculation to be recovered from development over the 2023-2032 period.

Childcare Capital Program	Net New Spaces[1]	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	CAC / Density Bonusing	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(#)	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Spaces for Ages 0-4									
Civic Buildings (e.g. Community Centres) VAHEF Projects (2 locations) Ray-Cam Cooperative Centre Olympic Village School West End Civic Centre Cedar Cottage Neighbourhood House Britannia Community Centre Marpole Civic Centre EFL Community Centre Childcare Kensington Community Centre Additional school project	716	$149,710	$25,040	$18,900	$105,770	$8,330	$9,460	$880	$87,100
Developer-Led, In-Kind 9 in-kind projects	450	$94,500	$0	$0	$94,500	$87,665	$2,950	$39	$3,846
NPO-Led, In-Kind 3 in-kind projects	188	$39,480	$13,810	$0	$25,670	$19,380	$0	$63	$6,227
Conversion from Part-Day to Full-Day 4 conversions	180	$1,800	$0	$0	$1,800	$0	$0	$18	$1,782
Indigenous-Led, Capital Grant 2 projects	74	$15,540	$2,960	$0	$12,580	$0	$0	$126	$12,454
NPO-Led, Capital Grant 3 projects	147	$25,110	$17,760	$0	$7,350	$0	$1,800	$56	$5,495
Part-Day Preschool, In-Kind 2 projects	40	$8,400	$0	$0	$8,400	$8,400	$0	$0	$0
Sub-Total Spaces for Ages 0-4	**1,795**	**$334,540**	**$59,570**	**$18,900**	**$256,070**	**$123,775**	**$14,210**	**$1,181**	**$116,904**
Spaces for Ages 5-12									
OOSC / Indigenous-Led 2 projects	100	$5,000	$4,000	$0	$1,000	$0	$0	$10	$990
Sub-Total Spaces for Ages 5-12	**100**	**$5,000**	**$4,000**	**$0**	**$1,000**	**$0**	**$0**	**$10**	**$990**
Emerging Priorities		$8,198	$0	$0	$8,198	$0	$0	$82	$8,116
Available DCL Reserves		$0	$0	$0	$0	$0	$27,959	$0	-$27,959
Total Childcare	**1,895**	**$347,738**	**$63,570**	**$18,900**	**$265,268**	**$123,775**	**$42,169**	**$1,273**	**$98,052**

Notes:

1) Childcare spaces shown are fully growth-related. The City will add additional spaces to address existing needs and those spaces, and associated costs are not reflected above.

APPENDIX D

REPLACEMENT HOUSING

DCL CAPITAL PROGRAM

REPLACEMENT HOUSING DCL CAPITAL PROGRAM

A. ESTABLISHING THE DEMAND FOR SERVICE

The goals and objectives of the Housing department are outlined in the Housing Vancouver Strategy, which identifies targets for additional units required. As only Replacement Housing is eligible for DCL funding under the Vancouver Charter, the City estimates the number of units that will be demolished due to development over the ten-year planning period for inclusion in the DCL calculations.

B. CAPITAL PROGRAM

The capital program includes total gross costs associated with 9,125 housing units at a total gross cost of $5.22 billion; however, DCL funding will be used for the Replacement Housing portion at 4,900 units.

The gross capital program includes City land acquisitions for 1,750 units, 5,125 capital grant-supported non-profit led units, 2,250 projects provided in-kind (at no cost to the City), as well as a $24.87 million allocation to additional emerging priorities in order to respond to development as it occurs.

A significant share of the gross capital program, $3.38 billion, is anticipated to be funded by senior government and partner contributions. Approximately $35.69 million in benefit to existing or replacement shares has been identified, leaving $1.80 billion in net growth-related costs. Of this amount, CACs and density bonusing contributions will cover $1.28 billion of the costs, primarily associated with the 2,250 in-kind units. Revenues from the Empty Homes Tax, as well as the available DCL reserve balance, will fund $222.04 million. The 1% municipal assist share results in another $3.21 million deduction, leaving $295.47 million to be brought forward to the 2023-2032 DCL rate calculations.

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Replacement Housing Capital Program	Net New Units	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	CAC / Density Bonusing	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	(#)	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Land Acquisition (VAHEF)	1,750	$1,013,100	$711,954	$13,800	$287,346	$104,000	$56,250	$1,271	$125,825
Non-Profit-Led, Capital Grant	5,125	$3,005,613	$2,671,225	$21,888	$312,500	$0	$143,750	$1,688	$167,063
In-Kind Projects	2,250	$1,176,450	$0	$0	$1,176,450	$1,176,450	$0	$0	$0
Emerging Priorities		$24,871	$0	$0	$24,871	$0	$0	$249	$24,623
Available DCL Reserves		$0	$0	$0	$0	$0	$22,040	$0	-$22,040
Total Housing Capital Program*	**9,125**	**$5,220,034**	**$3,383,179**	**$35,688**	**$1,801,167**	**$1,280,450**	**$222,040**	**$3,207**	**$295,470**

*DCLs fund Replacement Housing Calculation which is estimated to be 4,900 units

Appendix E

Transportation DCL Capital Program

TRANSPORTATION DCL CAPITAL PROGRAM

A. ESTABLISHING THE DEMAND FOR SERVICE

Development activity places increased demands on the transportation network in Vancouver, by adding additional people and employees that use various forms of transportation to get around. The department must plan and budget to accommodate the increasing use of the City's roads, sidewalks, bike lanes, parking options, and public transit. Ensuring intersections are safe and efficient, bridges are properly maintained, and pedestrian infrastructure is effective and accessible are all key components of properly servicing growth in Vancouver.

Mobility in Vancouver is guided by policies in Transportation 2040, a long-term strategic plan for the City that will help guide transportation and land use decisions and public investments for the years ahead. The plan supports "a thriving economy while increasing affordability; healthy citizens who are mobile in a safe, accessible, and vibrant city; and an enhanced natural environment that ensures a healthy future for people and the planet."

Active modes of transportation – that is, walking, cycling and rolling – are central to that vision for Vancouver. Public transit, private vehicles, and goods movement also have important roles to play, but this vision cannot be achieved without land use mix and destiny, infrastructure, and a culture that supports and encourages Vancouver residents to choose walking and cycling for more of their trips.

One of the central goals of Transportation 2040, supported by other City priorities and strategies, is making two-thirds of all trips by foot, bike, or transit. The 2040 Plan and the focus on active transportation is reflected in the growth-related capital program established for the DCL Update.

B. CAPITAL PROGRAM

The total gross 2023-2032 Transportation DCL capital program amounts to $1.52 billion. The program has a specific focus on achieving active transportation needs and goals while continuing to invest in core traditional road-related infrastructure. Table 1 provides an overview of the growth-related transportation capital program. The program includes:

- $883.89 million in costs related to road infrastructure such as bridges and structures, pavement and sidewalks, and traffic signals and street lights;
- $541.56 million in transit and active transportation capacity improvements including bus network upgrades and rapid transit-related projects, 80km of bikeways, complete streets projects, and safety and accessibility improvements;
- $62.50 million in public gathering and placemaking improvements (e.g. plazas and community hubs) and commercial high street corridor improvements; and
- $27.40 million allocated to additional emerging priorities to respond to growth and development pressures as they occur.

$362.85 million of the capital costs are anticipated to be funded through senior government or partner contributions. Another $699.64 million is deemed to benefit existing development, the majority of which is related to the roads and bridges infrastructure. As such, much of remaining net growth-related costs ($452.87 million) related to active transportation and transit-related projects.

CACs and density bonusing are anticipated to cover $30.00 million of the growth-related costs. Another $18.83 million will be funded through development conditions as well as the available DCL reserve balance. The 1% municipal assist factor, $4.19 million, will be funded through other City sources such as property taxes. After these deductions, $399.86 in growth-related costs are brought forward for DCL recovery over the 2023-2032 period.

Transportation Services	Total Gross Cost ($000)	Senior Gov. / Partners ($000)	Benefit to Existing ($000)	Net Growth-Related Costs ($000)	CAC / Density Bonusing ($000)	Other City Funding Sources ($000)	Municipal Assist ($000)	DCL Rate Funded 2023-2032 ($000)
Building a Resilient Network								
Bridges & Structures (Excl. Seawall Structures)	**$351,000**	**$77,000**	**$249,000**	**$25,000**	**$0**	**$0**	**$250**	**$24,750**
Granville Bridge rehab & seismic upgrade	$149,000	$38,000	$109,000	$2,000	$0	$0	$20	$1,980
Cambie Bridge rehab & seismic upgrade	$98,000	$35,000	$40,000	$23,000	$0	$0	$230	$22,770
Retaining walls, slopes, other structures	$104,000	$4,000	$100,000	$0	$0	$0	$0	$0
Pavement & Sidewalks	**$218,000**	**$50,000**	**$168,000**	**$0**	**$0**	**$0**	**$0**	**$0**
Traffic Signals & Street Lights	**$314,890**	**$1,500**	**$262,200**	**$51,190**	**$0**	**$3,150**	**$480**	**$47,560**
Signals and signal communication	$106,300	$0	$75,200	$31,100	$0	$3,150	$280	$27,670
Street signs and road markings	$24,000	$0	$24,000	$0	$0	$0	$0	$0
Street lighting & infrastructure	$184,590	$1,500	$163,000	$20,090	$0	$0	$200	$19,890
Subtotal Building a Resilient Network	**$883,890**	**$128,500**	**$679,200**	**$76,190**	**$0**	**$3,150**	**$730**	**$72,310**
Improving Mobility								
Transit Integration & Reliability	**$84,010**	**$53,600**	**$3,800**	**$26,610**	**$0**	**$0**	**$266**	**$26,344**
Bus stop upgrades and improvements	$46,000	$36,000	$3,800	$6,200	$0	$0	$62	$6,138
RapidBus expansion and bus-priority upgrades	$15,010	$12,000	$0	$3,010	$0	$0	$30	$2,980
Rapid transit planning & implementation	$23,000	$5,600	$0	$17,400	$0	$0	$174	$17,226
Active Transportation & Complete Streets	**$365,280**	**$176,500**	**$0**	**$188,780**	**$25,000**	**$0**	**$1,638**	**$162,142**
Active transportation & complete streets (including up to 80km of AAA bikeways such as Arbutus Greenway, West End, Cambie Corridor)	$180,280	$37,000	$0	$143,280	$25,000	$0	$1,183	$117,097
Prior St underpass	$145,000	$139,500	$0	$5,500	$0	$0	$55	$5,445
Transportation planning & monitoring	$40,000	$0	$0	$40,000	$0	$0	$400	$39,600

Transportation Services	Total Gross Cost	Senior Gov. / Partners	Benefit to Existing	Net Growth-Related Costs	CAC / Density Bonusing	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Transportation Safety & Accessibility	**$92,270**	**$4,250**	**$16,635**	**$71,385**	**$0**	**$370**	**$710**	**$70,305**
Waterway safety infrastructure	$7,820	$0	$7,820	$0	$0	$0	$0	$0
Transportation safety/construction management	$30,100	$0	$0	$30,100	$0	$230	$299	$29,571
School programs	$21,070	$0	$0	$21,070	$0	$140	$209	$20,721
At grade rail crossings	$10,030	$0	$5,015	$5,015	$0	$0	$50	$4,965
Curb ramp program	$12,000	$3,000	$1,800	$7,200	$0	$0	$80	$7,120
Neighbourhood traffic management/spot improvements	$11,250	$1,250	$2,000	$8,000	$0	$0	$72	$7,928
Subtotal Improving Mobility	**$541,560**	**$234,350**	**$20,435**	**$286,775**	**$25,000**	**$370**	**$2,614**	**$258,791**
Supporting Public Life								
Public Gathering & Placemaking 12+ plazas & community hubs 20+ upgrades	$39,375	$0	$0	$39,375	$0	$0	$394	$38,981
Commercial High Street Corridors Including Gastown	$23,130	$0	$0	$23,130	$5,000	$0	$181	$17,949
Subtotal Supporting Public Life	**$62,505**	**$0**	**$0**	**$62,505**	**$5,000**	**$0**	**$575**	**$56,930**
Emerging Priorities	$27,404	$0	$0	$27,404	$0	$0	$274	$27,130
Available DCL Reserves	$0	$0	$0	$0	$0	$15,306	$0	-$15,306
Total Transportation Services	**$1,515,359**	**$362,850**	**$699,635**	**$452,874**	**$30,000**	**$18,826**	**$4,194**	**$399,855**

APPENDIX F

UTILITIES DCL CAPITAL PROGRAM

Utilities DCL Capital Program

A. ESTABLISHING THE DEMAND FOR SERVICE

Development activity, including redevelopment and intensification, places increased demand on the City's utilities infrastructure. The City's water distribution system requires upgrades and expansions to meet the needs of development. The City must maintain adequate pressure in the water distribution system while addressing the increase in water demand and fire flow needs arising from growth. Sewer demand and network capacity is modelled with a particular focus on geographic areas experiencing substantial growth.

B. CAPITAL PROGRAM

i. Water Services

City staff have identified $38.71 million in gross capital costs related to growth-related Water projects. Most of this ($37.16 million) is related to water system upgrades in various growing neighbourhoods including the Cambie, Broadway, Grandview-Woodland, and False Creek Flats areas, as well as additional locations throughout the city. Growth-related hydraulic modelling costs amount to a total of $390,000. An additional $1.17 million has been earmarked for emerging priorities to associate with growth as it occurs over the next ten years.

No senior government or partner shares have been identified. Approximately $5.93 million in "post-period" shares anticipated to serve development beyond the ten-year planning period has been identified, attributed to the Broadway water upgrades, and removed from the 2023-2032 DCL calculation. Another $494,000 in non-growth related costs is also deducted, leaving $32.28 million in net growth-related costs.

Of the 2023-2032 growth-related City costs, $19.33 million will be funded through development conditions as well as available DCL reserves. The 1% municipal assist factors amounts to $135,000 and will be funded through other City sources, such as utility rates. This leaves $12.82 million in DCL rate funded costs over the 2023-2032 period.

Water Services	Total Gross Cost	Senior Gov. / Partners	Post-Period (2033+)	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
	($000)	($000)	($000)	($000)	($000)	($000)	($000)	($000)
Water System Upgrades	**$37,155**	**$0**	**$5,932**	**$397**	**$30,826**	**$18,760**	**$120**	**$11,946**
Cambie Water Upgrades	$9,740	$0	$0	$0	$9,740	$3,360	$64	$6,316
Broadway Water Upgrades	$7,933	$0	$5,932	$0	$2,001	$0	$20	$1,981
Grandview-Woodland Water Upgrades	$1,838	$0	$0	$0	$1,838	$0	$18	$1,820
False Creek Flats Water Upgrades	$5,332	$0	$0	$0	$5,332	$5,000	$3	$329
City-wide Water Upgrades	$12,312	$0	$0	$397	$11,915	$10,400	$15	$1,500
Hydraulic Model	**$390**	**$0**	**$0**	**$98**	**$293**	**$0**	**$3**	**$290**
Emerging Priorities	$1,166	$0	$0	$0	$1,166	$0	$12	$1,154
Available DCL Reserves	$0	$0	$0	$0	$0	$573	$0	-$573
Total Water Services	**$38,711**	**$0**	**$5,932**	**$494**	**$32,285**	**$19,333**	**$135**	**$12,817**

ii. Sanitary and Drainage

The City has a significant Sanitary and Drainage growth-related capital program, totaling $2.06 billion in gross costs. Projects in the Sanitary and Drainage capital program include extensive sewer and green infrastructure upgrades serving the Cambie ($223.51 million) and Broadway ($267.12 million) areas, as well as other growing areas throughout the city ($1.30 billion). The program also includes $67.12 million in pump stations, $75.45 million in hydraulic modelling and monitoring initiatives, $79.30 million in planning and other study costs, and $50.62 million to address other emerging priorities.

$18.5 million in senior government or partner shares has been identified and removed from the DCL calculation. A significant share of the program, $605.01 million, has been identified as “post-period”, or related to growth that is anticipated to occur beyond the 2023-2032 planning period. This amount is also removed from the 2023-2032 DCL rate calculations, but may be considered as part of future DCL updates. Another significant share of $737.45 million has been deemed as benefit to existing or replacement costs, leaving $698.89 million in net growth-related costs for the ten-year planning period.

Development conditions and available DCL reserves will fund $55.25 million of the net growth-related costs. Finally, the municipal assist share amounting to $6.69 million must be funded through other City sources, such as utility rates. The remaining amount eligible for funding through DCLs collected over the 2023-2032 period is $636.95 million.

The City has prepared a more detailed Utilities DCL Capital Project List (2023-2032) which is included as part of the 2022 DCL update under separate cover.

Sanitary & Drainage	Total Gross Cost ($000)	Senior Gov. / Partners ($000)	Post-Period (2033+) ($000)	Benefit to Existing ($000)	Net Growth-Related Costs ($000)	Other City Funding Sources ($000)	Municipal Assist ($000)	DCL Rate Funded 2023-2032 ($000)
Cambie Projects (Sanitary & Drainage Upgrades)	**$223,511**	**$2,000**	**$80,000**	**$7,274**	**$134,236**	**$12,940**	**$1,213**	**$120,084**
Broadway Projects (Sanitary & Drainage Upgrades)	**$267,130**	**$2,100**	**$140,370**	**$15,790**	**$108,870**	**$0**	**$1,089**	**$107,781**
City Wide Projects (Sanitary & Drainage Upgrades)	**$1,296,709**	**$14,400**	**$384,640**	**$638,026**	**$259,644**	**$16,695**	**$2,429**	**$240,519**
Pump Stations	**$67,125**	**$0**	**$0**	**$36,000**	**$31,125**	**$0**	**$311**	**$30,814**
Hydraulic Model & Monitoring	**$75,450**	**$0**	**$0**	**$35,500**	**$39,950**	**$0**	**$400**	**$39,551**
Planning & Other Studies	**$79,300**	**$0**	**$0**	**$4,860**	**$74,440**	**$0**	**$744**	**$73,696**
Emerging Priorities	$50,624	$0	$0	$0	$50,624	$0	$506	$50,118
Available DCL Reserves	$0	$0	$0	$0	$0	$25,616	$0	-$25,616
Total Sanitary & Drainage	**$2,059,850**	**$18,500**	**$605,010**	**$737,450**	**$698,889**	**$55,251**	**$6,693**	**$636,946**

City of Vancouver DCL Rate Update:

Evaluation of Potential Impacts on Urban Development

7 June 2022

Prepared for:
City of Vancouver

By:
coriolis
CONSULTING CORP.

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1.0 Introduction

1.1 Background

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

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

DCLs in Vancouver vary depending on the location of the project (as well as the zoning, use and density), but most projects are subject to the City-wide DCL and the Utilities DCL.

The City is in the process of updating the City-wide DCL bylaw and the Utilities DCL bylaw.

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

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

Therefore, for a wide range of case study sites across the City, we analyzed the financial viability of redevelopment to determine whether or not each site could support the proposed increased DCL rate and identify the types of redevelopment projects that may not be viable at the increased rates.

This report summarizes our analysis and conclusions. This report focuses on the impact of increased DCL rates on strata residential, mixed use, office, industrial and mixed employment projects. We also separately analyzed the impact of a DCL waiver for market rental and below market rental projects. The rental apartment evaluation is contained in a separate report.

Our market research was completed in late 2021 so the financial analysis contained in this report is based on market conditions and construction costs as of late 2021.

1.2 Types of Redevelopment Projects Analyzed

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

The types of projects included in our evaluation are:

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

1.3 Professional Disclaimer

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

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.

2.0 Vancouver's DCL System and Project Methodology

2.1 Vancouver's DCL System

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

- The City-wide DCL applies to most of the City and is levied for Affordable housing, Parks, Transportation and Childcare capital projects. Certain planning areas/zones are excluded from the City-wide DCL because infrastructure and amenity contributions have been negotiated in these exclude areas as part of area-wide or large site rezonings (such as False Creek North, Central Waterfront Port Lands).
- The City-wide Utilities DCL also applies to most of the City in addition to the City-wide DCL and is levied for utilities capital projects. Again, certain planning areas are excluded from this District.
- Layered DCLs. Development in some limited locations is also subject to an area-specific DCL in addition to the City-wide DCL and the Utilities DCL.

The focus of the current update is on the City-wide DCL and Utilities DCL rates. The current rates for these DCLs are summarized in Exhibit 1.

Exhibit 1: Existing City-wide DCL and Utilities DCL Rates by Land Use (per square foot)

	City-wide DCL	Utilities DCL	Combined
Residential Less than 1.2 FSR	$4.23	$2.33	$6.56
Residential 1.2 to 1.5 FSR	$9.11	$5.06	$14.17
Residential Above 1.5 FSR	$18.24	$10.13	$28.37
Commercial	$15.39	$5.32	$20.71
Mixed Employment	$11.55	$4.00	$15.55
Industrial	$6.14	$2.14	$8.28

Source: City of Vancouver

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

2.2 Draft Proposed DCL Rates

The draft proposed DCL rates provided by the City and the increase in the rates are summarized in Exhibit 2.

Exhibit 2: Proposed DCL Rates by Land Use (per square foot)

	Proposed Combined City Wide and Utilities DCL Rates	Proposed Increase
Residential Less than 1.2 FSR	$8.23	$1.67
Residential 1.2 to 1.5 FSR	$17.72	$3.55
Residential Above 1.5 FSR	$35.46	$7.09
Commercial	$28.63	$7.92
Mixed Employment	$21.46	$5.91
Industrial	$11.45	$3.17

Source: City of Vancouver

The proposed increase in the total combined DCL rates by category is as follows:

- $1.67 per square foot for low density residential less than 1.2 FSR (generally townhouse and infill units).
- $3.55 per square foot for residential development between 1.2 and 1.5 FSR (stacked townhouse).
- $7.09 per square foot for residential development above 1.5 FSR (apartment).
- $7.92 per square foot for commercial development (office, retail and service).
- $5.91 per square foot for mixed-employment development (applies to IC-1, IC-2, IC-3, I-1, I-1A, I-1B, I-1C, I-3 and I-4 zoning districts).
- $3.17 per square foot for industrial development (lower and higher density industrial).

2.3 Approach to Evaluating the Impact of Levies

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

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

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

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

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

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

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

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

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

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

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

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

for developers remain where they were before the introduction (or increase) of the levy. Only the land value supported by redevelopment changes.

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

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

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

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

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

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

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

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

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

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

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

3.0 Case Study Sites and Approach to Analysis

3.1 Approach to Analysis

Our approach to the analysis is to estimate the value of each case study site under its existing use (e.g. residential, income producing investment property) and compare this with the estimated redevelopment land value of the site to determine if the site is financially attractive for redevelopment under the existing DCL rates and the proposed DCL rates.

The methodology can be broadly summarized in the following steps:

1. The financial viability of redevelopment varies in the City depending on a site's location, existing zoning, maximum achievable density and value supported by the existing use. Therefore, we identified 27 different case study sites that are considered representative of the kinds of redevelopment opportunities that exist in locations anticipated to be the focus of development in the City (based on existing policy). For some sites, we tested more than one redevelopment scenario, so we analyzed a total of 35 different strata apartment and non-residential scenarios (we also analyzed about 39 rental scenarios as part of our DCL waiver analysis). These case studies were agreed upon with the City. Section 3.2 provides a detailed description of each case study site and the redevelopment scenarios tested for each site. Exhibit 3 provides a summary of the general location of each of the 35 redevelopment scenarios tested.

Exhibit 2: Summary of Types of Case Study Sites Analyzed

Number Development Scenarios Tested	Strata Apartment or Mixed-Use	Townhouse	Office	Mixed Employment or Industrial	Total
Downtown Scenarios	2	0	2	0	4
West Side Scenarios	7	2	3	2	14
East Vancouver Scenarios	7	4	1	5	17
Total	16	6	6	7	35

2. For each case study, we estimated the property value supported by the existing use of the site.
   a. For income producing properties (commercial, industrial), this is the capitalized value of the net income stream generated by the existing improvements. This is the value that an investor would be willing to pay for the property to retain the existing improvements and collect rent for the long term. This is the minimum price that a developer would need to pay for the site to acquire it for redevelopment purposes.
   b. For existing single family (or duplex) properties, this is the value of the property as an existing residence. For residential properties that require assembly, we assume that the developer would also need to pay a 20% premium over existing value in order to create an incentive for the existing property owner to sell for redevelopment.

3. Using proforma analysis, we determined whether redevelopment is financially viable under current market conditions and the current applicable DCL rate. That is, we calculated whether redevelopment supports a land value that is higher than the value supported by the existing use (from step 2 above). Our estimates of supportable land values from redevelopment are based on a land residual analysis which estimates the potential revenue from a new completed project and deducts all creation costs and a developer's profit to estimate supportable land value. The revenue and cost assumptions used in the land residual analysis is based on market research completed in late 2021.
4. We then re-analyzed each scenario (in step 3) using the proposed increased DCL rates to estimate the approximate impact of the proposed DCL rates on the supportable land value and the likely impact on project viability.

3.1.1 Strata Apartment and Mixed-Use Redevelopment Scenarios

We analyzed 16 different apartment or mixed-use development scenarios in different parts of the City. Each site is in a location that is a focus of apartment growth in the City.

Site 1 – Downtown South (DD)

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

Site 2 - West End Community Plan

This site is an existing lower density commercial property in the West End built to an approximate existing FSR of 1.0 and zoned C-6. Under the existing zoning, this site can be redeveloped to a highrise mixed-use project built to an FSR of 8.75. The redevelopment would include retail and residential, including 20% social housing as a density bonus contribution. This site is representative of potential redevelopment sites in the West End C-5A and C-6 zoning districts, in the Lower Robson and Lower Davie areas outlined in the West End Community Plan.

Site 3 - Cambie Corridor Plan, 6 Storey Residential Apartment

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

Site 4 - Cambie Corridor Plan, Mixed Use Apartment

This site is an assembly of older non-stratified duplexes zoned RT-2 in the Cambie Corridor. Under the Cambie Corridor Plan, the site can be rezoned (with a fixed rate CAC) to allow 8 storey mixed use strata apartment built to an FSR of 3.25. This is representative of residential redevelopment potential along the Cambie Corridor, south of West 41st Avenue and north of West 49th Avenue.

Site 5 - Cambie Corridor Plan, 4 Storey Residential Apartment

This site is an assembly of adjacent older single family homes zoned RS-1 in the Cambie Corridor. Under the Cambie Corridor Plan, the site can be rezoned (with a fixed rate CAC) to allow 4 storey strata apartment built to an FSR of 2.0. This site is representative of residential redevelopment potential along east/west avenues of West King Edward Avenue, West 41st Avenue and West 49th Avenue.

Site 6 - Cambie Corridor Plan, Oakridge Municipal Town Centre

This site is an assembly of adjacent older single family homes zoned RS-1 in the Cambie Corridor. Under the Cambie Corridor Plan, the site can be rezoned to allow a midrise strata residential apartment with 30% turnkey social housing at 4.75 FSR. This site is representative of residential redevelopment potential within the Oakridge Municipal Town Centre.

Site 7 - South East False Creek

This site is an existing lower density commercial property in South East False Creek built to an approximate existing FSR of 0.9 and zoned M-2. This site can be rezoned to a midrise mixed-use project built to an FSR of 3.5.

Site 8 – Marpole Plan

This site is an assembly of adjacent older single family homes zoned RM-9 in Marpole. The existing zoning allows 4 storey strata apartment built to an FSR of 2.0 with a density bonus contribution.

Site 9 - Dunbar Street

This site is an assembly of commercial properties on Dunbar Street zoned C-2 and built to an approximate existing FSR of 0.6. Under the current zoning, the site can be redeveloped to 4 storey mixed-use with retail at grade at a density of 2.5 FSR.

Site 10 - Grandview-Woodland Plan

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

Site 11 - Grandview-Woodland Plan

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

Site 12 - Main Street

This site is a low density commercial property in the Main Street corridor zoned C-2 and built to an approximate existing FSR of 0.4. Under the current zoning, the site can be redeveloped to 4 storey mixed-use with retail at grade at a density of 2.5 FSR. This is representative of potential mixed-use redevelopment sites in the Main Street corridor, south of East 16th Avenue.

Site 13 - Kingsway

This site is an assembly of commercial properties in the Kingsway corridor zoned C-2 and built to an existing density of 0.8 FSR. Under the current zoning, the site can be redeveloped to a 4 storey mixed-use building with retail at grade at a density of 2.5 FSR. This site is representative of potential mixed-use redevelopment opportunities in C-2 zoned areas along the Kingsway corridor.

Site 14 - Norquay Plan

This site is an assembly of commercial properties along Kingsway in Norquay Village zoned C-2 and developed at an existing density of 0.8 FSR. Under the Norquay Plan, the site can be rezoned (with a fixed rate CAC) and redeveloped to a 12 storey midrise mixed-use project with retail at grade at a density of 3.8 FSR. This is representative of potential development opportunities in areas designated for midrise development within the Norquay Plan area.

Site 15 - Norquay Plan

This site is an assembly of adjacent older single family homes on 33 foot lots in Norquay. Under the existing RM-9A density bonus zoning, the site can be redeveloped to a 4 storey strata apartment at a density of 2.0 FSR. This is representative of potential single family home redevelopment opportunities in apartment transition zones adjacent to the Kingsway corridor in the Norquay Plan.

Site 16 - Joyce Station Precinct Plan

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

3.1.2 Townhouse and Infill Scenarios

We analyzed 6 different townhouse and infill development scenarios at five different case study sites in different parts of the City. Each site is in a location that is a focus of planned townhouse growth in the City.

Site 17 – Cambie Corridor Plan

The site is an assembly of adjacent older single family homes zoned RS-1. Under the Cambie Corridor Plan, the site can be rezoned to the RM-8A density bonus district to allow townhouse development up to a maximum density of 1.2 FSR.

Site 18 - Marpole Plan

The site is an assembly of adjacent older single family homes in Marpole. Under the existing RM-8N density bonus zoning, townhouse development is allowed up to a maximum density of 1.2 FSR.

Site 19 - Grandview-Woodland Plan

The site is an assembly of adjacent older single family homes in Marpole. Under the existing RM-12N density bonus zoning, townhouse development is allowed up to a maximum density of 1.45 FSR.

Site 20 - Norquay Plan

The site is an assembly of adjacent older single family homes in Norquay. Under existing RM-7 zoning, these sites can be developed to allow townhouse development at a density of 1.2 FSR. Although not permitted under existing zoning, the sites were also tested at a density of 1.5 FSR as the City wanted to understand the impact on the supportable DCL rate for higher density townhouse development. This site is representative of redevelopment potential in the Stacked Townhouse designation of the Norquay Plan.

Site 21 - Norquay Plan

The site is a 50 foot single family lot. The existing RT-10 zoning allows 3 infill units at 0.75 FSR.

3.1.3 Office, Mixed Employment and Industrial Redevelopment Scenarios

We analyzed six different office development scenarios at three different case study sites, two mixed employment scenarios at one site, and five industrial development scenarios at two sites.

Site 22 - Downtown Office

This site is an existing above ground parkade zoned DD-B in the Downtown Official Development Plan. This site can be redeveloped to a mixed-use office and retail building at a density of 9.0 FSR under existing zoning. Recent office rezonings in downtown have achieved much higher densities. We assumed two scenarios for the site of 12.0 FSR and 20.0 FSR which are representative of recent downtown office rezonings.

Site 23 - Broadway Uptown Office Precinct

This site is an existing C-3A zoned retail property in the Central Broadway corridor built to an existing density of 1.1 FSR. This site can be redeveloped to a mixed-use office and retail building at a density of 3.0 FSR under existing zoning. Recent office rezonings along Broadway have achieved higher densities. We assumed three scenarios for the site of 7.5 FSR leasehold, 7.5 FSR strata and 9.0 FSR leasehold, which are representative of recent Broadway office rezonings and consistent with (or lower than) permitted office densities in the draft Broadway Plan.

Site 24 - Grandview Boundary Office

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

Site 25 - Mount Pleasant Mixed Employment

This site is an I-1 zoned industrial property built at an existing density of 0.9 FSR. Under existing zoning, the site can be redeveloped to mixed industrial and office at a density of 3.0 FSR. The overall permitted density of 3.0 FSR includes 1.0 FSR of industrial space and 2.0 FSR of office space. This is representative of mixed employment redevelopment sites zoned I-1 in Mount Pleasant. The site was also tested as a leasehold I-1C project at 6.0 FSR.

Site 26 – False Creek Flats Industrial

This site is an I-2 zoned industrial property built at an existing density of 0.4 FSR. Our analysis assumed the site would be redeveloped for stacked industrial use at an FSR of 3.0.

Site 27 - South Vancouver Industrial

This site is an I-2 zoned industrial property built at an existing density of 0.3 FSR. Our analysis tests the site at 1.0 FSR, which is the approximate maximum achievable density with surface parking. We also tested stacked industrial at 3.0 FSR.

4.0 Key Financial Assumptions

This section identifies the key assumptions used in our analysis. For the strata apartment and mixed use case studies, exhibit 4 summarizes the sales price, lease rate, hard construction cost, fixed CAC or density bonus rate, and the all-in project cost excluding land and amenity/bonus density contributions.

Exhibit 4: Key Assumptions for Strata Apartment Case Study Sites

Site Number	Plan Area/ Location	Assumed Development Scenario	Residential Sales Prices per Sq Ft	Commercial Lease Rates (or strata value) per sq ft	Hard Construction Costs per Sq Ft[4]	Existing Fixed Rate CAC/Density Bonus	All In Project Costs per Sq Ft[5]
1	Downtown South (DD)	Highrise Concrete Strata Residential Apartment at 5.0 FSR	$1,800	n/a	$630	n/a	$955
2	West End Community Plan	Highrise Concrete Mixed Strata and Office Project at 8.75 FSR	$1,800	$55 Retail $40 Office	$610	20% Social Housing	$900
3	Cambie Corridor Plan	6 Storey Concrete Strata Residential Apartment at 2.25 FSR	$1,550	n/a	$510	$103.38 psf CAC	$800
4	Cambie Corridor Plan	8 Storey Concrete Mixed Use Strata Residential Project at 3.25 FSR	$1,475	$45	$505	$112.41 psf CAC	$775
5	Cambie Corridor Plan	4 Storey Concrete Strata Residential Apartment at 2.0 FSR	$1,475	n/a	$515	$72.27 psf CAC	$800
6	Cambie Corridor Plan	Midrise Concrete Strata Residential Apartment at 4.75 FSR	$1,625	n/a	$520	30% Social Housing	$790
7	South East False Creek	Midrise Concrete Mixed Use Strata Residential at 3.5 FSR	$1,500	$45	$505	$67.81 psf CAC	$805
8	Marpole Plan	4 Storey Woodframe Strata Residential Apartment at 2.0 FSR	$1,325	n/a	$410	$66.79 psf Density Bonus	$670
9	Dunbar Street	4 Storey Concrete Mixed Use Strata Residential at 2.5 FSR	$1,675	$45	$505	n/a	$815
10	Grandview-Woodland Plan	6 Storey Woodframe Strata Residential Apartment at 2.65 FSR	$1,175	n/a	$410	$23.53 psf CAC	$645
11	Grandview-Woodland Plan	6 Storey Woodframe Mixed Use Strata Residential at 3.2 FSR	$1,150	$37.50	$420	$70.61 psf CAC	$650
12	Main Street	4 Storey Woodframe Mixed Use Strata Residential at 2.5 FSR	$1,200	$45	$420	n/a	$665
13	Kingsway	4 Storey Woodframe Mixed Use Strata Residential at 2.5 FSR	$1,050	$37.50	$400	n/a	$625
14	Norquay Plan	Midrise Concrete Mixed Use Strata Residential Project at 3.8 FSR	$1,150	$37.50	$490	$13.04 psf CAC	$725
15	Norquay Plan	4 Storey Woodframe Strata Residential Apartment at 2.0 FSR	$1,100	n/a	$400	$19.56 psf Density Bonus	$625
16	Joyce Station Precinct	4 Storey Woodframe Strata Residential Apartment at 2.0 FSR	$1,050	n/a	$395	$3.53 psf Density Bonus	$620

[4] Includes servicing, landscape and contingency allowance.

[5] All-in costs exclude land acquisition and any amenity or bonus density contributions.

Exhibit 5 summarizes the sales price, lease rate, hard construction cost, fixed CAC or density bonus rate, and the all-in project cost excluding land and amenity/bonus density contributions for the townhouse and infill case studies.

Exhibit 5: Key Assumptions for Townhouse and Infill Case Study Sites

Site Number	Plan Area/ Location	Assumed Development Scenario	Residential Sales Prices per Sq Ft	Commercial Lease Rates (or strata value) per sq ft	Hard Construction Costs per Sq Ft[6]	Existing Fixed Rate CAC/Density Bonus	All In Project Costs per Sq Ft[7]
17	Cambie Corridor Plan	Strata Townhouse Project at 1.2 FSR	$1,350	n/a	$440	$55.20 psf Density Bonus	$720
18	Marpole Plan	Strata Townhouse Project at 1.2 FSR	$1,250	n/a	$445	$20.07 psf Density Bonus	$720
19	Grandview-Woodland Plan	Strata Townhouse Project at 1.2 FSR	$1,125	n/a	$395	$3.37 psf Density Bonus	$660
20	Norquay Plan	Strata Townhouse Project at 1.2 FSR and 1.5 FSR	$975	n/a	$330	n/a	$560
21	Norquay Plan	Strata Duplex and Rear Yard SFH at 0.75 FSR	$1,150	n/a	$390	n/a	$630

Exhibit 6 summarizes the sales price, lease rate, hard construction cost, fixed CAC or density bonus rate, and all-in project costs excluding land and amenity/bonus density contributions for the non-residential case studies.

[6] Includes servicing, landscape and contingency allowance.

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

Exhibit 6: Key Assumptions for Office, Mixed Employment and Industrial Case Study Sites

Site Number	Plan Area/ Location	Assumed Development Scenario	Residential Sales Prices per Sq Ft	Commercial Lease Rates (or strata value) per sq ft	Hard Construction Costs per Sq Ft[8]	Existing Fixed Rate CAC/Density Bonus	All In Project Costs per Sq Ft[9]
22	Downtown Office	Highrise Leasehold Office Project at 12 FSR and 20 FSR	n/a	$50 Retail $47.50 Office	$505	$15.84 psf Linkage Fee	$760
23a	Broadway Uptown Office Precinct	Highrise Leasehold Office Project at 7.5 FSR and 9.0 FSR	n/a	$47.50 Retail $40 Office	$460	$15.84 psf Linkage Fee	$695
23b	Broadway Uptown Office Precinct	Highrise Strata Office Project at 7.5 FSR	n/a	$1,100 Retail $1,400 Office	$460	Calculated Negotiated CAC	$695
24	Grandview Boundary Office	Midrise Leasehold Office Project at 3.0 FSR	n/a	$34 Office	$450	n/a	$605
25a	Mount Pleasant Mixed Employment	Strata Mixed Office/Industrial Project at 3.0 FSR	n/a	$1,400 Office $850-$900 Industrial	$415	n/a	$590
25b	Mount Pleasant Mixed Employment	Leasehold Mixed Office/Industrial Project at 3.0 FSR	n/a	$40 Office $25-$27.50 Industrial	$430	$15.84 psf Linkage Fee	$625
26	False Creek Flats Industrial	Strata and Leasehold Mixed Industrial/Office at 3.0 FSR	n/a	$1,000 Office $800-$850 Industrial	$370	n/a	$505
27a	South Vancouver Industrial	Strata and Leasehold Mixed Industrial/Office at 3.0 FSR	n/a	$875 Office $700-750 Industrial	$370	n/a	$490
27b	South Vancouver Industrial	Strata Mixed Industrial/Office at 1.0 FSR	n/a	$875 Office $750 Industrial	$240	n/a	$340

Other key cost assumptions and allowances included in the analysis are as follows.

1. Rezoning application fees and an allowance for rezoning costs for sites which require rezoning.
2. Fixed rate CAC, density bonus contribution or commercial linkage fees as required.
3. An allowance for on-site rainwater management as provided by City staff (for residential sites).
4. A demolition allowance is included based on gross floor area of existing buildings.
5. An allowance for utilities relocation (for residential sites) as provided by City staff, assuming 50% of cost is recovered through a latecomer agreement.
6. Soft costs and professional fees are set at 9% of hard construction costs. This covers permit application fees, design, engineering, consultants, survey, legal, insurance, warranties, deficiencies, and other professional fees.
7. A project management fee of 4% on the hard and soft costs.

[8] Includes servicing, landscape and contingency allowance.

[9] All-in costs exclude land acquisition and any amenity or bonus density contributions.

8. A contingency allowance of 5%.
9. A vacancy allowance is applied for income producing commercial space based on current market vacancy rates.
10. Marketing costs, sales costs and commissions based on typical industry standards.
11. Separate allowances for property taxes, DCLs, and GVS&DD levies based on current rates.[10]
12. Construction financing is charged at 4.5% per year on 75% of the construction costs.
13. Land financing is charged at 4.5% per year on 50% of the estimated land value.
14. To estimate the supportable land value, a developer's profit margin of 15% of project costs (including the estimated supportable land value) is included.

[10] The analysis includes the recent Board approved update to the Metro Vancouver liquid waste DCC. However, the analysis does not include the Metro Vancouver Water DCC currently under consideration.

5.0 Summary of Results of Financial Analysis

Because of the large number of sites and scenarios analyzed, we have not included the detailed proformas for each site and each scenario in this report.

This section summarizes the findings.

The exhibits in the following sections show the following information for each redevelopment scenario:

- Site number.
- Location.
- Description of scenario.
- The existing use.
- Whether the redevelopment scenario is financially viable under current DCL rates.
- The estimated impact on supportable land value of the proposed increase in DCL rates.
- Whether the redevelopment scenario is financially viable under the proposed DCL rates.
- The impact on the estimated profit margin from the redevelopment scenario of the proposed DCL rates if the land acquisition cost cannot be reduced (for example, if the site was already purchased).

5.1 Strata Apartment and Mixed-Use Redevelopment Scenarios

The proposed DCL rate increase (combined) for apartment (over 1.5 FSR) is $7.09 per square foot (and $7.92 for commercial in mixed use scenarios). Exhibit 7 summarizes the estimated impacts of the proposed increase in the DCL rates on for the strata apartment and mixed use redevelopment scenarios.

The exhibit shows the estimated impact on viability, development site values or estimated developer's profit (if the property was already purchased or the land cannot be acquired at reduced value to off-set the increased DCL) of the proposed DCL rate increase.

Exhibit 7: Summary of Analysis for Apartment and Mixed-Use Development Case Studies

Case Study Site	Plan Area/ Location	Redevelopment Scenario	Existing Use	Is Project Viable at Existing DCL?	Decrease in Land Value Supported by Development Scenario due to Increase in DCL Rates	Is Project Viable at Proposed DCL?	Decrease in Profit Due to Increase in DCL Rates if Land Cost Fixed (Percentage Points)
1	Downtown South	Highrise Strata Residential Apartment at 5.0 FSR	Older 3 Storey Commercial Building	Yes	-2%	Yes	-0.7%
2	West End Plan	Highrise Mixed Strata Residential and Office Project with 20% Social Housing at 8.75 FSR[4]	2 Storey Commercial Building	Yes	-4%	Yes	-0.7%
3	Cambie Corridor Plan	6 Storey Strata Residential Apartment at 2.25 FSR	Assembly of 4 Old SFHs	Yes	-2%	Yes	-0.8%
4	Cambie Corridor Plan	8 Storey Mixed Use Strata Residential Project at 3.25 FSR	Assembly of 2 Old SFHs	Yes	-3%	Yes	-0.8%
5	Cambie Corridor Plan	4 Storey Strata Residential Apartment at 2.0 FSR	Assembly of 3 Old SFHs	Yes	-3%	Yes	-0.8%
6	OMTC	Midrise Strata Residential Apartment with 30% Social Housing at 4.75 FSR[4]	Assembly of 3 Old SFHs	Yes	-4%	Yes	-0.7%
7	SEFC	Midrise Mixed Use Strata Residential at 3.5 FSR	Restaurant/Auto Repair	Yes	-3%	Possibly	-0.8%
8	Marpole Plan	4 Storey Strata Residential Apartment at 2.0 FSR	Assembly of 3 Old SFHs	Yes	-2%	Possibly	-0.9%
9	Dunbar	4 Storey Mixed Use Strata Residential at 2.5 FSR	1 Storey Retail	Yes	-2%	Yes	-0.8%
10	Grandview Woodland Plan	6 Storey Strata Residential Apartment at 2.65 FSR	Assembly of 5 Old SFHs	Yes	-3%	Yes	-1.0%
11	Grandview Woodland Plan	6 Storey Mixed Use Strata Residential at 3.2 FSR	Convenience Store	Yes	-5%	Yes	-1.1%
12	Main Street	4 Storey Mixed Use Strata Residential at 2.5 FSR	Strip Commercial	Yes	-3%	Yes	-1.0%
13	Kingsway	4 Storey Mixed Use Strata Residential at 2.5 FSR	Assembly of Old Commercial Buildings	No	-5%	No	-1.2%
14	Norquay Plan	Midrise Mixed Use Strata Residential Project at 3.8 FSR	Old Commercial	Possibly	-6%	Possibly	-1.1%
15	Norquay Plan	4 Storey Strata Residential Apartment at 2.0 FSR	Assembly of 4 Old SFHs	No	-4%	No	-1.1%
16	Joyce Station Precinct Plan	4 Storey Strata Residential Apartment at 2.0 FSR	Assembly of 3 Old SFHs	No	-4%	No	-1.1%

Source: Coriolis Consulting

The key points from our apartment and mixed use analysis are as follows:

1. We tested a total of 16 strata apartment and mixed-use development case studies. Out of the 16 scenarios, 13 can support (or possibly support) the proposed draft DCL rate, so there is little or no impact on the viability of these scenarios. Of the other three scenarios, all three would already have difficulty supporting the existing DCL rate, so the increased DCL would not change the viability of these scenarios.

   For these three case study scenarios, an increase in the DCL to the proposed rates will result in one of two outcomes:

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

2. The proposed DCL rates will reduce the land value supported by apartment redevelopment:
   - For Downtown and West Side sites, the estimated impact on land value is in the range of about 2% to 4%.
   - For East Side sites, the estimated impact on land value is in the range of about 3% to 6%.
3. If developers are not able to reduce land acquisition costs to off-set the impact of the increase DCL rates, the estimated impact of the proposed rate increase on the potential profit margin is in the range of 1.0 to 1.1 percentage points.
4. Overall, the draft proposed DCL rates will not have a large impact on the financial viability of apartment development in the City. Downtown and West Side projects can support the proposed DCL rate. The proposed levy may have a negative impact on the viability of apartment development in some East Vancouver locations (such as Joyce Station, Norquay and Kingsway), but we would expect any impacts to be limited.

5.2 Townhouse and Infill Redevelopment Scenarios

The proposed DCL rate increase (combined) for townhouse and infill projects is $1.67 per square foot for projects up to 1.2 FSR and $3.55 per square foot for projects up to 1.5 FSR.

Exhibit 8 summarizes the estimated impacts of the proposed increase in the DCL rates on for the duplex and townhouse redevelopment scenarios.

The exhibit shows the estimated impact on viability, development site values or estimated developer's profit (if the property was already purchased or the land cannot be acquired at reduced value to off-set the increased DCL) of the proposed DCL rate increase.

Exhibit 8: Summary of Analysis for Townhouse and Infill Case Studies

Case Study Site	Plan Area/ Location	Redevelopment Scenario	Existing Use	Is Project Viable at Existing DCL?	Decrease in Land Value Supported by Development Scenario due to Increase in DCL Rates	Is Project Viable at Proposed DCL?	Decrease in Profit Due to Increase in DCL Rates if Land Cost Fixed (Percentage Points)
17	Cambie Corridor Plan	Strata Townhouse project at 1.2 FSR	Assembly of 3 Old SFHs	Possibly	-0.4%	Possibly	-0.2%
18	Marpole Plan	Strata Townhouse project at 1.2 FSR	Assembly of 3 Old SFHs	Possibly	-0.4%	Possibly	-0.2%
19	Grandview Woodland Plan	Strata Townhouse project at 1.45 FSR	Assembly of 3 Old SFHs	Possibly	-1.1%	Possibly	-0.5%
20a	Norquay Plan	Strata Townhouse project at 1.2 FSR	Assembly of 2 Old SFHs	No	-0.6%	No	-0.3%
20b	Norquay Plan	Strata Townhouse project at 1.5 FSR	Assembly of 2 Old SFHs	No	-1.5%	No	-0.9%
21	Norquay Plan	Strata Duplex and Rear Yard SFH at 0.75 FSR	Old SFH	No	-0.4%	No	-0.3%

Source: Coriolis Consulting

The key points from townhouse and infill analysis are as follows:

1. Townhouse and infill projects require redevelopment of existing single family homes. The variation in single family home lot size has an impact on the supportable DCL rate for each project as smaller single family lots are more challenging (from a financial perspective) to redevelop than larger lots.
2. There is a variation in the maximum supportable increase in DCL rates by geography and existing lot size.
3. Our case study analysis shows townhouse and infill development is likely financially attractive at three of the six case studies we assessed. All three are on the west side. The proposed rate increase will not have a material impact on the viability of townhouse development on the West Side.
4. The remaining three case studies are on the East Side and are not financially viable under the existing DCL rate or the proposed DCL rates. The existing value of the sites is significantly higher than the redevelopment land value, so these are not viable for development to townhouse under current market conditions.
5. The proposed DCL rates will reduce the land value supported by townhouse redevelopment by about 0.4% to 1.5%.

6. If developers are not able to reduce land acquisition costs to off-set the impact of the increase DCL rates, the estimated impact of the proposed rate increase on the potential profit margin is in the range of 0.2 to 0.9 percentage points.

5. Overall, the draft proposed increase of $1.69 to $3.60 per square foot (depending on density) will not have a material impact on the pace of duplex or townhouse development. This is a small increase relative to the total cost of developing a project.

5.3 Office Redevelopment Scenarios

The proposed DCL rate increase (combined) for office development is $7.92 per square foot.

Exhibit 9 summarizes the estimated impacts of the proposed increase in the DCL rates on for the office redevelopment scenarios.

The exhibit shows the estimated impact on viability, development site values or estimated developer's profit (if the property was already purchased or the land cannot be acquired at reduced value to off-set the increased DCL) of the proposed DCL rate increase.

Exhibit 9: Summary of Analysis for Office Case Studies

Case Study Site	Plan Area/ Location	Redevelopment Scenario	Existing Use	Is Project Viable at Existing DCL?	Decrease in Land Value Supported by Development Scenario due to Increase in DCL Rates	Is Project Viable at Proposed DCL?	Decrease in Profit Due to Increase in DCL Rates if Land Cost Fixed (Percentage Points)
22a	Downtown Office	Highrise Office Project at 12.0 FSR	Parking Garage	Yes	-6%	Possibly	-1.2%
22b		Highrise Office Project at 20.0 FSR		Yes	-6%	Yes	-1.2%
23a	Broadway Uptown Office Precinct	Leasehold Office Project at 7.5 FSR	Single Storey Commercial Building	Possibly	-7%	Possibly	-1.3%
23b		Leasehold Office Project at 9.0 FSR		Yes	-7%	Possibly	-1.3%
23c		Strata Office Project at 7.5 FSR		Yes	-4%	Yes	-1.0%
24	Grandview Boundary Office	Midrise Leasehold Office Project at 3.0 FSR[3]	Old Warehouse	Possibly	-16%	Possibly	-1.6%

Source: Coriolis Consulting

The key points from our office analysis are as follows:

1. We tested a total of six office scenarios. Out of the six scenarios, all six can support (or possibly support) the proposed draft DCL rate. Therefore, we would expect little or no impact on the viability of these scenarios due to the proposed rate increase.
2. The proposed DCL rates will reduce the land value supported by office redevelopment. The estimated impact on land value is in the range of about 4% to 7% for most of the scenarios we tested. One scenario resulted in a higher impact (16%), but this is a low density case study (3.0 FSR) in a location where little office development occurs (Grandview Boundary), so it is not representative of typical office projects in the City.
3. If developers are not able to reduce land acquisition costs to off-set the impact of the increase DCL rates, the estimated impact of the proposed rate increase on the potential profit margin is typically in the range of 1.0 to 1.3 percentage points.
4. Overall, the draft proposed DCL rates will not have a large impact on the financial viability of office development in the City, assuming that rezonings for leasehold office projects are relatively high. This is consistent with (or lower than) densities for recently approved rezonings for office projects in Downtown and the draft policies proposed in the Broadway Plan.
5. Any impact of the proposed increased DCL rates for strata office rezonings should be accounted for in CAC negotiations for strata office rezonings.

5.4 Mixed Employment Redevelopment Scenarios

The proposed DCL rate increase (combined) for mixed employment development is $5.91 per square foot.

Exhibit 10 summarizes the estimated impacts of the proposed increase in the DCL rates on for the mixed employment redevelopment scenarios in the **I**-1 and **I**-1C zoning districts.

The exhibit shows the estimated impact on viability, development site values or estimated developer's profit (if the property was already purchased or the land cannot be acquired at reduced value to off-set the increased DCL) of the proposed DCL rate increase.

Exhibit 10: Summary of Analysis for Mixed Employment Case Studies

Case Study Site	Plan Area/ Location	Redevelopment Scenario	Existing Use	Is Project Viable at Existing DCL?	Decrease in Land Value Supported by Development Scenario due to Increase in DCL Rates	Is Project Viable at Proposed DCL?	Decrease in Profit Due to Increase in DCL Rates if Land Cost Fixed (Percentage Points)
25a	Mt. Pleasant Industrial/ Office	Strata Mixed Office/Industrial Project at 3.0 FSR	Old Warehouse	Yes	-2%	Yes	-0.9%
25b		Leasehold Mixed Office/Industrial Project at 6.0 FSR	Old Warehouse	No	-7%	No	-0.8%

Source: Coriolis Consulting

The key points from our mixed employment analysis are as follows:

1. Mixed employment development in the City is focused in the Mount Pleasant area of the City (at **I**-1 sites) and is typically built as strata employment space.
2. The financial viability of mixed employment development depends on the tenure of the project:
   - The financial viability of strata mixed employment projects will not be negatively affected by the proposed DCL rate increase.
   - Leasehold mixed employment is very challenging (financially) and an increase in costs related to DCLs (or other costs) would make it more challenging. However, the DCL increase is not the factor that makes it challenging. There are other market issues, such as the high cost associated with land acquisition (as strata mixed employment is the highest and best use of these sites).
3. The proposed DCL rates will reduce the land value supported by mixed employment redevelopment. The estimated impact on land value is in the range of about 2% (strata) to 7% (leasehold) for the scenarios we tested.
4. If developers are not able to reduce land acquisition costs to off-set the impact of the increase DCL rates, the estimated impact of the proposed rate increase on the potential profit margin is in the range of 0.8 to 0.9 percentage points.
5. Overall, the draft proposed DCL rates will not have a large impact on the financial viability of mixed employment development in the City.

5.5 Industrial Redevelopment Scenarios

The proposed DCL rate increase (combined) for industrial development is $3.17 per square foot.

Exhibit 11 summarizes the estimated impacts of the proposed increase in the DCL rates on for the industrial redevelopment scenarios.

The exhibit shows the estimated impact on viability, development site values or estimated developer's profit (if the property was already purchased or the land cannot be acquired at reduced value to off-set the increased DCL) of the proposed DCL rate increase.

Exhibit 11: Summary of Analysis for Industrial Case Studies

Case Study Site	Plan Area/ Location	Redevelopment Scenario	Existing Use	Is Project Viable at Existing DCL?	Decrease in Land Value Supported by Development Scenario due to Increase in DCL Rates	Is Project Viable at Proposed DCL?	Decrease in Profit Due to Increase in DCL Rates if Land Cost Fixed (Percentage Points)
26a	False Creek Flats	Strata Mixed Industrial/Office Project at 3.0 FSR	Old Warehouse	Yes	-2%	Yes	-0.6%
26b		Leasehold Mixed Industrial/Office Project at 3.0 FSR		Possibly	-7%	Possibly	-0.7%
27a	South Vancouver Industrial	Strata Industrial Project at 1.0 FSR	Old Warehouse	Yes	-1%	Yes	-0.6%
27b		Strata Mixed Industrial/Office Project at 3.0 FSR		Yes	-4%	Yes	-0.7%
27c		Leasehold Mixed Industrial/Office Project at 3.0 FSR		Yes	-6%	Yes	-0.7%

Source: Coriolis Consulting

The key points from our mixed employment analysis are as follows:

1. The five case studies we analyzed are viable (or possibly viable) under the existing and proposed DCL rates. However, our analysis illustrates that:
   - Leasehold industrial development is more challenging from a financial perspective than strata industrial development.
   - Stacked (higher density) industrial development is currently the main opportunity in the City due to the high cost of acquiring industrial properties. A higher density stacked industrial project can spread the land acquisition costs across a larger floor area than a low density industrial project.
   - Lower density industrial development is not financially viable in the central locations of the City (such as False Creek Flats).
2. The proposed DCL rates will reduce the land value supported by industrial redevelopment. The estimated impact on land value is in the range of about 2% to 4% for the scenarios we tested.
3. If developers are not able to reduce land acquisition costs to off-set the impact of the increase DCL rates, the estimated impact of the proposed rate increase on the potential profit margin is in the range of 0.6 to 0.7 percentage points.
4. Overall, the draft proposed increase of $3.21 per square foot will not have a material impact on the pace of industrial development. This proposed rate increase is small relative to the total cost of developing a project.

6.0 Other Factors to Consider

Since the City-wide and Utilities DCL rates were last updated, the value of residential, office and industrial space in Vancouver has increased significantly.

Exhibit 12 summarizes the change in the Real Estate Board of Greater Vancouver's benchmark apartment and townhouse prices for the West Side and East Side of Vancouver between December 2016 and December 2021.

Exhibit 12: Vancouver Benchmark Apartment and Townhouse Unit Prices

Apartment	2016	2017	2018	2019	2020	2021	Increase 2016 to 2021
Vancouver West	$671,200	$807,100	$783,700	$760,900	$757,700	$842,900	25.6%
Vancouver East	$474,900	$592,100	$578,600	$572,000	$595,300	$647,600	36.4%
Townhouse	2016	2017	2018	2019	2020	2021	Avg Annual Increase
Vancouver West	$1,043,300	$1,175,000	$1,144,200	$1,136,500	$1,141,600	$1,307,600	25.3%
Vancouver East	$768,200	$907,500	$878,900	$886,100	$897,400	$1,085,800	41.3%

This shows that Vancouver apartment values have increased by about 25% and townhouse units have increased by about 36% to 41% over the past five years.

Exhibit 13 summarizes the change office rents (Downtown and Broadway) and industrial lease rates in Vancouver between December 2016 and December 2021 according to CBRE.

Exhibit 13: Office and Industrial Lease Rate Trends (CBRE)

	2016	2017	2018	2019	2020	2021	Increase 2016 to 2021
AAA Downtown Office	$31	$31	$39	$50	$47	$52	68.0%
AAA Broadway Office	$31	$33	$28	$32	$42	$37	19.9%
City of Vancouver Industrial	$13	$17	$18	$18	$18	$20	46.4%

This shows that Downtown office lease rates increased by about 68%, Broadway office lease rates increased by about 20% and Vancouver industrial lease rates increased by about 46% over the past five years. Cap rates declined during this same period, so the value of commercial and industrial space increased at a higher percentage than shown in the exhibit.

Because of the significant increases in value over the past five years, most new projects have the ability to absorb additional costs including increased DCL rates (as indicated by our case study financial analysis).

However, it should be noted that construction costs in Vancouver have been escalating at a high rate since late 2021. It is possible that the proposed DCL rate increases coupled with continued escalation in other project costs will make it challenging for some developers to proceed with planned projects in the short term.

7.0 Summary of Evaluation of Draft Proposed DCL Rates

Exhibit 14 summarizes the combined proposed City-wide and Utilities DCL rates and the combined increase per square foot.

Exhibit 14: Proposed DCL Rates (per square foot)

	Combined Proposed City Wide and Utilities DCL Rates	Proposed Increase
Residential Less than 1.2 FSR	$8.23	$1.67
Residential 1.2 to 1.5 FSR	$17.72	$3.55
Residential Above 1.5 FSR	$35.46	$7.09
Commercial	$28.63	$7.92
Mixed Employment	$21.46	$5.91
Industrial	$11.45	$3.17

Source: City of Vancouver

Based on our case study financial analysis, we have the following comments about the likely impact of the proposed rate increases on the financial viability of new development in the City:

1. The proposed increase of $7.09 per square foot for residential projects over 1.5 FSR will not have a large impact on the financial viability of apartment development in the City. Downtown and West Side projects can support the proposed DCL rate. The proposed levy may have a negative impact on the viability of apartment development in some East Vancouver locations (such as Joyce Station, Norquay and Kingsway), but we would expect any impacts to be limited.
2. The proposed increase of $1.67 to $3.55 per square foot (depending on density) for residential projects up to 1.5 FSR will not have a material impact on the pace of townhouse or infill development. This is a small increase relative to the total cost of developing a project.
3. The proposed increase of $7.92 per square foot for commercial projects will not have a large impact on the financial viability of office development in the City, assuming that rezoned densities for new office projects are relatively high, which is consistent with recently approved rezonings for office projects in Downtown and the draft policies proposed in the Broadway Plan (the locations that are the focus on most office development in the City).
4. The proposed increase of $5.91 per square foot for mixed employment will not have an impact on the pace of strata mixed employment development in the City. Leasehold mixed employment development is typically not viable under the current DCL rates (as strata mixed employment is the most valuable use of these sites), so the proposed increase in rates will make leasehold mixed employment development more challenging.

5. The proposed increase of $3.17 per square foot for industrial development will not have a material impact on the pace of development. This is a small increase relative to the total cost of developing a project.

Our analysis focuses specifically on the impact of the proposed rate increases (not on other possible future cost increases). On their own, we do not expect the proposed rate increases to negatively affect the pace of development in the City. However, there is currently significant upward pressure on construction costs in Metro Vancouver. If construction costs continue to escalate, it is possible that the combination of the DCL rate increase and continued construction cost inflation will make some projects unviable for a period of time.

Our understanding is that the City is considering phasing-in the proposed DCL increase over two years (50% of the proposed increase each year). A phased-in approach combined with the existing 12 month in-stream DCL rate protection policy would mean that applications which receive a building permit by September 30, 2024 will either pay the existing DCL or the existing DCL plus 50% of the proposed increase. We think that this phased-in approach to the proposed DCL increase is a good strategy to help mitigate any impacts on projects currently in the approvals process.

City of Vancouver DCL Rate Update:

Evaluation of Impact of City-wide DCL Waiver on Rental Viability

7 June 2022

Prepared for:
City of Vancouver

By:

coriolis
CONSULTING CORP.

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1.0 Introduction

1.1 Background

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

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

DCLs in Vancouver vary depending on the location of the project (as well as the zoning, use and density), but most projects are subject to two different levies: the City-wide DCL and the Utilities DCL.

The City is in the process of updating the City-wide DCL bylaw and the Utilities DCL bylaw.

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

Under current City policy, projects creating new rental supply, where 100% of the residential development is rental in tenure are eligible for a DCL waiver for the rental portion of the development. No waiver is available for the Utilities DCL.

As part of the current DCL update, the City is considering changes to the City-wide DCL waiver for rental projects.

Reducing or eliminating the DCL waiver could have a negative impact on the financial viability of new rental development in the City. If the supply of new rental housing is reduced, this could cause rent rates to rise, which is generally regarded as an undesirable outcome. Therefore, as one input to the overall update, Coriolis Consulting Corp. was retained to evaluate the impact that a waiver to the City-wide DCL has on the financial performance of rental projects.

This report summarizes our approach to the analysis, findings, and conclusions.

This report focuses on the impact of the proposed DCL rate and changes to the waiver on rental projects. A separate report documents our analysis of the impact of the proposed increased DCL rates on strata residential, mixed use, office, industrial and mixed employment projects.

Our market research was completed in late 2021 so the financial analysis contained in this report is based on market conditions and construction costs as of late 2021.

1.2 Types of Rental Projects Analyzed

City policy supports different kinds of rental projects in a wide variety of locations. For example:

- The Secured Rental Policy (SRP) supports rezoning to allow market rental projects up to 5 storeys in specific RS and RT zoned areas (the heights and densities vary depending on location).
- The SRP supports rezoning to allow 6 storey rental projects with 20% below market rental in specific RS and RT zoned areas (the heights and densities vary depending on location).
- The C-2 zoning district permits 6 storey market rental (in mixed use buildings) along many of the City's main commercial corridors (strata projects in this zone are limited to 4 storeys).
- The Cambie Corridor Plan supports rezonings to allow highrise rental projects with 20% below market rental in specific RS and RT zoned areas.
- Some zoning districts in the West End allow high density market rental (in mixed use buildings) instead of strata with turnkey social housing.
- The Moderate Income Rental Housing Pilot Program (MIRHPP) supports rezonings to allow increased density for rental projects that include 20% below market rental in a variety of locations in the City.

Our analysis primarily focuses on potential rental projects supported by these policies and zoning districts.

1.3 Professional Disclaimer

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

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.

2.0 DCL Rates and Waiver Scenarios Tested

2.1 Existing and Proposed DCL Rates

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

- The City-wide DCL applies to most of the City and is levied for Affordable housing, Parks, Transportation and Childcare capital projects. Certain planning areas/zones are excluded from the City-wide DCL because infrastructure and amenity contributions have been negotiated in these exclude areas as part of area-wide or large site rezonings (such as False Creek North, Central Waterfront Port Lands).
- The City-wide Utilities DCL also applies to most of the City in addition to the City-wide DCL and is levied for utilities capital projects. Again, certain planning areas are excluded from this District.
- Layered DCLs. Development in some limited locations is also subject to an area-specific DCL in addition to the City-wide DCL and the Utilities DCL.

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

The focus of the current update being completed by the City is on the City-wide DCL and Utilities DCL rates. The current rates for these DCLs for rental apartment projects (over 1.5 FSR) are summarized in Exhibit 1.

Exhibit 1:
Existing and Proposed City-wide DCL and Utilities DCL Rates for Apartment Projects (per square foot)

Residential Above 1.5 FSR	City-wide DCL	Utilities DCL	Combined
Existing Rates	$18.24	$10.13	$28.37
Proposed Rates	$21.80	$13.66	$35.46
Proposed Increase in Rates	$3.56	$3.53	$7.09

Source: City of Vancouver

The proposed increase in the rates for new apartment projects are:

- $3.53 per square foot for the Utilities DCL.
- $3.56 per square foot for the City-wide DCL.

2.2 Existing DCL Waiver

Under current City policy, projects creating new rental supply, where 100% of the residential development is rental in tenure are eligible for a DCL waiver for the rental portion of the development.

Under the City-wide DCL by-law, DCLs for rental housing can be waived for 'for-profit affordable rental housing' where the tenure is secured through a Housing Agreement. However, all rental projects are required to pay the Utilities DCL.

The DCL waiver also regulates maximum unit size and starting rents by unit type.

To qualify for the waiver, the maximum average unit sizes (excluding storage space and balcony space excluded from FSR calculations and floor area used for stairways), are as follows (for apartment projects):

- 450 square feet for studio units.
- 600 square feet for 1-bedroom units
- 830 square feet for 2-bedroom units.
- 1,044 square feet for 3-bedroom units.

In order to be eligible for the DCL waiver, starting monthly rents must not exceed the following average maximum rents (2022 rents) across all residential units in the project.

Exhibit 2: Maximum Rents for DCL Waiver

Unit Type	East Side Area	West Side Area
Studio	$1,690	$1,859
1-bedroom	$2,039	$2,243
2-bedroom	$2,724	$2,996
3-bedroom or larger	$3,759	$4,135

A partial waiver is also available to projects where the average 3-bedroom rents exceed the rents shown in exhibit 2, but the rents for the other bedroom types meet the maximum average rent rate requirement.

Rental projects that include 20% of the floorspace as below market rental units also qualify for the full DCL waiver.

2.3 DCL Waiver Scenarios Analyzed

The City does not provide a waiver on the Utilities DCL, so the Utilities DCL rate on new rental apartment projects will increase from $10.13 per square foot to $13.66 per square foot, an increase of $3.53 per square foot. This additional levy is incorporated into our analysis.

The proposed City-wide DCL rate will increase from $18.24 per square foot to $21.80 per square foot, an increase of $3.56 per square foot.

The City is considering changing the waiver to the City-wide DCL. As input to its evaluation, the City asked us to test different scenarios for the City-wide DCL:

1. A scenario that assumes no waiver on the City-wide DCL, so that rental projects would pay the proposed $21.80 per square foot City-wide DCL.

2. A scenario that assumes a waiver to the City-wide DCL as follows:
    - A full waiver, for rental projects that include 20% below market rental units so that these projects do not pay the City-wide DCL.
    - A partial waiver on 100% market rental projects, so that new rental projects would pay $3.00 per square foot of the overall City-wide DCL rate and receive a waiver equal to $18.80 per square foot. The waiver in this scenario is roughly 90% of the proposed City-wide DCL rate.
3. For selected 100% market rental scenarios, we also tested lower waiver scenarios.

3.0 Approach to Evaluating the Impact of Levies on New Rental Projects

Development Cost Levies (like any project cost) have downward influence on the amount that a developer can afford to pay for a site. So, for most types of redevelopment projects, the primary impact of an increased DCL is a reduction in the land value supported by the project. However, in the case of a rental project (in Vancouver), it is unlikely that the rental developer will be able to pass the cost of the increased levy back to the landowner through a reduced land acquisition price because:

- The sites that are the focus of rental development in Vancouver are improved with existing buildings that create a minimum market value for the site. For example, potential rental sites are typically improved with older single family homes or older low density commercial buildings. The value supported by the existing use is not reduced by an increased DCL so existing landowners will have no reason to accept lower prices for sites.
- Many potential rental sites in the City have zoning in place that permits other high value land uses, such as strata apartment or mixed use strata apartment and commercial development. A rental developer needs to outbid developers who are interested in acquiring these sites for the development of these other higher value options.

Therefore, an increased DCL will likely result in increased overall costs for a rental project that cannot be mitigated by a reduced land acquisition price.

Conversely, a DCL waiver will reduce the overall costs for a new rental project, which will improve the financial performance of rental development.

Therefore, our approach to this rental analysis was to evaluate the potential impact of a DCL waiver on the estimated profit of new rental development for a variety of different types of projects and locations in the City.

The methodology can be broadly summarized in the following steps:

1. The financial viability of rental redevelopment varies in the City depending on a site's location, existing zoning, existing use, requirement for below market units, and maximum achievable density. Therefore, we identified 17 different case study sites that are considered representative of the kinds of rental redevelopment opportunities that exist in locations anticipated to be the focus of rental development in the City (based on existing policy). For some sites, we tested more than one redevelopment scenario, so we analyzed a total of 39 different rental development scenarios. These case studies were agreed upon with the City. Section 4.0 provides a detailed description of each case study site and the redevelopment scenarios tested for each site. Exhibit 3 provides a summary of the general location of each of the 39 rental redevelopment scenarios tested.

Exhibit 3: Summary of Types of Case Study Sites Analyzed

Number Development Scenarios Tested	100% Market Rental	80% Market and 20% Below Market Rental	Total
Downtown Scenarios	1	0	1
West Side Scenarios	9	9	18
East Vancouver Scenarios	10	10	20
Total	20	19	39

2. For each case study, we estimated the current market value of the property under existing use and zoning of the site. This included two different indicators of market value:

   a. Value supported by existing use:

      - For income producing properties (commercial, industrial), this is the capitalized value of the net income stream generated by the existing improvements. This is the value that an investor would be willing to pay for the property to retain the existing improvements and collect rent for the long term. This is the minimum price that a developer would need to pay for the site to acquire it for redevelopment purposes.
      - For existing single family (or duplex) properties, this is the value of the property as an existing residence. For residential properties that require assembly, we assume that the developer would also need to pay a 20% premium over existing value in order to create an incentive for the existing property owner to sell for redevelopment.

   b. Land value supported by existing zoning. This is the value that a developer would pay for the site to redevelopment under existing zoning (typically to strata apartment or mixed strata apartment and commercial space).

   The higher of these two values is the existing minimum market value of the property and is the assumed cost to the rental developer to acquire the site for rental redevelopment.

3. Using proforma analysis, we determined whether redevelopment is financially viable under current market conditions at the proposed DCL rate, without any waiver. To determine if a rental scenario is financially viable, our analysis examines a combination of different indicators:

   - A profit margin of 10% on total project costs. This is low for a new multifamily residential project, but it is based on the estimated profit margins likely being achieved by new rental projects in Metro Vancouver. Our research indicates that rental developers are currently able to proceed at a lower margin than strata apartment developers (which typically requires a 15% profit margin).

   - An estimated annual yield on total costs of about 4.2% after the project is completed and the rental units are leased-up. This yield needs to be higher than the market capitalization (cap) rate for new(er) rental buildings[1] to account for the time, capital and risks associated with the development process. Without a return that exceeds the market cap rate, a rental developer/investor would be better off purchasing an existing rental building rather than taking on the risk of developing a new rental building.

Other measures of the return that are often used to evaluate the profitability of a new rental project are internal rate of return (IRR) and discounted cash flow (DCF) analysis. We did not focus on these measures as each involves numerous assumptions about the future change in rental rates, vacancy rates, operating costs, property taxes and cap rates. These additional assumptions introduce significant uncertainty to results of the analysis.

Drawing on these different measures of profitability we determined whether a development scenario was viable, possibly viable (slightly below our target measures of profitable), or not viable.

The revenue and cost assumptions used in the analysis are based on market research completed in late 2021.

4. We then re-analyzed each scenario (in step 3) under the proposed DCL waiver to estimate the approximate financial impact of the assumed waiver and the likely impact on project viability.

[1] Market cap rates for new rental apartment buildings in Metro Vancouver are currently in the range of about of 3.75% to 3.85% (assuming rents are at full market) depending on location and type of rental project. Some have sold at lower cap rates but these projects have had rents that are less than current market rents at the time of sale so there was potential upside to the investor as units turn over and rents are able to be increased to market rent.

4.0 Case Study Sites and Scenarios

We analyzed 39 different apartment or mixed-use development scenarios at 17 case study sites in different parts of the City. Each site is in a location that is a focus of rental apartment growth in the City.

4.1.1 C-2 Development Sites

Site 1r - Norquay

This site is an assembly of commercial properties in the Kingsway corridor zoned C-2 and built to an existing density of 0.8 FSR. Under the current zoning, the site can be redeveloped to a 6 storey mixed-use secure rental apartment with retail at grade at a density of 3.5 FSR (the density is limited to 2.5 FSR for a strata project).

Site 2r - Mount Pleasant

This site is a low density commercial property in the Main Street corridor zoned C-2 and built to an approximate existing FSR of 0.4. Under the current zoning, the site can be redeveloped to a 6 storey mixed-use secure rental apartment with retail at grade at a density of 3.5 FSR (the density is limited to 2.5 FSR for a strata project).

Site 3r - Kitsilano

This site is a low density commercial property on West Broadway zoned C-2C and built to an approximate existing FSR of 0.5. Under the current zoning, the site can be redeveloped to a 6 storey mixed-use secure rental apartment with retail at grade at a density of 3.5 FSR (the density is limited to 3.0 FSR for a strata project).

Site 4r - Dunbar

This site is an assembly of commercial properties on Dunbar Street zoned C-2 and built to an approximate existing FSR of 0.6. Under the current zoning, the site can be redeveloped to 6 storey mixed-use secure rental apartment at a density of 3.5 FSR (the density is limited to 2.5 FSR for a strata project).

4.1.2 Moderate Income Rental Housing Pilot Project Sites

Site 5r - Norquay

This site is an assembly of commercial properties in the Kingsway corridor zoned C-2 and built to an existing density of 0.8 FSR. Under MIRHPP, rental rezonings are required to include 20% of the floorspace as below market rental units. City staff estimated that a rezoning could achieve 5.4 FSR at this site under the existing policy. The site was tested twice assuming the below market units are limited to:

- MIRHPP rents with vacancy control (the current policy).
- 20% below CMHC average rents.

Site 6r - Mount Pleasant

This site is an assembly of commercial properties in the Kingsway corridor zoned C-2 and built to an approximate existing FSR of 0.33. Under MIRHPP, rental rezonings are required to include 20% of the floorspace as below market rental units. City staff estimated that a rezoning could achieve 5.4 FSR at this site under the existing policy. The site was tested twice assuming the below market units are limited to:

- MIRHPP rents with vacancy control (the current policy).
- 20% below CMHC average rents.

Site 7r – West Point Grey

This site is a low density commercial property on West 10th Avenue zoned C-2 and built to an approximate existing FSR of 0.6. Under MIRHPP, rental rezonings are required to include 20% of the floorspace as below market rental units. City staff estimated that a rezoning could achieve 5.4 FSR at this site under the existing policy. The site was tested twice assuming the below market units are limited to:

- MIRHPP rents with vacancy control (the current policy).
- 20% below CMHC average rents.

4.1.3 SRP Arterial Development Sites

Site 8r – Arbutus Ridge

This site is a 13,300 square foot assembly that includes an old non strata duplex and an old single detached house (the average lot size is 6,650 square feet). Under the SRP, the site can be rezoned to four possible rental zoning districts (RR-2B, RR-2C, RR-3A or RR-3B). We tested rental development under each zoning district:

- 5 storey rental project at 2.4 FSR.
- 6 storey rental project with 20% below market rental at 10% below CMHC average rents at 2.7 FSR.
- 4 storey mixed use at 2.5 FSR.
- 6 storey mixed use with 20% below market rental at 20% below CMHC average rents at 3.5 FSR.

Site 9r – Riley Park

This site is an assembly of three old single detached houses with a combined lot area of 19,080 square feet and an average lot size of 6,360 square feet. Under the SRP, the site can be rezoned to four possible rental zoning districts (RR-2B, RR-2C, RR-3A or RR-3B). We tested rental development under each zoning district:

- 5 storey rental project at 2.4 FSR.
- 6 storey rental project with 20% below market rental at 10% below CMHC average rents at 2.7 FSR.
- 4 storey mixed use at 2.5 FSR.
- 6 storey mixed use with 20% below market rental at 20% below CMHC average rents at 3.5 FSR.

Site 10r – Dunbar

This site is an assembly of four old single detached houses with a combined lot area of 13,465 square feet and an average lot size of 3,366 square feet. Under the SRP, the site can be rezoned to four possible rental zoning districts (RR-2B, RR-2C, RR-3A or RR-3B). We tested rental development under each zoning district:

- 5 storey rental project at 2.4 FSR.
- 6 storey rental project with 20% below market rental at 10% below CMHC average rents at 2.7 FSR.
- 4 storey mixed use at 2.5 FSR.
- 6 storey mixed use with 20% below market rental at 20% below CMHC average rents at 3.5 FSR.

Site 11r – Mount Pleasant

This site is an assembly of four old single detached houses with a combined lot area of 13,930 square feet and an average lot size of 3,483 square feet. Under the SRP, the site can be rezoned to four possible rental zoning districts (RR-2B, RR-2C, RR-3A or RR-3B). We tested rental development under each zoning district:

- 5 storey rental project at 2.4 FSR.
- 6 storey rental project with 20% below market rental at 10% below CMHC average rents at 2.7 FSR.
- 4 storey mixed use at 2.5 FSR.
- 6 storey mixed use with 20% below market rental at 20% below CMHC average rents at 3.5 FSR.

Site 12r – Victoria-Fraserview

This site is an assembly of four old single detached houses with a combined lot area of 15,210 square feet and an average lot size of 3,803 square feet. Under the SRP, the site can be rezoned to four possible rental zoning districts (RR-2B, RR-2C, RR-3A or RR-3B). We tested rental development under each zoning district:

- 5 storey rental project at 2.4 FSR.
- 6 storey rental project with 20% below market rental at 10% below CMHC average rents at 2.7 FSR.
- 4 storey mixed use at 2.5 FSR.
- 6 storey mixed use with 20% below market rental at 20% below CMHC average rents at 3.5 FSR.

4.1.4 SRP Off Arterial Development Sites

Site 13r – Renfrew-Collingwood

This site is an assembly of five old single detached houses with a combined lot area of 19,272 square feet and an average lot size of 4,818 square feet. Under the SRP, the site can be rezoned to the RR-2A rental zoning district. We tested the site as both a corner and non corner site to test the development at 1.75 and 2.0 FSR.

Site 14r – Dunbar

This site is an assembly of three old single detached houses with a combined lot area of 19,500 square feet and an average lot size of 6,500 square feet. Under the SRP, the site can be rezoned to the RR-2A rental zoning district. We tested the site as both a corner and non corner site to test the development at 1.75 and 2.0 FSR.

4.1.5 Local Plan Area Development Sites

Site 15r - Cambie Corridor Plan, Oakridge Municipal Town Centre

This site is an assembly of three older single family homes in the Cambie Corridor with a combined lot size of 23,544 square feet and an average lot size of 7,848 square feet. Under the Cambie Corridor Plan, the site can be rezoned to allow a midrise rental residential apartment with 20% below market rental at various densities depending on the location of the site within the town centre. We tested the rental redevelopment at the following densities:

- 4.75 FSR.
- 6.0 FSR.
- 6.7 FSR.

Site 16r – Marpole Plan

This site is currently improved with an older 3 storey rental apartment in Marpole. Under the Marpole Plan, the site can be rezoned to allow a 6 storey rental residential apartment at 2.4 FSR.

Site 17r – West End Plan

This site is an existing lower density commercial property in the West End built to an approximate existing FSR of 1.0 and zoned C-6. Under the existing zoning, this site can be redeveloped to a highrise mixed-use rental project built to 8.75 FSR. The redevelopment would include retail, office and market rental.

5.0 Key Financial Assumptions

This section identifies the key assumptions used in our case study financial analysis. Many of the specific revenue and cost assumptions vary from site to site so we have outlined the assumptions in ranges. The lower end of each range is representative of our assumptions for lower density projects in East Vancouver. The higher end of each range is representative of high density scenarios in Downtown. Assumptions for sites on the West Side are between the lower and upper end of the ranges specified.

5.1.1 Revenue Assumptions

1. The following average unit sizes and monthly rents are assumed for new market rental units.

Exhibit 4: Unit Sizes and Monthly Rents for New Market Rental Units by Unit Type

Unit Type	Average Unit Size (sf)	Estimated Monthly Rent in Lower Value Areas	Estimated Monthly Rent in Higher Value Areas
Studio	425	$1,650	$2,100
1 Bed	550	$1,975	$2,550
2 Bed	775	$2,650	$3,500
3 Bed	950	$3,200	$4,150
Average	**615**	**$2,185**	**$2,835**

2. The following average unit sizes and monthly rents are assumed for new below market rental units.

Exhibit 5: Unit Sizes and Monthly Rents for New Below Market Rental Units by Unit Type

Unit Type	Average Unit Size (sf)	MIRHPP Monthly Rents	20% Below CMHC Average	10% Below CMHC Average
Studio	400	$1,055	$1,077	$1,211
1 Bed	490	$1,332	$1,216	$1,368
2 Bed	750	$1,776	$1,683	$1,894
3 Bed	900	$2,220	$2,293	$2,579
Average	**574**	**$1,463**	**$1,406**	**$1,581**

3. Monthly parking revenue is included at $125 to $150 per month on 85% of residential stalls.
4. Storage and other miscellaneous revenue is included at $40 per month on 75% of residential units.
5. A 1% vacancy allowance is included.
6. Operating costs and property taxes are assumed to range from $6,625 to $7,150 per unit per year.
7. To estimate the completed project value, the net operating income of the market rental units is capitalized at 3.75%. The net operating income for the below market rental units where the rents are indexed to a percentage of CMHC average is capitalized at 3.75%. The net operating income of the MIRHPP below market units are capitalized at 5.25%.[2]
8. Commercial space is assumed to achieve net lease rates ranging from $37.50 to $55 psf depending on location.

[2] Due to the restrictions on increasing rents between tenancies, an investor would require a higher yield on the MIRHPP units.

5.1.2 Costs and Other Financial Assumptions

1. Wood frame hard construction costs range from $365 to $395 per square foot including servicing, landscaping and contingency.
2. Concrete hard construction costs range from $435 to $510 per square foot including servicing, landscaping and contingency.
3. Rezoning application fees and an allowance for rezoning costs are included for sites which require rezoning.
4. An allowance for on-site rainwater management is included as provided by City staff.
5. A demolition allowance is included based on gross floor area of existing buildings.
6. An allowance for utilities relocation (for residential sites) is included as provided by City staff, assuming 50% of cost is recovered through a latecomer agreement.
7. Soft costs and professional fees are set at 9% of hard construction costs. This covers permit application fees, design, engineering, consultants, survey, legal, insurance, warranties, deficiencies, and other professional fees.
8. A project management fee of 4% on the hard and soft costs.
9. A contingency allowance of 5% is included.
10. Marketing costs, sales costs and commissions are included based on typical industry standards.
11. Separate allowances for property taxes, DCLs, and GVS&DD levies are included based on current rates[3]. The analysis does not account for any potential future increase in levies from other levels of government, such as the possible regional water DCC being considered by Metro Vancouver.
12. An allowance for GST of 5% on capitalized value of market rental units and 3.2% for below market units.
13. Construction financing is charged at 4.5% per year on 75% of the construction costs.
14. Land financing is charged at 4.5% per year on 50% of the estimated land value.
15. To estimate the supportable land value, a developer's profit margin of 10% of project costs (including the estimated supportable land value) is included.

[3] The analysis includes the recent Board approved update to the Metro Vancouver liquid waste DCC. However, the analysis does not include the Metro Vancouver Water DCC currently under consideration.

6.0 Summary of Results of Financial Analysis

Because of the large number of sites and scenarios analyzed, we have not included the detailed proformas for each site and each scenario in this report.

This section summarizes the findings.

The exhibits in the following sections show the following information for each redevelopment scenario:

- Site number.
- Location.
- Description of scenario.
- The existing zoning.
- The estimated profit and yield under the proposed DCL rates with no waiver.
- Whether the redevelopment scenario is financially viable under the proposed DCL rates with no waiver.
- The estimated profit and yield under the proposed DCL rates with the assumed waiver on the City-wide DCL.
- Whether the redevelopment scenario is financially viable under the proposed DCL rates with the assumed waiver on the City-wide DCL.

6.1 Downtown and West Side Scenarios

The proposed City-wide DCL rate for apartment (over 1.5 FSR) is $21.80 per square foot. Exhibit 6 shows the estimated financial performance of the Downtown and West Side rental case scenarios assuming:

- No waiver on the proposed City-wide DCL.
- A waiver on the proposed City-wide DCL, so that projects with 20% below market rental pay no City-wide DCL and projects with 100% market rental pay a City-wide DCL of $3 per square foot (roughly a 90% waiver).

Exhibit 6: Summary of Analysis for Downtown and West Side Rental Scenarios

Case Study	Plan Area/ Location	Redevelopment Scenario	Existing Use	Existing Zoning	No Waiver: Project Pays Proposed City Wide DCL			Waiver: Project Receives City-Wide DCL Waiver		
					Estimated Profit Margin on Cost if Site Acquired at the Existing Value	Estimated Annual Yield on Costs if Site Acquired at the Existing Value	Is Project Likely Viable?	Estimated Profit Margin on Cost if Site Acquired at the Existing Value	Estimated Annual Yield on Costs if Site Acquired at the Existing Value	Is Project Likely Viable?
C-2 Sites										
3r	Kitsilano	6-storey Mixed Use Project at 3.5 FSR	Older 1 Storey Commercial Building	C-2C	-2%	3.7%	No	0%	3.8%	No
4r	Dunbar	6-storey Mixed Use Project at 3.5 FSR	Older 1 Storey Commercial Building	C-2	3%	3.9%	No	5%	4.0%	No
MIRHPP Sites										
7r -A	West Point Grey	Midrise Rental Tower including 20% Below Market Rental Units at 5.4 FSR	Older 1 Storey Commercial Building	C-2	-7%	3.6%	No	-5%	3.7%	No
7r -B					-5%	3.6%	No	-2%	3.7%	No
SRP Arterial Sites										
8r - A	Arbutus Ridge	5-storey Rental Project at 2.4 FSR	1 Old SFH and 1 Old Non Strata Duplex on Large Lots	RT-2	9%	4.1%	Possibly	12%	4.2%	Yes
8r - B		6-storey Rental Project With 20% BMR at 10% Below CMHC at 2.7 FSR			6%	4.0%	Possibly	10%	4.1%	Possibly
8r - C		4 Storey Mixed Use at 2.5 FSR			10%	4.1%	Possibly	12%	4.2%	Yes
8r - D		6 Storey Mixed Use 20% BMR at 20% Below CMHC at 3.5 FSR			13%	4.3%	Yes	16%	4.4%	Yes
10r - A	Dunbar	5-storey Rental Project at 2.4 FSR	4 Old SFHs on Small Lots	RS-5	0%	3.8%	No	2%	3.8%	No
10r - B		6-storey Rental Project With 20% BMR at 10% Below CMHC at 2.7 FSR			-2%	3.7%	No	1%	3.8%	No
10r - C		4 Storey Mixed Use at 2.5 FSR			1%	3.8%	No	2%	3.9%	No
10r - D		6 Storey Mixed Use 20% BMR at 20% Below CMHC at 3.5 FSR			5%	4.0%	No	8%	4.1%	Possibly
SRP Off Arterial Sites										
14r - A	Dunbar	4 Storey Market Rental at 1.75 FSR	3 Old SFHs on Large Lots	RS-5	-6%	3.5%	No	-4.7%	3.6%	No
14r - B		4 Storey Market Rental at 2.0 FSR (Assumes Corner Site with Wide Frontage)			-1%	3.7%	No	1.2%	3.8%	No
Local Plan Area Sites										
15r - A	Oakridge	Midrise Rental Tower including 20% Below Market Rental Units at 4.75 FSR	3 Old SFHs on Large Lots	RS-5	3%	4.0%	No	7%	4.1%	Possibly
15r - B		Midrise Rental Tower including 20% Below Market Rental Units at 6.0 FSR			8%	4.2%	Possibly	11%	4.3%	Yes
15r - C		Midrise Rental Tower including 20% Below Market Rental Units at 6.7 FSR			10%	4.3%	Possibly	13%	4.4%	Yes
16r	Marpole	6-storey Rental Project at 2.4 FSR	36 Unit Old Apartment	RM-3A	-3%	3.6%	No	-1%	3.7%	No
17r	West End	Highrise Mixed Use Rental Residential and Office Project at 8.75 FSR	2 Storey Commercial Building	C-6	19%	4.5%	Yes	19%	4.6%	Yes

Source: Coriolis Consulting

The key points from the Downtown and West Side rental case study analysis are:

1. The viability of rental development varies from site to site depending on location, existing use and zoning, existing lot sizes (smaller single family lots are more challenging to redevelop due to higher existing

values per square foot of lot area), permitted height and density, and the required amount of below market rental.

2. With the proposed City-wide DCL, very few rental case study scenarios that we analyzed in Downtown and the West Side are financially viable. Out of the 19 scenarios analyzed, two are viable if there is no waiver on the proposed City-wide DCL (with another five possibly viable).
3. The waiver that we tested on the proposed City-wide DCL[4], significantly improves the financial performance of new rental development. The waiver would increase the estimated profit margin on new rental projects by between 2 and 3 percentage points.
4. Under this waiver scenario, the number of rental cases that we tested in Downtown and the West Side increases from two case studies to six case studies (with a further three case scenarios that are possibly viable).
5. Rental development is particularly challenging on assemblies of smaller single family lots and commercial sites zoned for mixed use strata apartment development.

6.2 East Side Scenarios

The proposed City-wide DCL rate for apartment (over 1.5 FSR) is $21.80 per square foot. Exhibit 7 shows the estimated financial performance of the East Side rental case scenarios assuming:

- No waiver on the proposed City-wide DCL.
- A waiver on the proposed City-wide DCL, so that projects with 20% below market rental pay no City-wide DCL and projects with 100% market rental pay a City-wide DCL of $3 per square foot (roughly a 90% waiver).

[4] This scenario assumes a full waiver on projects with 20% below market rental and a 90% waiver on 100% market rental projects.

Exhibit 7: Summary of Analysis for East Side Rental Scenarios

Case Study	Plan Area/ Location	Redevelopment Scenario	Existing Use	Existing Zoning	No Waiver: Project Pays Proposed City Wide DCL			Waiver: Project Receives City-Wide DCL Waiver		
					Estimated Profit Margin on Cost if Site Acquired at the Existing Value	Estimated Annual Yield on Costs if Site Acquired at the Existing Value	Is Project Likely Viable?	Estimated Profit Margin on Cost if Site Acquired at the Existing Value	Estimated Annual Yield on Costs if Site Acquired at the Existing Value	Is Project Likely Viable?
C-2 Sites										
1r	Norquay	6-storey Mixed Use Project at 3.5 FSR	Old Commercial	C-2	8%	4.1%	Possibly	11%	4.2%	Yes
2r	Mount Pleasant	6-storey Mixed Use Project at 3.5 FSR	Strip Commercial	C-2	11%	4.2%	Yes	14%	4.3%	Yes
MIRHPP Sites										
5r - A	Norquay	Midrise Rental Tower including 20% Below Market Rental Units at 5.4 FSR	Old Commercial	C-2	-5%	3.7%	No	-2%	3.9%	No
5r - B					-2%	3.7%	No	1%	3.9%	No
6r - A	Mount Pleasant	Midrise Rental Tower including 20% Below Market Rental Units at 5.4 FSR	Auto Service	C-2	-1%	3.9%	No	2%	4.0%	No
6r - B					2%	3.9%	No	5%	4.0%	Possibly
SRP Arterial Sites										
9r - A	Riley Park	5-storey Rental Project at 2.4 FSR	3 Old SFHs on Large Lots	RS-1	10%	4.1%	Yes	13%	4.3%	Yes
9r - B		6-storey Rental Project With 20% BMR at 10% Below CMHC at 2.7 FSR			7%	4.0%	Possibly	11%	4.2%	Yes
9r - C		4 Storey Mixed Use at 2.5 FSR			10%	4.2%	Yes	12%	4.3%	Yes
9r - D		6 Storey Mixed Use 20% BMR at 20% Below CMHC at 3.5 FSR			12%	4.3%	Yes	16%	4.4%	Yes
11r - A	Mount Pleasant	5-storey Rental Project at 2.4 FSR	4 Old SFHs on Small Lots	RS-1	-2%	3.7%	No	0%	3.8%	No
11r - B		6-storey Rental Project With 20% BMR at 10% Below CMHC at 2.7 FSR			-3%	3.7%	No	0%	3.7%	No
11r - C		4 Storey Mixed Use at 2.5 FSR			-1%	3.7%	No	1%	3.8%	No
11r - D		6 Storey Mixed Use 20% BMR at 20% Below CMHC at 3.5 FSR			3%	3.9%	No	6%	4.0%	Possibly
12r - A	Victoria- Fraserview	5-storey Rental Project at 2.4 FSR	4 Old SFHs on Small Lots	RS-1	-6%	3.5%	No	-4%	3.6%	No
12r - B		6-storey Rental Project With 20% BMR at 10% Below CMHC at 2.7 FSR			-7%	3.5%	No	-4%	3.6%	No
12r - C		4 Storey Mixed Use at 2.5 FSR			-5%	3.6%	No	-3%	3.7%	No
12r - D		6 Storey Mixed Use 20% BMR at 20% Below CMHC at 3.5 FSR			-1%	3.8%	No	2%	3.9%	No
SRP Off Arterial Sites										
13r - A	Renfrew-Collingwood	4 Storey Market Rental at 1.75 FSR	5 Old SFHs on Large Lots	RS-1	-12%	3.3%	No	-9%	3.4%	No
13r - B		4 Storey Market Rental at 2.0 FSR (Assumes Corner Site with Wide Frontage)			-7%	3.5%	No	-4%	3.6%	No

Source: Coriolis Consulting

The key points from the East Side rental case study analysis are:

1. The viability of rental development varies from site to site depending on location, existing use and zoning, existing lot sizes (smaller single family lots are more challenging to redevelop due to higher existing values per square foot of lot area), permitted height and density, and the required amount of below market rental.

2. With the proposed City-wide DCL, very few rental case study scenarios that we analyzed on the East Side are financially viable. Out of the 20 scenarios analyzed, four are viable if there is no waiver on the proposed City-wide DCL (with another two possibly viable). Rental development is particularly challenging on assemblies of smaller single family lots.

3. The waiver that we tested on the proposed City-wide DCL[5], significantly improves the financial performance of new rental development. The waiver would increase the estimated profit margin on new rental projects by between 2 and 4 percentage points.
4. Under this waiver scenario, the number of rental cases that we tested on the East Side increases from four case studies to six case studies (with a further two case studies that are possibly viable).

6.3 Sensitivity Analysis – Alternate Waiver Scenarios

Our analysis shows that the financial viability of rental development varies significantly from site to site. Therefore, the impact of a DCL waiver on the viability of new development is different for each rental project. There are some situations where a project may not require a waiver to be viable while there are others that require a full waiver.

The City asked us to test additional DCL waiver scenarios that assume a reduced waiver (less than the 90% waiver tested in Section 6.2).

For a selection of case study scenarios, we evaluated the impact on the financial performance and viability of new rental development of a 50% City-wide DCL waiver (rather than a 90% waiver).

For the sensitivity analysis, we selected three rental case study scenarios that are viable with the 90% waiver to the City-wide DCL. In other words, we selected case study scenarios that are the strongest financial performers and may be able to absorb a higher DCL rate. We re-ran the analysis for these three sites assuming the waiver is reduced to 50%. The analysis indicated that two of three scenarios were viable with a 50% DCL waiver (all three are viable with a 90% waiver). This shows that many of the best performing rental scenarios still require a significant waiver to be remain viable.

Overall, the smaller the waiver, the fewer the number of sites that are likely to be viable for rental development. Therefore, a larger waiver will likely lead to increased new rental development. The analysis also shows that there is not a specific waiver value that makes most sites viable for rental development. The required waiver varies across different sites.

6.4 Overall Implications of Case Study Analysis

The key findings of our analysis of a City-wide DCL waiver for new rental projects can be summarized as follows:

1. The viability of rental development varies from site to site depending on location, existing use and zoning, existing lot sizes (smaller single family lots are more challenging to redevelop due to higher existing values per square foot of lot area), permitted height and density, and the required amount of below market rental. Therefore, the impact on project viability of a DCL waiver varies from site to site.
2. Under the proposed City-wide DCL rate, very few rental scenarios that we analyzed are financially viable in the absence of a waiver.

[5] This scenario assumes a full waiver on projects with 20% below market rental and a 90% waiver on 100% market rental projects.

3. If the City provides a waiver on the City-wide DCL, it will increase the number of potential projects that are financially viable. The larger the waiver, the greater the number of rental projects that will likely be viable.

4. The waiver that we tested for the proposed City-wide DCL[6], significantly improves the financial performance of new rental development. The waiver would increase the estimated profit margin on new rental projects by between 2 and 4 percentage points. Under this waiver scenario, the number of rental cases that we tested increases from six case studies to twelve case studies.

5. Even with a large waiver, many of the rental scenarios that we analyzed are not viable or are marginal (i.e., possibly viable). This is due to the high cost to acquire sites for rental development (as the sites are improved with valuable existing uses or are zoned for other uses that support a high land value) coupled with the lower value of a new rental building in comparison to a new strata residential building. Rental development will remain particularly challenging on assemblies of smaller single family lots and commercial sites zoned for mixed use strata apartment development.

6. Many of the best performing rental scenarios that we tested require a significant waiver to be remain viable. There is not a specific waiver value that makes most sites viable for rental development. The required waiver varies across different sites.

7. The City-wide DCL waiver that we tested will help support the financial viability of rental development and increase the number of rental projects that occur in the City.

[6] This scenario assumes a full waiver on projects with 20% below market rental and a 90% waiver on 100% market rental projects.

7.0 Other Factors to Consider

As indicated by our case study analysis, rental development in the City of Vancouver is challenging from a financial perspective. Therefore, increased project costs will likely have a significant impact on the viability of a new rental project.

Holding aside any changes to the existing DCL waiver, rental developers will likely be faced with increasing project costs going forward:

- Construction costs in Vancouver have been escalating at a high rate since late 2021 which is expected to continue during 2022.
- Financing costs for rental developers are currently rising due to increases in the Bank of Canada lending rate and increasing bond rates.
- The Utilities DCL (which applies to rental projects) is proposed to increase by about $3.53 per square foot.

Overall, it is likely that the viability of new rental development in Vancouver will be negatively affected by rising project costs during the foreseeable future. This will make it challenging for rental developers to absorb any increase in DCLs due to a reduction to the current City-wide DCL waiver.

8.0 Conclusions

The City is updating its DCL bylaw and is proposing to increase the City-wide DCL rate levied on apartment projects (over 1.5 FSR) from $18.24 to $21.80 per square foot, an increase of $3.56 per square foot. The Utilities DCL is also proposed to be increased.

The City currently provides an opportunity for new rental projects to request a waiver on the existing City-wide DCL. The DCL waiver reduces the overall costs for a new rental project, which can improve the financial performance of new project and help encourage new rental development.

As part of the current DCL update, the City is considering revising the waiver available to rental projects as follows:

- Maintaining the full waiver on projects with 20% below market rental.
- Requiring a reduced City-wide DCL of $3 per square foot for 100% market rental projects, which is roughly a 90% waiver on the proposed $21.80 City-wide DCL rate.

We analyzed the impact of this potential revised DCL waiver on the financial performance of a wide range of potential case study rental scenarios in different parts of the City. Our analysis indicates that:

1. The viability of rental development varies from site to site depending on location, existing use and zoning, existing lot sizes (smaller single family lots are more challenging to redevelop due to higher existing values per square foot of lot area), permitted height and density, and the required amount of below market rental. Therefore, the impact on project viability of a DCL waiver varies from site to site.
2. Under the proposed City-wide DCL rate, very few rental scenarios that we analyzed are financially viable in the absence of a waiver.
3. If the City provides a waiver on the City-wide DCL, it will increase the number of potential projects that are financially viable. The larger the waiver, the greater the number of rental projects that will likely be viable.
4. The waiver that we tested on the proposed City-wide DCL[7], significantly improves the financial performance of new rental development. The waiver would increase the estimated profit margin on new rental projects by between 2 and 4 percentage points. Under this waiver scenario, the number of rental cases that we tested increases from six case studies to twelve case studies.
5. Even with the waiver that we tested, most of the rental scenarios that we analyzed are not viable or are marginal (i.e., possibly viable). This is due to the high cost to acquire sites for rental development (as the sites are improved with valuable existing uses or are zoned for other uses that support a high land value) coupled with the lower value of a new rental building in comparison to strata residential. With a waiver, rental development will remain particularly challenging on assemblies of smaller single family lots and commercial sites zoned for mixed use strata apartment development.
6. Many of the best performing rental scenarios that we tested still require a significant waiver to be viable. There is not a specific waiver value that makes most sites viable for rental development. The required waiver varies across different sites.

[7] This scenario assumes a full waiver on projects with 20% below market rental and a 90% waiver on 100% market rental projects.

7. The waiver that we tested on the City-wide DCL rate will improve the viability of rental development and increase the number of rental projects that occur in the City.

Overview of Public and Stakeholder Engagement

The following is a summary of public and stakeholder engagement conducted for the 2022 DCL Update.

Key Dates in Public/Stakeholder Engagement

Date	**Event**
November 2021	• Development Industry stakeholders notified of DCL Update • Financing Growth website updated

February 11th and 24th, 2022	Meetings to present DCL Update Overview:
	• Vancouver Park Board
	• Development Stakeholders, including:
	  o Urban Development Institute
	  o NAIOP
	  o HAVAN
	• Non-profit Organizations, including:
	  o BCNPHA
	  o More Than A Roof
	  o Affordable Housing Societies
	  o Coast Mental Health
	  o YMCA
	  o Association of Neighbourhood Houses
	  o Collingwood Neighbourhood House
	  o Vancouver Society of Children's Centres
	• Senior government agencies, including
	  o BC Housing
	  o Vancouver School Board

February 2022	DCL Update Overview slide deck uploaded to Financing Growth website

May 5th and 6th, 2022	Meetings to present Draft Directions on the DCL Update:
	• Vancouver Park Board
	• Development Stakeholders, including:
	  o Urban Development Institute
	  o NAIOP
	  o HAVAN
	  o Landlord BC
	• Non-profit Organizations, including:
	  o BCNPHA
	  o More Than A Roof
	  o Affordable Housing Societies
	  o Coast Mental Health
	  o Association of Neighbourhood Houses
	  o Collingwood Neighbourhood House
	  o Vancouver Society of Children's Centres
	• Senior government agencies, including
	  o BC Housing

Date	Event
May 2022	• Provided materials to stakeholders via email, including presentation, development forecast methodology, detailed capital project list, and economic testing assumptions. Staff also answered questions received from stakeholders. • Posted materials on the City's website and updated the DCL Bulletin with the proposed DCL rates. • Placed adverts on the DCL Update within media outlets • DCL materials included with the 4-year Capital Plan engagement on the Shape Your City webpage.
June 2nd, 2022	Met with the UDI Liaison Committee to discuss the DCL Update recommendations.
June 8, 2022	City Clerks notification to stakeholders of Council agenda & report
June 22, 2022	Council date

Staff collected feedback on the DCL Update from stakeholders through meetings, emails, phone calls, and letters throughout the engagement process. Staff also collected feedback as part of the consultation with the 4-year Capital Plan.

The development industry expressed the following concerns:
- Requested a phase-in of increased rates
- Requested a delay of the DCL rate increases and further consultation
- Noted the challenge of increasing construction costs and other development costs (e.g. Regional DCCs) and the difficulty for in-stream applications to absorb these costs
- NAIOP requested a reduction of the proposed non-residential DCL rate
- UDI/Landlord BC did not support any changes to the DCL waiver for market rental

Senior government agencies expressed the following concerns:
- VSB did not support an increase to the School reduced rate

In response to the concerns raised by the stakeholders, staff are recommending a phase-in of the DCL rate increase over 2 years. This phase-in will partially address the rising cost concerns raised by the stakeholders, as well as provide applicants that are in-stream further protection from the full rate increase. Staff are also recommending to not increase the reduced rate for Schools, but are committed to monitoring the usage of the rate and report back as part of the next DCL update.

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

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VANCOUVER CHAPTER

Mr. Chris Clibbon
Planner, Citywide & Regional
Planning, Urban Design & Sustainability
City of Vancouver
453 West 12th Ave
Vancouver, BC
V5Y 1V4

May 18, 2022

Re: 2022 Development Cost Levy Update

Dear Mr. Clibbon:

Thank you for your invitation to participate in the Development Industry Stakeholder Meetings associated with the City's 2022 Development Cost Levy (DCL) Update. Further to the meetings held on February 11, 2022 and May 5, 2022, NAIOP Vancouver appreciates this opportunity to provide feedback on the proposed DCLs, particularly for non-residential development.

As you are aware, NAIOP Vancouver is focused on providing rational and common-sense advocacy that supports economic and job growth, as it relates to issues that impact the management and development of non-residential property. Our membership, which totals approximately 300 members that represent the surrounding local market and includes the Government Relations Committee, is concerned about the impact this specific DCL bylaw will have in conjunction with other headwinds facing the industry. These challenges include rising interest rates, rising construction costs, lengthy approval processing times, and increasing development fees.

With respect to the 2022 DCL review, we appreciate that Coriolis Consultant Corp. has been engaged by the City to determine the impact of the DCL rate increase on the financial viability of the redevelopment of selected case study sites. According to their analysis, we wish to highlight the following with respect to Office, Mixed Employment, and Industrial land uses.

<u>Office</u>

- The estimated impact on land value of the proposed DCL increase is in the range of 6% to 7%, for leasehold office developments;
- For strata office projects, the land value impact ranges from 2% to 4%; and
- If land acquisition costs cannot be reduced, the profit margin on leasehold office projects is reduced by 1.2 to 1.3 percentage points at most sites studied.

With respect to Office development, Coriolis concludes:

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- Leasehold office development requires rezoning to higher densities consistent with rezonings seen Downtown and as contemplated in the Broadway Corridor Plan in order to be viable;
- In other words, Office development can support the proposed DCL only if rezoned densities are sufficiently high; and
- Proposed DCL on strata office rezonings will impact CAC negotiations.

Mixed Employment

- The estimated impact on land value of the proposed DCL increase reduces supportable land values by about 2%; and
- If land acquisition costs cannot be reduced, the profit margin on mixed employment projects is reduced by 0.9 percentage points.

Industrial

- Coriolis acknowledges that viability of industrial development is mixed under current market conditions already;
- In particular, leasehold projects are more challenging than strata industrial developments (i.e., likely not feasible); and
- Lower density industrial projects are not viable at all in central areas of the city.

While stacked industrial is the main opportunity due to high land values, Coriolis concludes the proposed DCL increase has little impact on incremental viability, as some types of projects are already difficult, regardless of projects that are underway or submitted to the City for approval.

Respectfully, we point out that in their economic analysis, Coriolis did not include other regional DCC and application fee increases that are expected in 2023. Staff note that Coriolis included all existing regional DCCs in effect at the time of their assignment. In other words, the economic analysis simply shows the layered effect of the proposed DCL increase, however in reality, the expected regional DCCs and other increases will also need to be paid by developers.

We also feel it necessary to note that the summary of economic testing assumptions used by Coriolis was not provided to us until May 10, making it difficult for NAIOP to fully review the analysis in order to provide meaningful input. Still, we have determined that Coriolis' economic assessment of the effect of DCLs was based on construction costs ascertained in late 2021. Since the start of 2022, the development sector continues to see dramatic concrete, labour, and material cost increases. The effect of one single item may not be significant, but certainly together (along with DCLs, DCCs, and other fee increases) the viability of future commercial development projects is precarious. In fact, we believe the economic viability of projects in progress that cannot adjust their land-value, will be impacted greatly by the proposed DCL rate increases.

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Further, Coriolis did not consider a study case that reflects a Mixed Employment project on a leasehold basis. Staff note that Coriolis tested the most common form of development in the Mt. Pleasant area which is strata industrial/office. Yet NAIOP members report quite a number of Mixed Employment leasehold projects well underway in Mt. Pleasant, as well as other parts of the city, where current economic viability is marginal at best. In our opinion, the effect of the proposed DCL increase will essentially eliminate this type of development from moving forward.

To mitigate the impact of the proposed DCL rates on non-residential developments, NAIOP requests that the DCL's be reduced by a minimum 2%. Furthermore, we request a phase-in period over two years be considered. Our experience indicates in a municipal election year, most rezoning applications are subjected to a delay of five to seven months, if a public hearing has not been scheduled prior to the election. Given elections occurring later this year, a longer phase-in period would allow the new Council to get through the backlog due to no public hearings from June to December.

Finally, as you are aware, we engaged an independent consultant to review the City's 2022 DCL update exercise to assist NAIOP in providing more comprehensive comments on behalf of our members. Please find that feedback attached to this letter.

In closing, we trust the recommendation to phase-in the proposed DCL rates for non-residential developments be considered seriously by the City. While supportive of implementing needed infrastructure investments and the principle that new development fairly shares in those costs, the proposed DCL rates should be balanced with the impact on non-residential land development and its effect on economic growth and job creation.

Sincerely,

Blaire Chisholm
Co-Chair, Government Relations Committee

Attachment

Attachment

MEMORANDUM

DATE: May 17, 2022

TO: Carl Funk and Jon Leugner

NAIOP Government Relations Committee

FROM: Raymond Fung, M.Eng., P.Eng., Consultant

RE: **2022 Development Cost Levy (DCL) Update Review Comments**

Further to my initial review of the City's 2022 DCL Update project, I am pleased to provide preliminary comments. Note that the analysis has been limited to the materials provided during and after the Stakeholder Engagement meetings and available background reports from previous DCL update efforts. Comments also reflect correspondence with City staff.

1. It is unclear how Best Practices recommended by Hemson in 2017 have been implemented at the City since that time. Staff have responded as follows:

As part of the 2017 City-wide DCL Update, Hemson provided the City with 5 key recommendations (shown in bold below) for the City to consider for future DCL updates:

- ***Coordinate development forecast and capital planning***

The 2022 DCL Update was done in coordination with the capital planning program, including the upcoming 2023-2026 Capital Plan. This has allowed staff to utilize information such as the development forecast and supporting capital programs across both the 10-year DCL capital program and 4-year capital plan.

- ***Refine service level determination and DCL rate calculation methodology***

City staff utilize both plan-based, standards-based, and past levels of service to determine the capital needs arising from the 10-year development forecast. When comparing the 2017 Citywide DCL and 2018 Utilities DCL capital programs with the 2022 DCL Capital programs, the size of the programs has increased 23%. Refining service levels is a city-wide exercise that is envisioned to be part of the VanPlan implementation phase in 2023-2024, which will inform the 2026 DCL update.

- ***Specify purpose of DCLs in relation to other sources of infrastructure funding***

The 2022 DCL Update looked holistically at all funding sources for the respective capital programs, including renewal funding, senior government grants, in-kind CACs, cash CACs, density bonusing, layered DCLs, and DCL reserves. In particular, the City has also incorporated the role of conditions of development to fund transportation and utility growth-related infrastructure.

Since the 2017 DCL Update, the City has improved its financing growth system:

- *The City introduced the Utilities DCL as a way to fund utility infrastructure and place less reliance on development conditions.*
- *The City has established a system for front-ending UDCL projects. The City now uses Front-Ender Agreements (FEAs) to allow developers to finance and*

build growth-related utilities projects that they require to be emplaced ahead of the City's schedule.

- *Vancouver also now has Vancouver Charter authority to undertake latecomer agreements. Latecomer agreements represent a substantial improvement to Vancouver's development conditioning processes. A latecomers policy was developed and approved by Council in 2021.*

- ***Formalize the DCL study process***

*The 2017 City-wide DCL update included Council approving an update to the DCL program every
4 years, in coordination with the 4-year capital plan. The 2022 DCL update is the first scheduled DCL update as part of these regular updates which is used to inform the 2023-2026 capital plan. The 2022 DCL Update has built upon the 2017 City-wide DCL update process, utilizing external consultants with experience across Canada and formalizing the process to update the DCL.*

- ***Continue solid administration practices***

The City continues to provide detailed annual reports on DCL collection and allocation, continuing a municipal best practice.

The City's efforts to implement best practices, especially to formalize the DCL study process and to provide annual DCL reports should be commended.

2. In the 2017 DCL update, the City established an initial utilities component in the City-wide rates. Then in 2018, a separate Vancouver Utilities DCLs was established. Further, the City then re-allocated the initial utilities component in the City-wide DCLs towards affordable housing utilities. It is recommended that in the 2022 DCL Update, the initial utilities component be completely eliminated to avoid double charging of costs. Staff report that all utilities will now be fully funded by the Vancouver Utilities DCL, and any utility allocation will be removed from the 2022 City-wide DCL.

3. Given that the 2023-2032 growth forecast does not include policy plans currently underway, such as the Broadway Corridor Plan or the Vancouver Plan, it can be argued that the development forecast in the next 10-year period is underestimated. If the net DCL share of growth-related costs is being spread out over a smaller amount of development than is expected, higher DCL rates result. Staff have responded as follows:

The Development Forecast largely takes into account projects that have in-stream applications since the City is estimating when new development will complete construction and new residents and businesses will require services. Consistent with its methodology in 2017, the City did not forecast new development in plan areas that have not been approved, including Broadway Plan, as staff did not want to presume what would or would not be approved by Council.

Staff included any applications that were in-stream at the time of doing the development forecast within the Broadway corridor. Any new applications as a result of the future Broadway Plan would be captured in the next DCL Update in 4 years.

Looking at historical development approvals of new floor area, the 2023-2032 development forecast is aligned with historical trends. Staff will also note that the development forecast for 2023-2032 is about 10% higher than the 2017-2026 forecast used in the 2017 City-wide DCL update.

4. Even though the Broadway Corridor Plan has not been included in the growth forecast, it appears that utilities capital necessary to support Broadway redevelopment has been included in the DCL capital program. Higher Utilities DCLs result, compared to rates calculated by matching the capital program to the corresponding growth projection. Staff have responded as follows:

In-stream applications within the Broadway Plan area are included in the development forecast. Staff assess the need for utility infrastructure based on the existing capacity within the utility network which differs by area. In-stream applications are triggering the need for significant utilities upgrades on the Broadway Corridor. Note that that over 50% of the utilities costs within the Broadway Corridor have a post-period benefit that will serve future growth beyond the 2023-2032 timeframe.

5. In 2017, the consultant developing the City-wide DCLs (that included an initial utilities component) reflected demand factors that were applied equally across the DCL project categories. Subsequently in 2018, the consultant who established the Vancouver Utilities DCLs applied a downward adjustment to the demand factors for water, sewer, and drainage projects. It is recommended that the different demand factors be applied on the 2022 DCL update. Staff confirm that the different demand factors have been applied, that is, the 2017 City-wide DCL Update has a 1:1 ratio between the high-density residential and commercial uses, whereas the 2018 Utilities DCL Update has a 1:0.5 ratio between the two uses recognizing that non-residential uses do not have the same impact on utilities as residential uses.

6. With respect to the City-wide DCL calculation, the gross floor space weighting factors are normalized around apartment and commercial square footage. This results in one square foot of apartment development being equated to one square foot of commercial development from an infrastructure demand basis. Staff have responded as follows:

Yes that is correct, the equivalency factor between high-density residential and commercial uses is 1:1. The City recognizes that different uses create different demands on services, impacted by the type of use and the floor space per person.

Simply looking at the GFA 1:1 ratio does not take into consideration the difference in residential and employment utilization of space; for example the DCL development forecast is based on a high density residential floor space per person of 600sf and a commercial/office floor space per worker of 250sf resulting in different DCL rates per capita and employee. This means that the residential DCL charge per capita is over 2x higher than the non-residential charge per employee.

Both residents and employees use park space, place demands on childcare needs, create the need for replacement housing, and create demands for transportation infrastructure. Therefore, we believe the City-wide DCL equivalence is defensible.

In contrast, for the Utilities DCL the City recognizes that the demands on utility infrastructure differs between residential and non-residential, since water use and wastewater demands are greater with residential use.

I disagree with the staff response, as the City acknowledges demand for City services funded by DCLs are generally driven by population and employment increases. Since the charges are levied on a square footage basis, the population/employment projections are converted to gross floor area by a weighting factor for the purpose of DCL calculations. In other words, the square footage equivalence takes into account different floor space per person requirements. Therefore, one square foot of apartment development actually is being equated to one square foot of commercial development, and from an infrastructure demand basis is not defensible in my view.

8. The methodology of dividing the total DCL rate recovery costs by the total weighted Gross Floor Area is an extremely blunt approach to assigning infrastructure costs to various land uses. For example, the relative impact of the various land uses on transportation infrastructure varies from say, childcare, which is different from parks. The simple methodology is not necessarily equitable between land uses, but I can understand this approach is taken for administrative ease. Staff have responded as follows:

The DCL rate calculation is actually a comprehensive approach to establishing rates by taking into account a number of different factors, including the development forecast, capital programs needed to support growth, senior government funding, any benefit to existing shares, other funding sources available, municipal assist, equivalency factors, and weighting factors.

The difference between the impact on amenities and infrastructure by service category is partially reflected in the size of the respective capital programs as well as the available funding sources available to each type of service. The City also takes into account the impact of different uses through the weighting factors which reflect person/worker per square foot differences. For example, higher density development creates more people per square foot than the lower density forms of development. This higher concentration of people results in more demand on services, and therefore higher-density residential has a higher rate.

In addition, individual development projects, whether residential, non-residential, or mixed-use, will place different demands on different services based on a number of factors; DCL legislations and methodologies used across the Country use average municipal-wide, or service-area wide, assumptions as tailoring to individual project and service specific would prove problematic and likely not implementable.

I disagree with the staff response. For example, with respect to transportation services, commercial land uses create a higher demand on the road system than low density residential. On the other hand, commercial imposes little to no impact on park needs compared to residential land uses (see next point below). Many municipalities in Metro Vancouver reflect different demand factors between service categories for various land uses in their DCC rates. I would argue that specific demand factors for parks, childcare, replacement housing, and transportation would result in more equitable DCLs. Already the Vancouver Utilities DCL acknowledges this approach.

9. Further, according to the Parks Board, their aim is to add 1.1 ha of neighbourhood parkland for every 1,000 **new residents** *(emphasis mine)* and to ensure that every person **lives** *(emphasis mine)* within a 5-minute walk of a park, greenway, or other green space. I would then argue that Parks DCLs should be exempt for non-residential land uses. Staff have responded as follows:

> *The Parks Board historically has used the standard of 1.1 ha of parkland per 1,000 residents as a guide, however the VanPlay strategy also recognized the impact that employees have on the need for additional park space. Staff believe residents and employees create demands on park space and therefore non-residential development has a role to fund new park space. Its clear that workers in the city's employment areas frequently use park space. Examples of this include: Jonathan Rogers Park serving the Mount Pleasant mixed employment areas: Stanley Park/Coal Harbour/Smith & Richards Park all serving the Downtown CBD; Emery Barnes Park and David Lam Park serving workers in Downtown CBD and in Yaletown; and, False Creek South Seawall serving Broadway Corridor.*
>
> *In addition, the active transportation network that exists within the City's park system provides linkages to the active transportation networks, sidewalks and bike lanes, within the roads right-of way which provide residents and employees with important modes of transportation to jobs, schools (all levels) and other institutional buildings, and well as cultural and leisure activities.*
>
> *In the City of Vancouver, non-residential land uses generate needs, and benefit from, an comprehensive well developed park system.*

I accept staff's response, however suggest that residential and non-residential demands on park space/use are not equal. In other words, if Parks DCLs are levied against non-residential land uses, the demand factor should not be the same.

10. In principle, I would argue that Replacement Housing DCLs should be exempt for non-residential land uses, even though legally, the *Vancouver Charter* allows Council to impose a charge for this purpose "in such a manner as it deems appropriate". Staff have responded as follows:

> *Staff estimate the number of replacement housing units needed over the next 10 years as part of the City-wide DCL update. Staff use a city-wide approach towards counting the units lost to development and don't account for the type of development that has caused the units to be demolished (i.e., commercial/industrial redevelopment vs. residential development). This is particularly challenging in Vancouver's context where intensified development increasingly features a mix of uses between residential and non-residential (mixed use development). The City believes that new employment space creates demand to create housing for new employees, as well as new development for employment spaces puts direct and indirect pressure on the existing housing stock and loss of housing units.*

While I accept that a mixed use development comprising ground-floor commercial and residential above-ground may impact replacement housing, the intention of the capital program is to replace those affordable units that are lost through redevelopment. In general, commercial, light industrial, and mixed employment developments do not cause the loss of affordable housing units. At the very least, a different demand factor should be applied for these non-residential land uses in DCL calculations, should Council wish to increase the supply of affordable housing regardless of land use.

11. Many of the water, sanitary, and drainage upgrade projects in the 2022 – 2032 Capital Program along the Cambie and Broadway corridors are assessed 100% to growth. Given that there is existing aging infrastructure, costs attributable to growth should be confirmed. Staff have responded as follows:

> *Most of the sanitary and drainage upgrades, including within Cambie and Broadway, have a benefit to existing share associated with the capital projects. In cases where there is not a replacement share, it has been deemed by staff to be 100% related to growth. When determining the benefit to existing vs growth share, staff take into account both the size and age of the pipe.*

12. With respect to transportation capital in the 2023 – 2032 Capital Plan, the Active Transportation & Complete Streets projects are considered 100% attributable to growth. This allocation does not acknowledge a level of service increase for existing users. Staff have responded as follows:

> *As the City street network is primarily built out, all new trips need to be accommodated through walking, cycling, and transit for the system to continue to function well. Our work primarily involves enhancements and new infrastructure added to the streets to allow people to better travel through active transportation and transit to increase capacity. Therefore the work can all be attributed to growth. This includes up to 80km of new AAA bikeways which are to be integrated into complete streets.*

While I acknowledge staff's approach, reducing Vehicle Kilometres Travelled is an overall goal for the City's transportation system, therefore existing users should share in the cost of walking, cycling, and transit infrastructure and not just road repaving costs.

13. School Programs and At-grade Rail Crossings projects are considered 100% attributable to growth. With respect to the latter, I would argue that increased requirements by Transport Canada for at-grade rail crossings should be considered a level of service increase. The crossing upgrades are mandated by federal government, even if no growth occurred. Staff have responded as follows:

> *Upon further review, we agree it is appropriate to allocate a benefit to existing to the At-grade Rail Crossings. We have adjusted At-Grade Rail Crossings to 50% attributable to growth as we have confirmed that these may not all be directly growth-related. As a result of this change, the DCL recoverable share for Transportation will decrease and it will be reflected in a slightly lower DCL rate. School improvements are unchanged as we have confirmed that these initiatives support increasing number of students which is directly related to development growth and additional trips (pedestrian, cyclist, and/or motorist) in the neighborhood.*

Staff should be commended for adjusting the Transportation DCL.

14. Staff's 2022 DCL Update presentation acknowledges that Mixed Employment and Commercial DCL rates are the highest in the region. Coriolis's 2022 analysis shows office development can support the proposed DCL only if rezoned densities are sufficiently high. Further, Coriolis's 2022 analysis shows viability of leasehold industrial development to be challenging and lower density industrial not to be viable in central areas. Therefore, it is recommended that a longer phase-in period for new DCLs to become effective be considered. Further, since rezoning is never guaranteed, this expectation is unfair for non-residential developers. Staff have responded as follows:

The City of Vancouver cautions against comparing its DCL rates with its regional counterparts. Vancouver has legislative authority to levy DCLs for Childcare and Replacement Housing for which no other BC municipality can, so as a result Vancouver's DCL growth program is larger since it is more expansive. Just as important, one cannot simply look at the DCL rates in comparison with other jurisdictions without comparing the much higher leasehold and sale prices that land owners/developers achieve in Vancouver versus places elsewhere. It's worth pointing out that Vancouver's industrial rates are within line of other regional municipalities.

The densities assumed in the Coriolis office rezoning scenarios are consistent with (or lower than) precedent rezonings in Downtown and the office densities proposed in the draft Broadway Plan.

City staff may consider any written request for a phase-in of its updated DCL rates.

15. While I can understand that Coriolis was only able to test a finite number of cases in their analysis, the mixed employment category only included strata development. My understanding is that margins and current economic viability of those projects are razor thin, and the effect of this DCL increase will essentially eliminate mixed employment leasehold development. Staff have responded as follows:

The City hired Coriolis to do extensive case study testing for the 2022 DCL Update study. Informing this update was a Coriolis review of 73 case study development scenarios at over 34 different sites testing different types of development and tenures of development (residential and various non-residential land use types) in different locations of the City. The City had Coriolis test a significantly greater amount of case studies compared to what was done in the 2017 City-wide DCL Update Study. In term of the mixed employment area (which is predominantly comprised of the Mount Pleasant zoning district of I-1, I-1A/B/C zoning district), Coriolis tested the most common form of development in this area which is strata industrial/office. Leasehold mixed employment development is uncommon in these districts.

16. My understanding is that Coriolis analyzed the impact of the City's DCL increase on the financial viability of redevelopment. However in reality, developers also face significant increases in regional DCCs. Therefore, layered on top of other increases, the proposed DCL increase may indeed affect viability more significantly. Staff have responded as follows:

In its development pro forma case studies, Coriolis included all existing regional DCCs in effect at the time of the economic analysis. This included the current Translink DCC and Metro Vancouver's current GVS&DD DCC. Similar to the approach used in the *development projection that only reflected existing plans/policies, staff/Coriolis only included existing regional DCC rates (Translink/Metro Vancouver) at the time of the economic testing.*

17. Since the Broadway Plan is being considered by Council, deferring a DCL update until that Plan is adopted, so that the additional square footage contemplated by that Plan can be included in the growth forecast should be considered. Staff have responded as follows:

The 2022 DCL Update will be going to Council on June 22, 2022, which is intentionally ahead of the city's 4-year capital plan that will be going to Council in July 2022. At any given time, there are draft policy plans in progress that have the potential to affect the development forecast. The City uses a 'point in time' approach to updating the development forecast, which means that we capture instream applications that are in the system at the time of doing the analysis to inform the forecast. City staff do comprehensive updates to the DCL system every 4 years, so the next update in 2026 will be the next opportunity to update the development forecast.

18. Given the timeline to bring the 2022 DCL Update to Council without further provision for stakeholder engagement meetings, it is difficult to provide the City with meaningful feedback on the impact of proposed DCLs, especially as addition information requested by stakeholders was only provided on May 10. Staff have responded as follows:

City staff have been clear at the outset of this DCL update project that we were going to hold two meetings with development industry stakeholders before bringing this report to Council. Staff held two separate stakeholder engagement meetings with the development industry with the first occurring on February 11, 2022, which included details on the engagement strategy, and a second meeting detailing the draft rates and recommendations on May 5, 2022. Stakeholders have between May 5th and May 18th to submit detailed comments to staff for consideration and up to June 22nd to send in any further comments to staff/Council. At the June 22nd Council meeting, stakeholders (or any member of the public) are welcome to come speak before Council provided that they register to speak beforehand with City Clerks.

19. Review comments are provided on the basis of the stakeholder engagement presentations and available background reports from previous DCL updates. Access to the consultant's background study report for the 2022 DCL Update prior to the Council Report for the June 22 meeting would allow for fuller comments from stakeholders. Staff have responded as follows:

The full background study will be included with the Council report one week prior to the Council date of June 22, 2022 (accessible on city website). Staff will send notification to stakeholders once this report is posted to the City website for public review.

On May 5th, staff shared with stakeholders the key technical components of the background study, this included the development forecast, draft DCL eligible programs, draft rates, and draft policies. On May 10th, additional requested technical information was sent to development industry stakeholders. The information shared to date will make up the majority of the background report content when it's shared online with the Council report.

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May 18, 2022

Chris Clibbon
Planner, City-Wide & Regional Planning
Planning, Urban Design & Sustainability
City of Vancouver
City Hall
453 West 12th Ave
Vancouver, BC V5Y 1V4

Dear Mr. Clibbon:

Re: Development Cost Levy (DCL) Comprehensive Review

The Urban Development Institute (UDI) would like to thank you for forwarding the reports on the Comprehensive Review of the City's Development Cost Levies (DCLs) and the update on the inflationary adjustments to the DCLs, Community Amenity Contribution Targets (CACs) and Density Bonus Contributions. We also appreciate the recommendation by staff to waive the 8.8% inflationary increase to mitigate the impact of the DCL increase from the Comprehensive Review.

However, the increases are still substantial (22.4% for high-rise projects and over 32% for non-residential), and we are concerned that because of the limits on the consultation, our members have not had time to digest all of the information that has been provided by the City. As discussed, **UDI still recommends that a larger meeting of our membership be held to review the findings in the reports.**

Equally important, the notice to our membership about what are still substantial increases in fees is only a few months. It is difficult for builders to adjust financial arrangements after land is purchased early in the development process. If new costs or risks are introduced afterward, projects can become unviable, or rents and house prices have to increase; both would undermine housing supply and affordability.

In addition, many of our members will not be able to take advantage of the legislated grandparenting because of delays with Council due to the election. The increases are also happening when there are other cost pressures and substantial fee increases occurring, including:

- The elimination of the Utilities DCL (UDCL) waiver for rental projects;
- The above mentioned 8.8% increase to all CAC and Density Bonus Contributions;
- A 60% increase in Metro Vancouver's Sewerage Development Cost Charges (DCCs) for apartments; and

- A new Regional Water DCC, which is proposed to be between $4,261 and $6,692 for residential projects as well as $\$3.39/ft^2$ for non-residential projects.

UDI recommends that the City consider deferring the increase from the Comprehensive Review by six months, phasing it in over two years.

Staff are also recommending that the DCL waiver be reduced to 90%. **UDI does not support reducing the waiver further.** As noted above, the UDCL waiver has already been removed. Purpose Built Rental (PBR) housing builders are already facing a rapidly escalating cost environment, much higher interest rates, and increasing limits on senior government programs. As a result, rental projects are becoming unviable (unless rents increase). In addition, smaller PBR builders are unable to launch projects due to the increased equity needed to offset the above pressures. This will reduce the supply of rental units further.

The City has made rental housing a priority and has substantial targets for PBR, which UDI supports. We are very concerned that they will not be achieved if the DCL waiver continues to be compromised. One of the key assumptions in the recently released *Broadway Plan* for rental projects is "*The existing City-wide DCL waiver is available for rental units that meet the DCL waiver eligibility requirements for average starting rents and maximum unit sizes*."

UDI would be pleased to discuss our comments with staff further. If you have any questions, please do not hesitate to contact us.

Yours sincerely,

Anne McMullin
President & CEO, Urban Development Institute

From: David Hutniak
To: Clibbon, Chris
Subject: [EXT] Development Cost Levy (DCL) Comprehensive Review
Date: Wednesday, May 18, 2022 2:21:41 PM

Hello Chris,

Thank you for the in-depth discussion of May 5th and the additional information you subsequently shared May 10, 2022.

I've had an opportunity to review the additional information you provided, and to consult with my colleagues at the Urban Development Institute (UDI), who are particularly well-positioned to provide input on the proposed DCL changes. I am aware that UDI has reached out to your directly and have in my possession a copy of their submission dated May 18, 2022.

I support UDI's concern for the scope of the increases and the tight timing, and agree with their request for a broader consultation. We too are concerned that new costs/risks introduced after land is purchased early in the development process could cause these project to become unviable. This is not a desirable outcome and I am especially concerned about the impacts on new purpose-built rental construction.

Speaking of purpose-built rental, at the May 5th meeting I rather strongly expressed my dissatisfaction with the Staff recommendation that the DCL waiver be reduced to 90% for purpose-built rental. As you are aware, the Utilities DCL waiver has already been removed and PBR builders are already facing a rapidly rising cost environment due to much higher interest rates (we shutter to see where interest rates will land by the end of 2022), and certain CMHC programs have been recently altered to look less favourably upon market rental projects. As a result, rental projects are becoming unviable particularly if we hope to temper starting rents for these new homes. You are likely aware that the impacts on smaller PBR builders are more pronounced with all these increased costs. The bottom line is that many are unable to launch projects due to the increased equity needed to offset these pressures. This will reduce the supply of rental units further.

Vancouver has made rental housing a priority and has substantial targets for PBR, which LandlordBC supports. We are very concerned that they will not be achieved if DCL waiver continues to be compromised.

Sincerely,

David Hutniak
Chief Executive Officer
Landlord BC

APPENDIX E: UTILITIES DCL CAPITAL PROJECT LIST

2023-2032

UTILITIES CAPITAL PROGRAM AND DCL PROJECT LIST

Engineering Services

CITY OF VANCOUVER | GREENEST CITY

June 2022

CITY OF VANCOUVER

Overview

The Utilities Capital Program identifies and assesses the utilities projects required to service the needs of forecasted development activity in the City, as covered in Council-approved land use policies. The Utilities Capital Program is the basis on which the Utilities Development Cost Levy (UDCL) is calculated. The Utilities DCL funds upgrades to neighbourhood serving utilities infrastructure.

Utilities Capital Program and Costs

Costs were prepared in 2022 dollars, include contingencies and do not include inflation.

Tables 1 and 2 below provide a high-level summary of the anticipated programs/projects included in the UDCL capital program. For a detailed list of projects, refer to the detailed lists provided in Table 3 and 4 and the associated maps. As shown, the gross capital program cost is $2.1 billion. Removing costs that are not eligible for UDCLs; senior government or partner funding, post 2033 project costs, the benefit to existing costs, other funding sources and the municipal assist factor, the net recoverable UDCL cost is $650 million. This is to be recovered from new development until 2032 by the Utilities DCL.

Table 1: Summary of 2023-2032 Utilities Capital Program

	Cost
Total Gross Cost for Projects	$2,098,560,100
Senior Government / Partners Funding	- $18,500,000
Post-Period (2033+) Costs for Projects	-- $610,942,000
Benefit to Existing Costs	- $737,944,500
Net Growth-Related Costs	- $731,173,600
Other City Funding Sources	- $74,585,000
Municipal Assist Factor	- $6,827,100
DCL Rate Funded 2023-2032	**$649,763,100**

Table 2: Summary of 2022-2032 DCL Recoverable Costs

Service	**Total DCL Recoverable Costs**
Sanitary & Drainage	$636.9 M
Potable Water	$12.8 M
Total	**$649.7 M**

CITY OF VANCOUVER

Selection of Projects

Upgrades for utilities are determined to be UDCL eligible if they service growth at a neighbourhood scale. A sewer project is deemed neighbourhood serving if it is a significant upgrade that services a population greater than 5000, or a large size pipe (e.g. greater than 600mm in diameter combined pipes or greater than 450mm in diameter for sanitary pipes), or it's downstream of a catchment of an existing trunk, or a tie in with a regional trunk pipe. Green rainwater infrastructure drainage projects are selected within growth sewersheds that offset impacts of increase impervious area and pollutant loading from growth. A water system upgrade is considered a UDCL project if it provides increased fire flow or domestic water capacity for the area.

Projects that only serve one development usually would not be considered for a UDCL project.

Timing of Projects

The Utilities DCL projects in this document are based on the anticipated pace and expected locations of future growth in the 2023-2032 timeframe. Should development and growth occur differently, then the timing of individual projects may have to change as well; therefore, the projects, and in particular their timelines and extents of work shown, should be regarded as conceptual and are subject to and expected to change.

If a developer would like to advance a UDCL capital project due to their timing, they may work with the City to complete the project themselves. The developer could then be reimbursed through the Front Ender Agreement (FEA) process for the growth portion of the project costs.

Updates

The information found in the Utilities Capital Program is based on the best technical program/project and costing information available at the time of completing the study. This includes the City's development forecast which is based on approved policy, as well as known and anticipated development, and their location and timing. The Utilities DCL Program reflects the needs arising from the forecast location, amount and timing of development. As community planning proceeds and development occurs, it is anticipated that the capital program needs will be adjusted to reflect the actual location, amount and timing of development. The City will review and adjust the UDCL capital program to ensure it reflects the intensity and location of growth. This update will include changes to the timing and nature of projects, and may include the substitution of projects, in and out of the program, to meet the servicing needs arising from development.

The UDCL project list has been updated since the initial project list published in 2018. A prioritization of the project list was conducted with the project selection criteria in mind. Projects that are no longer meeting the UDCL criteria were removed and new projects were added.

City of Vancouver – Engineering Services
2023-2032 Utilities Capital Program and DCL Project List

Table 3 Sewer and Drainage Related DCL Project List (2023-2032)

Project Description	Project Priority	Total Gross Cost	Senior Gov. / Partners	Post-Period (2033+)	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
Cambie Projects (Sanitary & Drainage Upgrades)									
Alberta Trunk	Short Term (1-4 years)	$22,180,000	$0	$0	$5,593,000	$16,587,000	$5,240,000	$113,000	$11,234,000
Kent-Yukon Sanitary Sewer	Medium Term (5-8 years)	$3,330,000	$0	$0	$470,000	$2,860,000	$0	$29,000	$2,831,000
Manitoba - SW Marine Sanitary Sewer	Medium Term (5-8 years)	$2,900,000	$0	$0	$392,000	$2,508,000	$0	$25,000	$2,483,000
Heather St	Medium Term (5-8 years)	$11,015,000	$0	$0	$0	$11,015,000	$7,700,000	$33,000	$3,282,000
Manitoba Trunk (in period share)	Long Term (8-10+years)	$150,000,000	$0	$80,000,000	$0	$70,000,000	$0	$700,000	$69,300,000
Alberta St - Columbia Park Blue-Green Corridor	Short Term (1-4 years)	$18,600,000	$0	$0	$0	$18,600,000	$0	$186,000	$18,414,000
Cambie Green Infrastructure	Short to Medium Term (1-10 years)	$15,486,000	$2,000,000	$0	$820,000	$12,366,000	$0	$127,000	$12,539,000
Broadway Projects (Sanitary & Drainage Upgrades)									
Willow Trunk (in-period share)	Long Term (8-10+years)	$100,000,000	$0	$66,670,000	$4,000,000	$29,330,000	$0	$293,000	$29,037,000
W 14th Ave	Medium Term (5-8 years)	$5,500,000	$0	$0	$990,000	$4,510,000	$0	$45,000	$4,465,000
W 1st Ave Tight Pipe	Medium Term (5-8 years)	$34,500,000	$0	$31,500,000	$0	$3,000,000	$0	$30,000	$2,970,000
Balaclava & 8AI Redirection	Medium Term (5-8 years)	$19,800,000	$0	$15,300,000	$0	$4,500,000	$0	$45,000	$4,455,000
Hemlock Storm Trunk Redirection	Medium Term (5-8 years)	$17,000,000	$0	$16,000,000	$0	$1,000,000	$0	$10,000	$990,000
Vine St Trunk Storm Upgrade/Separation	Medium Term (5-8 years)	$9,300,000	$0	$0	$4,000,000	$5,300,000	$0	$53,000	$5,247,000
East Park Tight Pipe	Short Term (1-4 years)	$18,000,000	$0	$0	$0	$18,000,000	$0	$180,000	$17,820,000
Pressure Diversion to East Park Outfall	Medium Term (5-8 years)	$11,900,000	$0	$0	$0	$11,900,000	$0	$119,000	$11,781,000
St George Storm Upgrade	Medium Term (5-8 years)	$1,500,000	$0	$0	$360,000	$1,140,000	$0	$11,000	$1,129,000
Innovation Hub Storm	Medium Term (5-8 years)	$2,400,000	$0	$0	$500,000	$1,900,000	$0	$19,000	$1,881,000
Terminal Ave Siphon	Medium Term (5-8 years)	$3,000,000	$0	$0	$0	$3,000,000	$0	$30,000	$2,970,000
China Creek (Cottrell ST) Storm Trunk Upgrade	Medium Term (5-8 years)	$14,900,000	$0	$10,900,000	$360,000	$3,640,000	$0	$36,000	$3,604,000
E 7th Storm Upgrade	Medium Term (5-8 years)	$3,600,000	$0	$0	$2,450,000	$1,150,000	$0	$12,000	$1,138,000

Broadway Green Infrastructure	Short to Medium Term (1-10 years)	$25,730,000	$2,100,000	$0	$3,130,000	$20,500,000	$0	$205,000	$20,295,000
City Wide Projects (Sanitary & Drainage Upgrades)									
W29 & Marguerite St	Medium Term (5-8 years)	$2,200,000	$0	$0	$479,000	$1,721,000	$0	$17,000	$1,704,000
Cambie St	Medium Term (5-8 years)	$2,660,000	$0	$0	$1,550,000	$1,110,000	$0	$11,000	$1,099,000
Seymour and Richards	Medium Term (5-8 years)	$1,140,000	$0	$0	$137,000	$1,003,000	$0	$10,000	$993,000
Little Mountain	Short Term (1-4 years)	$26,605,000	$0	$0	$7,376,000	$19,229,000	$0	$192,000	$19,037,000
Shaugehnessy Outfall	Medium Term (5-8 years)	$8,650,000	$0	$0	$1,732,000	$6,918,000	$0	$69,000	$6,849,000
Oak St	Short Term (1-4 years)	$11,733,000	$0	$0	$0	$11,733,000	$10,615,000	$11,000	$1,107,000
EFL Projects	Medium Term (5-8 years)	$8,091,000	$0	$0	$0	$8,091,000	$0	$80,910	$8,010,090
Portion of Regional Sewer Upgrades	Long Term (8-10+years)	$480,000,000	$0	$384,640,000	$0	$95,360,000	$0	$954,000	$94,406,000
General City-wide Sewer/Sanitary Capacity Upgrades	Medium Term (5-8 years)	$29,155,000	$0	$0	$3,711,000	$25,444,000	$6,080,000	$194,090	$19,169,910
Sewer Renewal	Short to Medium Term (1-10 years)	$673,000,000	$0	$0	$605,700,000	$67,300,000	$0	$673,000	$66,627,000
City-wide Green Infrastructure	Short to Medium Term (1-10 years)	$53,475,000	$14,400,000	$0	$17,340,000	$21,735,000	$0	$217,000	$21,518,000
Pump Station									
Thornton Pump Station	Short Term (1-4 years)	$7,300,000	$0	$0	$0	$7,300,000	$0	$73,000	$7,227,000
Kent Ave Pump Station	Medium Term (5-8 years)	$3,000,000	$0	$0	$0	$3,000,000	$0	$30,000	$2,970,000
EFL Pump Station	Medium Term (5-8 years)	$12,825,000	$0	$0	$0	$12,825,000	$0	$128,250	$12,696,750
Sanitary Pump Station Upgrades / Other Stations	Medium Term (5-8 years)	$4,000,000	$0	$0	$0	$4,000,000	$0	$40,000	$3,960,000
Pump Station Renewal	Short to Medium Term (1-10 years)	$40,000,000	$0	$0	$36,000,000	$4,000,000	$0	$40,000	$3,960,000
Other									
Hydraulic Model & Monitoring	Short to Medium Term (1-10 years)	$75,450,000	$0	$0	$35,500,000	$39,950,000	$0	$400,000	$39,550,000
Planning & Other Studies	Short to Medium Term (1-10 years)	$79,300,000	$0	$0	$4,860,000	$74,440,000	$0	$744,000	$73,696,000
Emerging Priorities		$50,624,000	$0	$0	$0	$50,624,000	$0	$507,000	$50,118,000
Available DCL Reserves		$0	$0	$0	$0	$0	$25,616,000	$0	-$25,616,000
TOTAL		**$2,059,849,000**	**$18,500,000**	**$605,010,000**	**$737,450,000**	**$698,889,000**	**$55,251,000**	**$6,692,000**	**$636,947,000**

Notes:
All Costs are in 2022 Dollars
Other Funding' includes funds provided from other sources including rezoning conditions and Federal and Provincial grants.
* Non-growth costs are preliminary and are subject to change based on identified projects

City of Vancouver – Engineering Services
2023-2032 Utilities Capital Program and DCL Project List

Table 3 Water Related DCL Project List (2023-2032)

Project Description	Project Priority	Total Gross Cost	Senior Gov. / Partners	Post-Period (2033+)	Benefit to Existing	Net Growth-Related Costs	Other City Funding Sources	Municipal Assist	DCL Rate Funded 2023-2032
Cambie Projects (Water System Upgrades) 35% of eligible works noted below									
Alberta St, W 43rd to W 42nd Alberta St, W 44th to W 43rd Ash St, W 45th to South Baillie St, W 37th Ave to W 41st Ave Cambie St (East Side), W 39th to W 40th Cambie St (East Side), W 63rd to W 64th Cambie St (West Side), W 62nd to W 63rd Cambie St (West Side), W 64th Ave to 65th Cambie St, W 65th to SW Marine Cambie St, W 70th to W 71st Elizabeth St, W 39th to W 41st Fremlin St, W 49th to 51st Kersland Dr, W 33rd to W 35th Kersland Dr, W 35th to W 37th L/W Cambie St, W 24th to W King Edward Laurel St, W 49th to W 52nd Laurel St, W 57th to W 55th Lord St, W 65th to SW Marine Manson, W 39th Ave to W 41st Ave Oak St, W 38th, to W 41st Oak St, W 57th to W 55th Tisdall St, W 42nd to W 45th W 23rd Ave, Cambie to Yukon St W 23rd, Manitoba to Ontario W 26th Ave, Manitoba to Ontario W 27th Ave, Willow to Heather W 37th Ave, Heather to Ash W 37th Ave, Oak to Heather W 38th Ave, Cambie to Alberta W 38th Ave, Oak to Willow	Short to Long Term (1-10 years)	$6,380,000	$0	$0	$0	$6,380,000	$0	$63,800	$6,316,200

W 39th Ave, Manson to Ash St									
W 40th Ave, Cambie to Alberta									
W 42nd Ave, Across Oak St									
W 42nd Ave, Willow to Tisdall									
W 43rd Ave, Across Oak St									
W 48th Ave, E of Cambie to Yukon									
W 48th Ave, Oak to Osler									
W 62nd Ave, Cambie to Yukon									
W 65th Ave, Lord to Cambie									
Willow St, L/N W 44th to W 46th									
Willow St, W 35th to South									
Willow St, W 37th to W 41st									
Willow St, W 42nd to L/N W 44th									
Yukon St, W 46th to W 48th									
Yukon St, W 62nd to W 61st									
Yukon St, W King Edward to W 26th									
Broadway Projects (Water System Upgrades)									
E 12th Ave, Sophia St to Kingsway	Short Term (1-4 years)	$410,000	$0	$0	$0	$410,000	$0	$4,100	$405,900
E 13th and Main - Hydrant Reconfiguration	Short Term (1-4 years)								
E 13th and Sophia Hydrant Reconfiguration	Short Term (1-4 years)								
Sophia St, E 11th to E 12th	Short Term (1-4 years)								
Cypress St, W 5th to W 4th (Transmission Main)	Medium Term (5-8 years)	$1,483,000	$0	$0	$0	$1,483,000	$0	$14,830	$1,468,170
Pine St, W 1st to W 6th	Medium Term (5-8 years)								
W 4th Ave, Maple to Burrard	Medium Term (5-8 years)								
W 6th Ave, Cypress to Granville (Transmission Main)	Medium Term (5-8 years)								
City Wide Projects (Water System Upgrades)									
Grandview Woodlands Upgrades	Short Term (1-4 years)	$690,000	$0	$0	$0	$690,000	$0	$6,900	$683,100
Grandview Woodlands Upgrades	Medium Term (5-8 years)	$1,148,000	$0	$0	$0	$1,148,000	$0	$11,480	$1,136,520
False Creek Flat Upgrades	Medium Term (5-8 years)	$332,000	$0	$0	$0	$332,000	$0	$3,320	$328,680
Jericho Upgrades	Medium Term (5-8 years)	$283,000	$0	$0	$0	$283,000	$0	$2,830	$280,170
Mount Pleasant Upgrades	Short Term (1-4 years)	$108,000	$0	$0	$0	$108,000	$0	$1,080	$106,920
Other Citywide Growth Upgrades		$1,629,000	$0	$0	$397,000	$1,232,000	$0	$12,320	$1,219,680
Emerging Priorities		$1,166,000	$0	$0	$0	$1,166,000	$0	$12,000	$1,154,000
Available DCL Reserves		$0	$0	$0	$0	$0	$573,000	$0	-$573,000
Other									
Hydraulic Model Update	Short to Long Term (1-10 years)	$390,000	$0	$0	$97,500	$292,500	$0	$2,925	$289,575
TOTAL		**$38,711,000**	**$0**	**$5,932,000**	**$495,000**	**$32,285,000**	**$19,333,000**	**$135,000**	**$12,817,000**

Notes:
All Costs are in 2022 Dollars
Other Funding' includes funds provided from other sources including rezoning conditions and Federal and Provincial grants.
* Non-growth costs are preliminary and are subject to change based on identified projects

City of Vancouver

2023-2032 Utilities Capital Program and Utilities DCL Project List

City of Vancouver
2023-2032 Utilities Capital Program and Utilities DCL Project List

Overview of Development Contribution Tools

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

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).

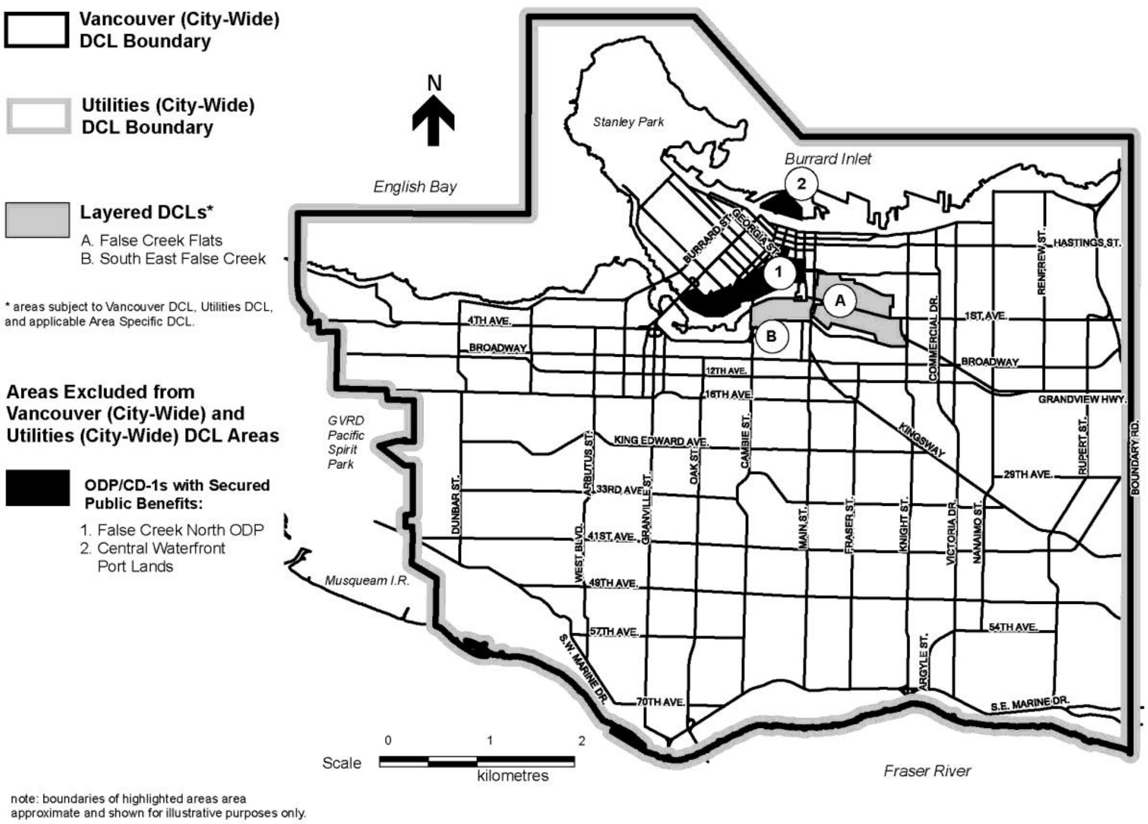
The current DCL system consists of 4 DCL Districts (each with its own rates) and 2 additional planning areas excluded from DCLs. The Vancouver (City-wide) and Utilities DCL Districts apply to most of the city and the 2 Area Specific DCL Districts apply to smaller planning areas across Vancouver.

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



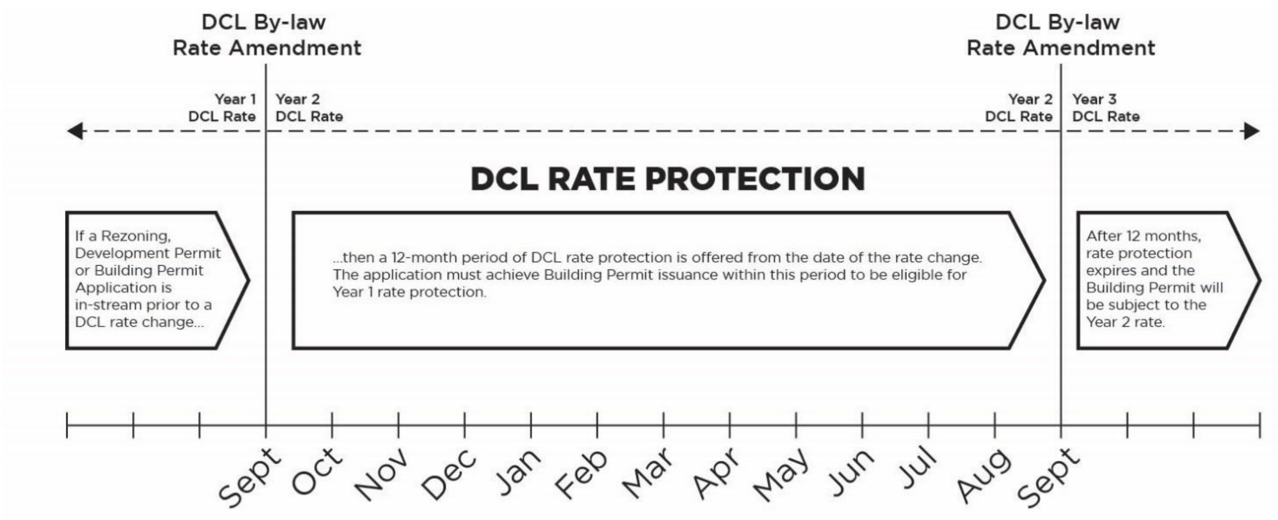
In-Stream Rate Protection

The City of Vancouver implements DCL by-law amendments on September 30th of each year. In order to ensure fairness to applications that have been submitted prior to the adoption of annual DCL Bylaw rate adjustments, in-stream rate protection is offered. Building permits issued within 12 months of a DCL By-law amendment are exempt from that DCL rate increase, provided there was a precursor application (rezoning, development permit or building permit application) that was in-stream on the date of that increase, and provided that:

- the applicant has submitted an application in a form satisfactory to the City; and
- the applicant has paid the applicable application fee to the City.

If a related building permit application is not issued within the 12-month period, the rate protection expires and new DCL rates take effect. Section 523D (8.2 & 8.3) of the Vancouver Charter outlines the criteria that must be met in order for an application to qualify for in-stream protection. See Figure 1 as an illustration of how in-stream rate protection is administered.

Figure 1: In-stream Rate Protection



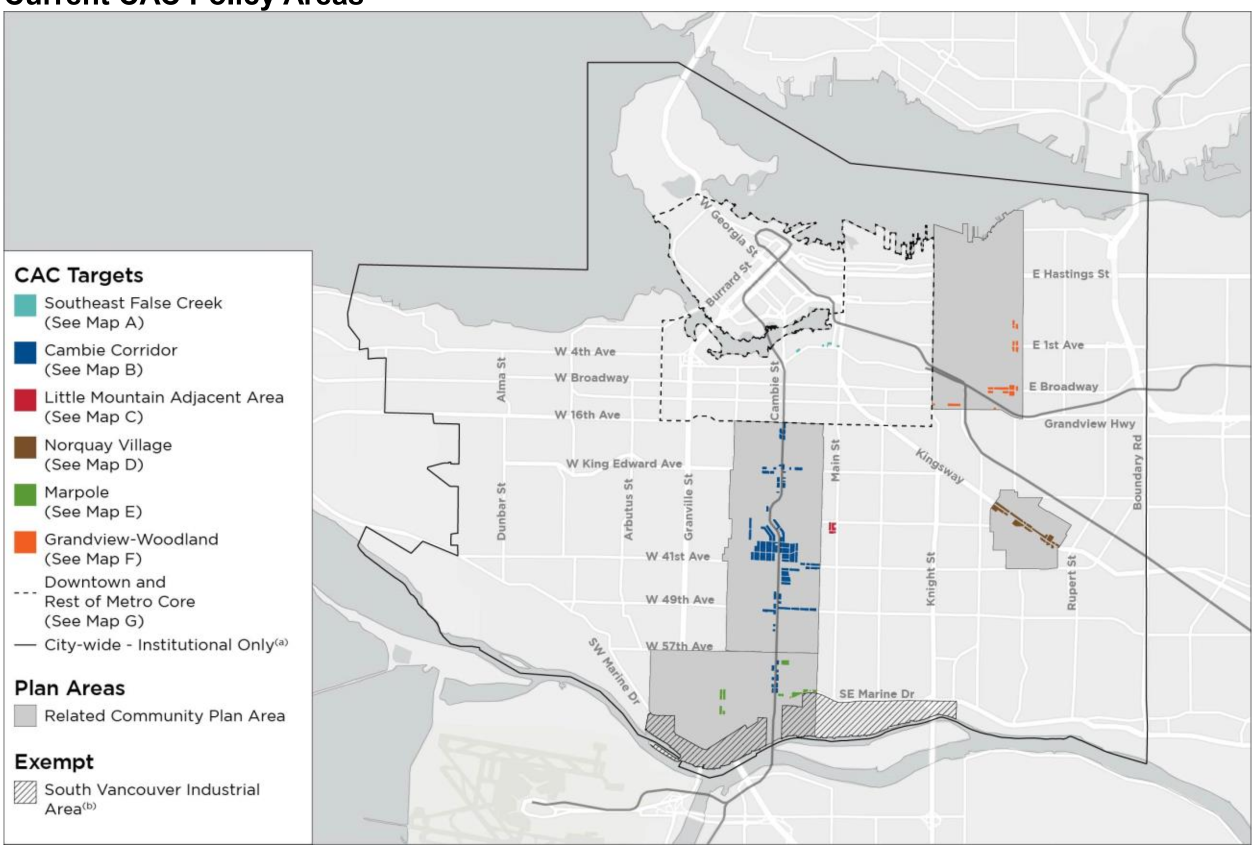
2. Community Amenity Contributions (CACs)

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.

4. Conditions of Development

Development applications are required to mitigate their impact to existing City infrastructure, and provide new infrastructure where it does not already exist. The Vancouver Charter provides the City Engineer with the ability to restrict occupancy or use of land or building unless due provision is made for public safety and infrastructure servicing. The Vancouver Charter also allows the City to create by-laws or policy to support this. Different types of applications vary in authority and impact. The discussion below outline the City's approach to reviewing and conditioning for development impacts to infrastructure.

- Rezoning Applications

The City has the authority to impose conditions on a rezoning application for core infrastructure and servicing, as well as enhancements and policy initiatives. In completing a rezoning review, the General Manager of Engineering Services may require the following types of infrastructure and services:

  - Provision of net new streets, lighting, intersections, utilities and public realm enhancements
  - Provision of upgrades and/or mitigating measures to existing assets
  - Provision of other core infrastructure such as but not limited to flood protection, pump stations, transit infrastructure, district energy, etc.
  - Revisions to application design on site

- Subdivision Applications

The City has the authority to impose conditions on a subdivision application through the Land Title Act, the Vancouver Charter and the City's Subdivision By-law. The City may require dedications or rights of way, on-site infrastructure and off-site infrastructure extensions or upgrades as they pertain to the subdivision application, including those in excess of the specific application at hand. In completing a subdivision review, the General Manager of Engineering Services will determine the application's impact on infrastructure or how infrastructure may need to be extended to facilitate the subdivision.

- Development Permit Applications

The City has the authority to impose conditions on a development permit application where the conditions are directly attributable to the application or where an existing system may be worsened or depleted by development, as outlined in several City by-laws. In completing a development permit review, the General Manager of Engineering Services may require the development to provide or improve access (signals, sidewalks, bike lanes, roads) and in some cases provide or improve sanitary, drainage or water servicing to mitigate the direct impacts from development.

- Building Permit Applications

The City has the authority to recover costs due to a building permit application through several City by-laws. The technical information to determine impacts to existing infrastructure may not be available during the review phases mentioned above (i.e. rezoning and/or development permit) and can only be determined at building permit or connection stage.