

# **MONtreal HIPPOdrome**

Financial Analysis – Final Report

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APPENDIX-I

# Introduction

The 32-hectare Blue Bonnets Hippodrome site in western Montreal is a highly coveted lot of land in the city's landscape. Located near the juncture of the Côte-des-Neiges and Notre-Dame-de-Grâce neighborhoods, both of which have high proportions of low-income, unhoused and immigrant populations, the site is ideal for a social housing project which would meet a large share of the city's permanently affordable housing requirements.

The following report outlines the financial analyses for a development plan proposed by McGill's Master of Urban Planning students. The project focuses on creating a dynamic community with a total of 6,721 units of subsidized, affordable, and market rate rental housing units, as well as a number of limited equity units. It will include communal and community-owned assets such as social and commercial spaces, parks and gardens, biodiversity corridors, community amenities, and more. The community shall be developed, and will continue to operate under the stewardship of a community land trust (CLT) whose ultimate aim will be to make the Hippodrome home to a permanently affordable and thriving neighborhood. The development will be constructed over the course of 20 years, and the report discusses the operational finances incurred by the CLT over the course of 35 years.

This report delineates the financial stakes of the CLT, various levels of government, and/or other entities. A development budget with the CLT as the prime developer has been drawn up, and a summary of all operational revenue sources and expenses follows. While the financial costs of this project may be high, the socio-economic and political benefits of such an undertaking are indubitable. It can be realistically hoped that the Hippodrome affordable housing project will serve to not only meet the city's growing needs for permanently affordable housing, but also as a basis for other such projects in North America.

# Finances in Brief

**\$3.9B**

Total Development Cost

**6,721**

Total Units

15%

1-bedroom units

20%

2-bedroom units

45%

3-bedroom units

20%

4-bedroom units

25%

Subsidized Rental

40%

Affordable Rental

15%

Market-rate Rental

20%

Equity Ownership

Development Costs (A)	\$3,925,829,623
Residential	\$2,638,253,740
Mixed ground floor	\$301,699,143
Underground Parking	\$79,916,058
Contingency fund (5%)	\$150,993,447
Soft costs (25%)	\$754,967,235

Mortgage Interests (B)	\$736,790,810.90
Federal Loans (Co-I, AHIF, RCFI)	\$449,100,000
Private Loan @ 5%	\$74,051,739
Social Loan Programs @ 2%	\$51,500,000
Private loan MLI	\$162,139,072

Repayable Loans (C)	\$3,167,768,979
CMHC Mortgage Financing	\$538,200,000
CMHC AHIF	\$100,000,000
CMHC RCFI	\$260,000,000
Private Loans	\$493,678,260
Community Impact Fund (REIT)	\$150,000,000
Student Union Contribution	\$4,500,000
Private loan MLI	\$1,621,390,719

Grants (D)	\$704,999,535
Municipal Funding	\$103,500,000
PHAQ	\$567,739,535
CMHC Seed Grant	\$2,070,000
CMHC Co-Investment Grant	\$17,550,000
FCM Grant	\$4,140,000
Grant from Social Investors	\$10,000,000

Equity Units: Down payment (E)	\$789,851,920
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<b>Total Costs (A+B)</b>	<b>\$4,662,620,434</b>	=	<b>Total Sources (C+D+E)</b>	<b>\$4,662,620,434</b>
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Figure 1. Development Costs and Financing

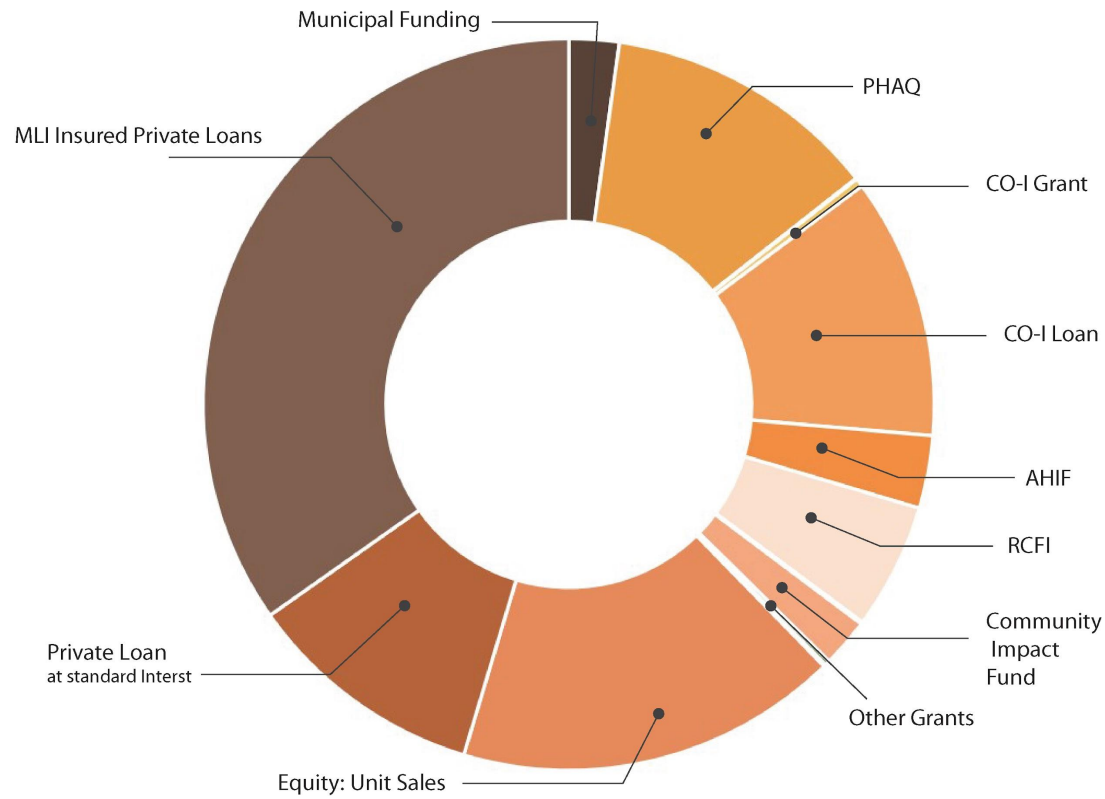


Figure 2. Financing Sources

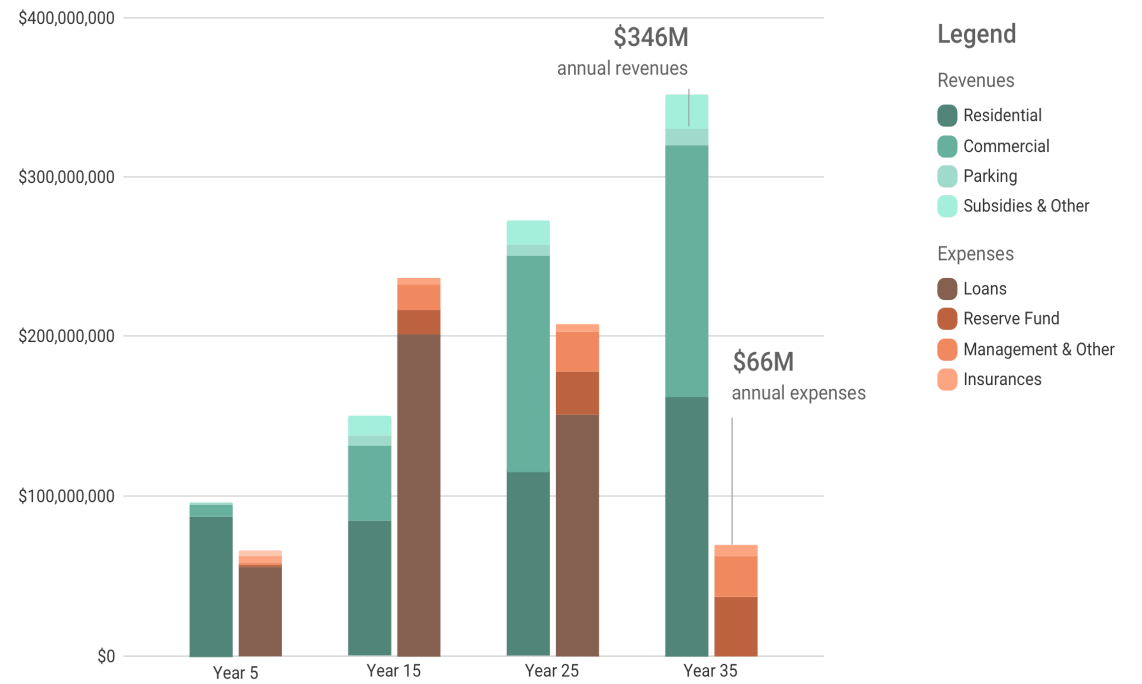


Figure 3. Annual Revenue and Expenses

## Definitions

**Affordable rental housing**, as defined in the purview of this project, is housing which costs 30% of the median pre-tax income in its local context, to rent.

**Construction cost** refers to the total hard costs of work borne by the owner/developer to construct all the structures, like buildings and other amenities, that make up the project. This includes costs of materials such as concrete, steel, wood, cement, tilework, cabinets, plaster, paint, etc., and labor. It also includes construction management fees, coordination and procurement fees and taxes, but excludes the costs of land and its development, as well as soft costs such as fees owed to the architect and other consultants.

**Construction loan** is a financial loan that aids in covering the construction expenses of a project, and is often repayable with an added interest rate.

**Co-op** or a housing cooperative is a legal entity which owns one or more residential units where tenants or equity owners involve themselves in the organization, maintenance, governance and other activities of the community.

**Development costs** is the sum total of hard costs, soft costs, land cost, and other expenditures, including onsite and offsite improvements, required to complete the project across all phases.

**Equity**, in financial terms, refers to the ownership of an asset like land or housing. Equity accrues over time for homeowners, as they pay off their mortgage.

**Expense** refers to the money required for something. In the case of housing development, this includes development costs, taxes, operation and maintenance costs, etc.

**Financial viability** is the financial and operational ability of a project to meet operational, maintenance and other expenses with the income generated.

**Forgivable loan** is a loan amount that either does not need to be paid back, or is eligible for deferral of repayment, as long as stipulated conditions and terms are fulfilled and maintained.

**Gross Floor Area** for an apartment unit is the proportional measure of total area of building envelope (excluding shafts, terraces, walkways, steps, roof-overhangs, etc.) measured from the exterior phase of exterior walls. It includes the net floor area of apartment units, and other usable floor areas like corridors, foyers and basements.

**Hard costs** are those associated with the physical construction of structures that make up the project, i.e., material and labor costs. It does not include taxes, fees, and other soft costs. It is calculated as the product of quantity of material (or man hour for labor) and the cost per unit of material (or man hour).

**Inflation** can be defined as the “general increase in prices and fall in purchasing value of money”.

**Inflation rate** refers to the rate at which inflation occurs, i.e., the rate at which price for goods and services rise/fall, and/or the rate at which money loses its purchasing value in the local and international context.

**Maintenance cost** is the monetary cost incurred to carry out maintenance works, such as repairs or upgrades, over the operational life period of a construction project.

**Market rate** is the price charged for a good or service in the local free market.

**Market-rate housing** refers to any type of publicly or privately owned housing that is rented or sold at the current local market rates.

**Mortgage** is a legal agreement between a lender and borrower wherein money is lent to the borrower for purchasing an asset, where failure to repay the debt (capital borrowed + interest charged) would result in the lender gaining possession of the asset.

**Net Floor Area** is the measure of liveable floor area within an apartment. It consists of interior floor space of a unit and excludes walls, pillars, cabinet space, terrace/roofs, etc.

**Operational/Operations cost** is the monetary cost incurred to carry out the operational and management services of a project. Operational costs include salaries for staff, water and electricity charges for shared spaces, building insurance costs, taxes, etc.

**Private loan** is a loan given by a bank or private mortgage lender to help cover the upfront expenses and capital costs.

**Programming budget** is the annual budget allocated to the CLT's operating entities to carry out programs and activities for the residential community. Some of the programs planned include mental and community health programs, senior and childcare services, legal and immigration services, linguistic services, placemaking, recreation programs, climate resilience programs, etc.

**Property tax** is an annual tax paid by the owner of a property to the municipality or other governing body, and is calculated as a percentage of the value of the property, i.e., property value.

**Property value** is the estimated fair market value of a property which may be slightly higher or lower than the value at which the property would sell. It includes the pessimistic valuation of the land, building and other immovable structures on the site. It takes into account the size and desirability of the property and is subject to changes in the market.

**Rental revenue** is the revenue/income generated by renting a good, like housing, over a specific period of time.

**Repayable loan** is a loan (amount of money lent) to someone under the agreement that the sum will be repaid within a stipulated period of time.

**Reserve fund** is money set aside annually for major maintenance, renovation and repair works that will be required at a later stage in the project's operational life (typically at the 25-year mark).

**Revenue** is the total amount of monetary income generated by the sale, trade or rental of a good or service over a specific period of time.

**Social housing or subsidized housing** is any type of rental housing owned by a governmental entity and/or a non-profit organization with the aim of providing housing that is affordable to lower-income residents of the neighborhood through subsidies. Tenants typically pay a rental amount equal to a proportion of their household income, with the government paying the difference (between chargeable rent and rent payable by the tenant) through rental subsidies. Unlike affordable housing, tenants of social housing often need to undergo an official application process and fulfill all eligibility requirements.

**Soft costs** include the "hidden costs" such as those associated with obtaining building permits, filing paperwork, engineering and architectural fees, legal and accounting fees, taxes, construction insurance, security, property maintenance, etc. For a preliminary project budget estimate, these are calculated as an additional 25% of estimated hard costs.

## Abbreviations and Acronyms

**CLT:** Community Land Trust, **CMHC:** Canada Mortgage and Housing Corporation, **NHS:** National Housing Strategy, **PSL:** Programme supplément au loyer, **PHAQ:** Programme d'habitation abordable Québec, **MLI:** Mortgage Loan Insurance, **sq.ft:** square foot or square feet, **sq.m:** square meter

## Approach

Two broad guiding approaches were taken in completing this project. The analysis was an iterative process where the numbers and proportions of units were repeatedly adjusted until a viable model was arrived at (see figure 4). In doing so, 50% of non-rentable ground floor flex space was converted into 300 new units, all of which are slated to be sold as equity ownership units, thus increasing the proportion of equity units to 20%. The same process was also applied ascertaining the various funding sources and estimating the sum of grants and loans that the project could acquire from different sources.

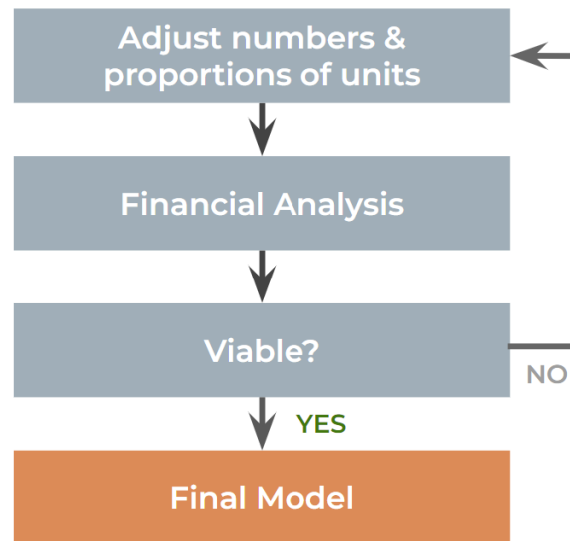


Figure 4. Project approach flowchart

The second approach that guided the project methodology was to considerably simplify the financial model, whilst still accounting for all major components. As the project is still in its preliminary design stages, construction phasing was considered to be proportional to the total number of residential units, commercial space and parking facilities, built over a period of 20 years where the first two years would be dedicated to project mobilization and site preparation with no actual construction. To simplify the calculation of loan interest and repayment, it was assumed that the interest would be calculated as a simple interest and repayment would occur in equal installments throughout the loan repayment period which varies depending on the loan source.



## Assumptions

A number of assumptions were made to produce the figures in the model. While the numbers themselves can be found in the attached sheets, this section will briefly cover the key sources and methodology. Where specific numbers were concerned, they were either derived from guidebooks, similar examples, or upon advice from contacts in the industry.

In nearly all cases, some inflation was assumed, which ranged from 1% to 5% depending on the input. It is important to note that over a 35 year time frame, it is nearly impossible to predict this figure with much confidence. Therefore, rates were assigned largely based on best educated judgments on what to expect.

### *Property Tax Exemption*

Of particular note is the expected increase in property value that would increase the tax burden on the site, which would constitute a substantial proportion of expenses. While Montréal currently does not exempt any properties from property taxes, there are several precedents across Canada where property taxes were waived for social housing and other similar philanthropic projects. The [Ontario Assessment Act](#) (section 3, sub-section 1) exempts land and property owned by philanthropic organizations, municipalities, charity organizations, senior and child care centers, etc. from property taxes. Similarly, in the [City of Regina, Saskatchewan](#), affordable and social housing units and buildings are also exempt from property taxes for a certain period of time. Thus, it is assumed that Québec and the City of Montréal would follow suit, and allow a waiver of property taxes for a project which attempts to meet the city's affordable housing needs with such a large proportion of permanently affordable apartments. In line with this assumption, property taxes have been deducted from the CLTs annual operational expenses.

### *Land Donation*

The Blue Bonnet's Hippodrome site is currently unoccupied and is a financial drain on the city. As most federal and provincial housing policies and schemes are conditional upon

municipal contribution, it is hoped that the city would donate the land for execution of this project, thereby absolving the CLT of the financial burden of purchasing this land. Moreover, the city currently [spends millions of dollars purchasing and renovating old buildings to meet the city's growing affordable housing needs](#). Ergo, this project shall save the city money in the long run while also contributing significantly to the city's affordable housing goals.

### *Reserve Fund*

As operations are underway for this development project, the reserve fund builds to a sizable amount worth millions of dollars. It is thus assumed that the CLT, as a way of increasing revenues, will earn a standard bank interest of 2% on the reserve fund annually.

The tables in the following pages summarize other assumptions and ways in which values were determined.

# 1. Revenue

## 1.1. Housing

<i>Rent: Market Rate</i>	Rental prices were based on market research conducted by other collaborating teams. Current market rental rates in the CDN-NDG neighborhood for similar properties is higher than the <a href="#">CMHC 2021 Rental Market Report values</a> . Thus, market rental rates for this project were fixed at 50% higher than CMHC 2021 rental rates. It is important to note that these rates are still comparatively lower than rents charged in newly constructed condominiums.
<i>Rent: Subsidized</i>	These types of units will have a net rental rate equal to that of the affordable rental rate discussed below. While rent will ultimately be 25% of tenants' income, following some generalization and for ease of calculation, it is assumed that 40% of the rent will be borne by the tenant, and the remaining 60% shall be covered by the provincial Rent Supplement Program (PSL), or its equivalent.
<i>Rent: Affordable</i>	To ensure that housing units in this project will be permanently affordable, affordable rental units will have a rental rate that equals 30% of pre-tax median income in the neighborhood. This value equates to roughly 90% of the market rental rate set for this project, and aligns with the Montreal standard <a href="#">for affordable housing</a> .
<i>Equity: property sales</i>	The selling price for equity ownership units was calculated as the total development cost (hard cost + soft cost) for the unit, with a 15% markup. This goes towards covering development costs with the 15% put towards the CLT's reserve fund for major renovation,

and other expenses. This price roughly correlates to, but is still lower than, current market selling prices for similar units.

## 1.2. Commercial

<i>Lease: Market-Rate</i>	Rental rate charged per square foot for this type of space was based on comparable units in the area.
<i>Lease: Affordable</i>	This represents 75% of the market rate for commercial units.
<b>1.3 Bank interest on Reserve Fund</b>	See section above. It is assumed that the CLT will receive a standard bank interest of 2% on the reserve fund.

# 2. Expenses

## 2.1 Interest

<i>Private loan</i>	A typical private loan charges an average of 5% interest on principal amount. This was arrived upon through market study and on recommendation of industry professionals.
<i>CMHC loan</i>	Considered as 2% on the principal amount based on analyses of CMHC loan schemes.
<i>Private loan with MLI backing</i>	With <a href="#">CMHCs Mortgage Loan Insurance (MLI)</a> , private loans for development of projects with social/environmental outcomes will be insured by CMHC for a low interest rate of about 1%.

**2.2 Reserve Fund** Annually, 10% of operational revenues will be set aside for major

	renovation work expected 25-years after construction. As of year 25, the reserve fund adds up to \$316 million which will cover renovation costs for the buildings. As construction is phased over 20 years, properties constructed in year-20 will only need to be renovated by year-45 during which time the reserve fund will have grown. Under the CLTs discretion, the percentage of annual revenue set aside as a reserve fund may be increased in later years.
<b>2.3 Insurance</b>	Following a market study of prevalent building insurances, insurance premiums on similar projects, and consultation with industry experts, this value was fixed at 0.06% of building value per year.
<b>2.4 Management</b>	
<i>Salaries</i>	A value of \$1.5 million per year (later adjusted for inflation) payable to employees of the CLT.
<i>Professional fees</i>	This assumes that a yearly audit will be performed as well as the occasional need for legal consultations. The final figure is based upon recommendations from industry experts.
<i>Fixed costs</i>	This was based on the costs reported <a href="#">by the Champlain Housing Trust</a> , a project similar to the proposed project.
<b>2.5 Maintenance</b>	This was derived from data reported <a href="#">by Strawhomes</a> .
<i>Programming Budget</i>	An annual budget of \$400k which will go towards covering a portion of costs to carry out various social interest activities and programs within the community. These costs can further be

	supplemented by various public programs (refer report by Team Social Infrastructure).
<i>Taxes</i>	This is the standard Montreal property tax applied to the estimated property value. Land value was determined through comparisons to similar buildings, and building value was set as its construction price. It is assumed that this amount will be waived (see section above).

# 1. Project Overview

This section presents an overview of the financial feasibility of the Hippodrome development project with a breakdown of units by unit-size and tenure structure, commercial by rent chargeable, the development phasing, and a summary of the financial model.

## 1.1 Land use plan

The plan includes residential, commercial and parking space, as well as other communal and community owned public facilities. The **residential portion** consists of 6,721 units, and the typological breakdown can be found in Figure 5. Within each tenureship category, the following unit types will be available: 15% one-bedroom, 20% two-bedroom, 45% three-bedroom and 20% four-bedroom.

**Rental prices** charged by tenure-type for each unit type are elucidated in Figure 6. 20% of the total residential units will be sold as **equity ownership** units at prices listed in Figure 7.

	Rental-Subsidized	Rental-Affordable	Rental Market-rate	Equity
Unit Proportion	25%	40%	15%	20%
Number of units	1,680	2,688	1,088	1,344
Rent & Price	25% household income + rent subsidy program	90% market-rate rent	Market-rate rent	Construction cost + 10%
Coop member fee	X	4% of Rent (M)	4% of Rent (M)	\$300 (M)

Figure 5. Housing Models

	Unit type	Monthly rent (Year 1)
<b>Paid by resident in PSL subsidized*</b>	1-bedroom	\$465.00
	2-bedroom	\$585.00
	3-bedroom	\$665.00
	4-bedroom	\$765.00
<b>Affordable</b>	1-bedroom	\$1,162.00
	2-bedroom	\$1,463.00
	3-bedroom	\$1,663.00
	4-bedroom	\$1,913.00
<b>Market-Rate</b>	1-bedroom	\$1,292.00
	2-bedroom	\$1,626.00
	3-bedroom	\$1,848.00
	4-bedroom	\$2,126.00

Figure 6. Monthly Rents of Housing Models by Unit Size on Year 1

Unit type	Equity value	Maintenance fee/m
1-bedroom	\$390,000	\$300.00
2-bedroom	\$509,000	\$300.00
3-bedroom	\$630,000	\$300.00
4-bedroom	\$719,000	\$300.00

Figure 7. Equity Value of Ownership Units

**Commercial spaces** will be located on the ground floor of mixed-use, mid-and high-rise zones. Two types of commercial leases are proposed on the site: a traditional commercial lease and a Social Economic Space Affordable-Lease (see figure 8). Traditional commercial spaces will be leased out at market-rate rents and occupy 30% of the ground floor mixed-use area. The social economy zone will levie affordable rental rates fixed at 75% of market-rate rents for commercial space. This type of commercial space will occupy approximately 20% of the total ground floor area.

	<b>Traditional Commercial Lease</b>	<b>Social Economic Space Affordable-Lease</b>
Rent	\$12 per sqft Market-rate rent	\$9 per sqft 75% of Market-rate rent
Area	45% of all ground floor space	25% of all ground floor space
Purpose	Typical commercial business, e.g., Supermarket, Pharmacy	Businesses serving the local public interest, e.g., local community-run businesses, social enterprises

**Figure 8. Breakdown of Commercial Spaces**

The construction cost and operation plan for **underground parking** are shown in Figure 9. There will be 3,000 spots on the site; 80% of which will be designated for residents and the remaining 20% will be allocated as visitors' parking. The parking fee for residents is \$250 per month per spot; whereas the visitor's parking fee is \$3.5 per hour with a daily cap of up to \$20 maximum.

Type	<b>Resident's Parking</b>	<b>Visitor's Parking</b>
Proportion of units	80%	20%
Number of units	2400	600
Parking Fee	\$250 / spot / month	\$3.5 / hr / spot \$20 / day / spot (daily cap)

**Figure 9. Underground Parking and Operating Plan**

The site will also feature **various public services and infrastructure** like schools, community centers, libraries, roads, greenhouses, gardens, and energy infrastructure. The costs associated with these facilities and institutional buildings shall be borne by governmental entities or covered by existing public schemes. They are therefore not accounted for in this cost analysis.

## 1.2 Development phasing

The expected time for completion of construction on this site is twenty years, where the first three years will be pre-construction and initial construction periods (see figure 10). The construction of all types of housing models and commercial space will commence slowly in the third year and enter full swing the following year. Occupancy of the first few units can commence in Year-4. In the years following, housing will be built proportionally throughout the proposed project time frame.

Construction of equity units will be finished first over the next ten years with an estimated completion date of Year-12. Market-rate rental units will be built for another three years until the end of Year-15. Subsidized and affordable housing units, as well as commercial and parking spaces are expected to be completed over the full construction time span of twenty years. As shown in the table, 212 units will be built in Year-3. 470 units will be built each year between years 4 and 12. In the final 7 years, fewer units will be built as construction comes to an end.

UNITS TYPES	Y1.Y 2*	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	
<b>SUBSIDIZED UNITS</b>		1.4%	5.8%																	
<b>AFFORDABLE UNITS</b>		1.4%	5.8%																	
<b>MARKET-RATE UNITS</b>		1.6%	8.2%																	
<b>EQUITY UNITS</b>		10%																		
<b>COMMERCIAL</b>		1.4%	5.8%																	

**Figure 10. Construction Phasing**

### 1.3 Financial feasibility study structure

This feasibility study is fundamentally based on an equation of cost, revenue, and profit. The Hippodrome affordable housing project aims to strike a balance and remain permanently affordable rather than perpetuate profitability. Thus, the model adheres to the following basic equation, illustrated in Figure 11 below:

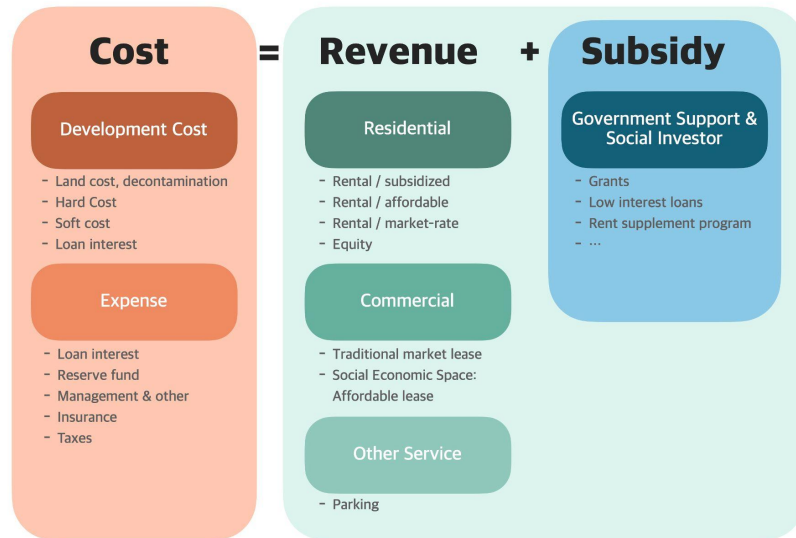


Figure 11. Components of the Financial Analysis

The three main components in this analysis are cost, revenue, and subsidy. Capital cost and operating cost constitute the cost component. Revenue will be mainly drawn from residential and commercial monthly rents. The subsidy stream covers possible resources and supplements from the public and the third sector.

Figure 12 below illustrates payments, returns, and subsidies taking place at different stages of the development and operational period. The planned construction phase is set to take 20 years. Parallel to each other are revenue and expenses; revenue and expenses begin after the commencement of residents' occupancy in the fourth year. The revenue model considers a 2% vacancy allowance, and annual rent increases at 2.5%. In estimating expenses, components like repayment of loan principal and interest, insurance, management, operating fees, etc. are accounted for.

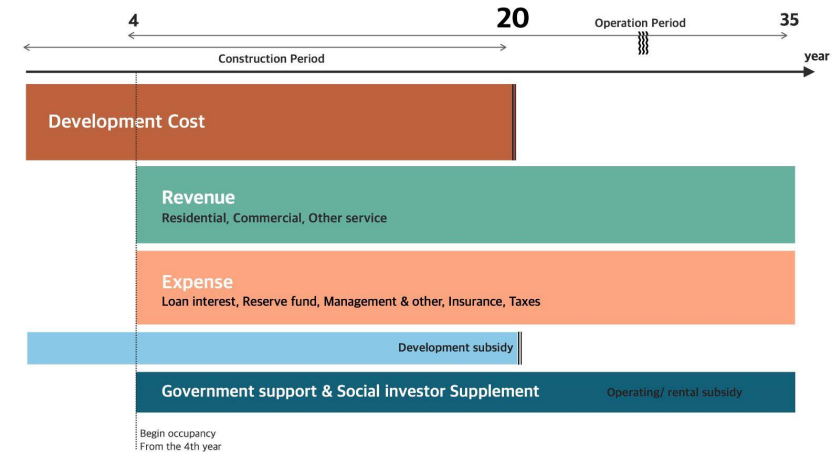


Figure 12. Development Timeline

Lastly, In the subsidy component, resources from government and social investors are considered. Subsidy types include capital subsidy in the pre-construction and construction period and rent supplement programs in the long-term operating stage.

## 2. Development Costs

Development costs include the construction costs and interests related to the project. Construction costs include the hard and soft costs as follows:

- Gross floor area of residential units for buildings of 6 storeys or less;
- Gross floor area of residential units for buildings of 7 storeys or more;
- Gross floor area of mixed spaces (commercial and community) located on the first floor of residential buildings;
- Soft costs: estimated at 25% of the subtotal, these costs include permits, administrative fees, professional fees and taxes. This is a rough estimate and will depend on the construction approach;
- Contingency fund: estimated at 5% of the sub-total, this fund will be used in case of emergency during construction;
- Land costs: it should be noted that no costs associated with the land have been included, given the assumption that the land would be donated by the city and that no decontamination seems necessary.

Estimates are based on a cost per square foot sourced from the 2022 Altus Canadian Cost Guide for the greater Montreal area. The highest cost for the region was used, plus a 5% markup to reflect the likely increase in construction costs in the coming years. Given the difficulty of finding a reliable average cost per square foot for the first floor of mixed-use buildings, the price of office buildings was used, which is slightly lower than residential costs.

Finally, to determine the development costs, the amount of mortgage interest due – based on the initial financing – is thus added to the construction costs (detailed in figure 14).

Type	Total SQFT	Cost/SQFT	Altus 2022 (high)
Residential (< 7-storey)	5,511,843	\$273/sqft	\$273/sqft
Residential (7+ storey)	1,930,217	\$289/sqft	\$289/sqft
Ground-floor (Mixed)	1,139,338	\$263/sqft	\$263/sqft

Figure 13. Gross Floor Area and Construction Cost by Type

	Quantity (sqft)	Cost per unit	Cost
<b>Building</b>			
Residential (< 7-storey)	5,511,843	\$273/sqft	\$1,924,723,059
Residential (7+ storey)	1,930,217	\$289/sqft	\$713,530,681
Ground-floor (Mixed)	1,139,338	\$263/sqft	\$301,699,143
Underground Parking			\$79,916,058
Subtotal			\$3,019,868,940
Soft costs		25%	\$754,967,235
Contingency fund		5%	\$150,993,447
<b>Total Building costs (A)</b>			<b>\$3,925,829,622</b>
<b>Finance</b>			
Federal Loans (Co-I, AHIF, RCFI)		-%	\$449,100,000
Private Loan @ 5%		5%	\$74,051,739
Social Loan Programs @ 2%		2%	\$51,500,000
Private loan MLI		1%	\$162,139,072
<b>Total Interest (B)</b>			<b>\$736,790,811</b>
<b>Total Development costs (A + B)</b>			<b>\$4,662,620,433</b>

Figure 14. Breakdown of Development Costs

### 3. Revenue & Expenses

The following section discusses the operational revenue and expenses incurred by the CLT over the 35-year operational period.

As the project completes its construction phases and commences tenancy and operations, cash revenue comes in through various rents and subsidies. However, the CLT will also have numerous expenses such as repayment of construction loans (including interests), taxes (which would presumably be waived), building of a reserve fund for major renovations, annual maintenance charges, and property insurance.

With construction commencing in the third year, building insurance costs need to be borne by the CLT for the proportion of buildings constructed during this year. As of Year-4, revenue is generated through sale of equity ownership units and rental income for residential, commercial and parking spaces. 10% of this revenue will be set aside as the reserve fund for major renovation which will occur after 25 years.

Sale of equity units shall continue until Year-13, following which a drop in revenue can be observed (see figure 15). Between years 8 and 17, the CLTs expenses will exceed that of revenue as the bulk of development loans are repaid. As of Year-18, repayment of certain loans, such as the estimated private loan, will be complete, and revenues shall begin to exceed expenses.

Construction of all residential, commercial and parking components will be completed by the end of Year-20, and all loans will be repaid by Year-30. During this time, the gap between revenue and expenses will widen with revenue far exceeding expenses. It is assumed that the

extra revenue will be used to repay the municipality for operational assistance or any operational loan that may be taken, until Year-28 where the CLT will have paid off any and all financial aids (see appendix). Between years 28 and 35, with extra revenue coming in, the CLT will have considerable capital at its disposal, which may then be diverted to other social housing endeavors within the city. As of Year-35, it is estimated that revenues will be as high as \$346 million, with \$66 million in expenses.

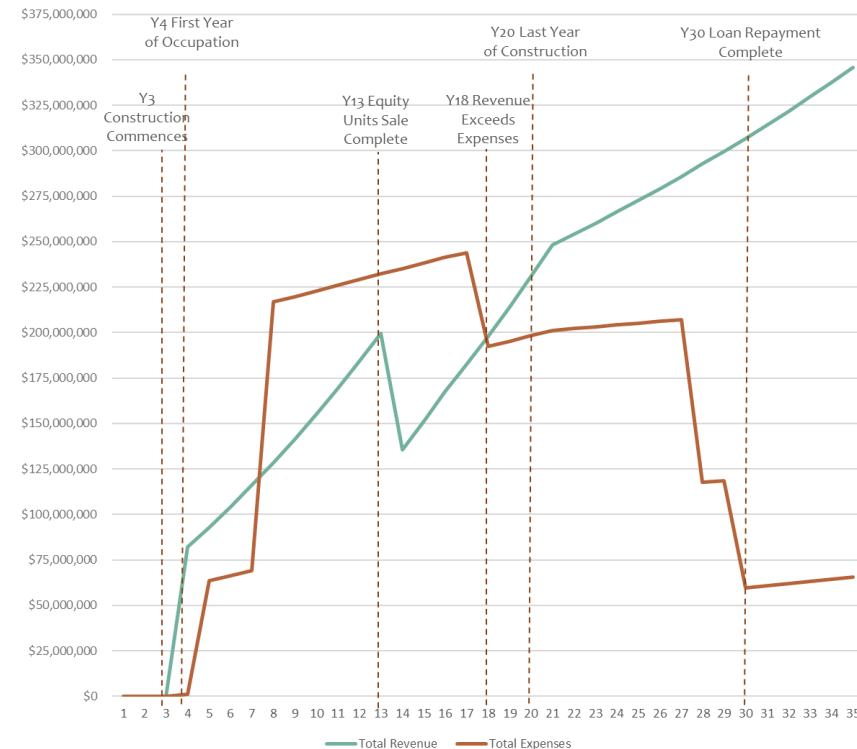


Figure 15. Revenue and Expenses Projections – 25 Years



## 4. Financing

In order to create as many affordable housing units as possible, this project will explore financial support from a variety of sources. The proposed development is composed of a mix of market rent rate units, affordable units, rent-gear-to-income units, and affordable homeownership units. And as such, it is important to be mindful that each of these will be eligible for different funding opportunities. Nonetheless, the project is eligible for financing from all levels of government, particularly with the help of these programs mentioned in this section.

The units are comparable to community norms in terms of floor space and amenities; the proposed rents are lower than the current average market rent for the Cote des Neiges neighborhood (CMHC) even considering that the units are brand new. The NHS prioritizes the creation of units at affordable rent, with preference given to rent-gear-to-income. This is evident in the abundance of resources that are most readily available for subsidized and affordable rental housing. Comparatively, it is safe to anticipate that it's going to be more challenging to secure funding for market-rate rentals and co-ownership units. Figure 16 shows the proposed tenure models and which funding sources each is eligible for.

Thus, the project will leverage other conventional as well as unconventional sources. As per typical development procedure, construction loans will be acquired from financial institutions, such as [BMO](#), that have expressed interest and financial commitment towards affordable housing and infrastructure projects that increase access to housing and promote economic development. The financial analysis accounts for considerably high bank interest rates, especially compared to those of CMHC's. In the long run, the co-ownership model is set to generate funds as units are sold off. Consequently, the 15% "profit" made from unit sales will go towards the reserve fund and to fulfill other expenses such as loan repayment.

Notably, provincial and federal funds are generally supportive of covering a great percentage of capital costs involved in the development of affordable housing (see Figure 17). Assistance

Funding Options	Tenure Model			
	Rentals Subsidized	Rentals Affordable	Rentals Market-rate	COOP Co-Ownership
Rent Supplement Program (PSL)	✓	✓		
PHAQ - Programme d'habitation abordable Québec	✓	✓		
Seed Funding	✓	✓	✓	✓
Rental Construction Financing Initiative	✓	✓	✓	
National Co-Investment Fund (New Construction)	✓	✓	✓	✓
Affordable Housing Innovation Fund	✓	✓	✓	

Figure 16. Tenure Models and Eligible Funding Sources

from the Quebec government will be available for low-income households to live in private-sector rental dwellings or dwellings belonging to housing cooperatives or non-profit organizations, and to pay a rent similar to that for low-rental housing, i.e. rent equal to 30% of their income. This signifies that the project, post development, will have to sustain itself solely financed by rents and rent supplements, while also producing enough surplus to compensate investors and allocate funds toward the reserve replacement. To this end, a new initiative similar to PSL (Programme supplément au loyer) is proposed which would provide uncapped operating funding for rent geared to income units. This program could potentially be an alternative to the currently in place AccèsLogis component that offers capital and operating funds for the first 5 years of tenancy.

[CMHC's funding](#) (SEED, Co-investment, Rental Construction Financing Initiative) will make up around 20% of the total capital cost. Funding from Co-investment would be provided in the forms of a repayable loan and a forgivable loan that is rewarded for Higher Performance in Affordability, Accessibility and Energy Efficiency. Also on the federal level, the project is also

Funding Options/ Contribution to	Capital Cost	Operating Cost
Low-Rental Housing (HLM)		25% of the household's income- Reimburses a share of operating deficit
Rent Supplement Program (PSL)		25% of the household's income- Covers the difference between the portion payable by the tenant and the rent agreed upon with the landlord
Programme d'habitation abordable Québec - PHAQ	Up to 80% of total eligible costs: 3,007.45\$/sqm for residential buildings of 7+ storeys	
AccèsLogis	Loans for feasibility and construction+ additional support	\$ in the form of rent supplements
Seed Funding	Pre-feasibility, up to \$150k per project	
Rental Construction Financing Initiative	Up to 100% loan to cost	
National Co-Investment Fund	Repayable loan: up to 95% of loan to cost	
National Co-Investment Fund	Forgivable loan: to bridge the gap, for higher performing projects	

Figure 17. Details of Considered Funding Sources

eligible for funding from the Federation of Canadian Municipalities (FCM), particularly from the Green Municipal Fund which aids in the construction of energy-efficient new builds that emit lower GHG emissions.

As for provincial funding, contributions from Programme d'habitation abordable Québec, which is a program that provides funding for rent geared to income and affordable housing, is targeted. Certainly, the proposed project will be able to compete and succeed in receiving a great deal of support from Quebec as a province that has always been particularly supportive of affordable housing. Furthermore, it is speculated that in the coming years, the PHAQ program will receive a bigger budget to disburse toward real estate development as AccessLogis is phased out and replaced. The project makes a commitment to keep the affordable units as “affordable” in perpetuity, with rent increases after initial occupancy being made in accordance with rent increase guidelines and rules. This will play a role in instilling good faith with funders who often require a 25+ year affordability commitment.

Moreover, in order to fill the funding gap, the project will look towards philanthropist grants, such as the Fonds d'investissement de Montréal (FIM IV), the Fonds immobilier de solidarité (FTQ), Caisse Desjardins des travailleuses et travailleurs unis, and other financial partners that promote the development of real estate to help two-parent and single-parent families. Allowance will also be made for the potential future prevalence of Student Union-led affordable housing initiatives- similar to UQAM's- [UTILE](#)- that can be successful in pooling significant funds to invest into social purpose real estate. All of this in combination with a new tool that is introduced: low interest, high social impact REIT (real estate investment trust) community bonds. This tool targets institutions such as The Canadian pension fund, the Caisse de dépôt et placement du Québec and other patient funders who would be open to investing into the community without necessarily claiming ownership of any individual units or buildings. A successful precedent for this type of tool has been set in Toronto's Centre for Social Innovation ([CSI](#)) that has successfully, with the backing of the City of Toronto, been able to secure a better interest rate from Alterna Credit Union. In this model, the government of [Canada's guarantee](#) of the community bonds provide an extreme reinforcement as a substantial and reliable source to finance the Blue Bonnets site development.

Additionally, and granted that the City of Montreal acknowledges the long term social and economic benefits of this project, this model accounts for support from the municipality . This support, not currently provided for projects of this nature, could be in the forms of land donation as well as waivers for the site plan and building permit fees (capital contribution), and property tax abatement (annual operational contribution depending on post-construction assessment). Furthermore, the

financial model counts on a substantial GST/QST rebate recovery particularly for subsidized and affordable units run by nonprofits or charities.

Figure 18 summarizes the breakdown of anticipated financial sources for the project. For a more detailed breakdown of the preliminary financial analysis of the project.

Funding Source	Type	Total over 20 years	Notes
Municipal Funding	Grant	\$103,500,000	Assume max \$5M per building for 30% of our buildings
PHAQ	Grant	\$567,739,535	Assume a max of 3 007,45\$/sqm for a total of 629259.046 sq m residential space
SEED Contribution	Grant	\$2,070,000	Assume \$100k for 30% of our buildings
Co-I Forgivable Loan	Grant	\$17,550,000	3% of Co-I loan according to CMHC Viability Assessment Calculator
Co-I Repayable Loan	Loan	\$538,200,000	Assume around \$26M for 30% of our buildings, 92% of Co-I loan according to CMHC Viability Assessment Calculator
CMHC AHIF	Loan	\$150,000,000	Assume Fund is renewed for over 20yrs
CMHC RCFI	Loan	\$260,000,000	Assume min 50% of buildings are eligible for 95-100% LTC
FCM GMF	Grant	\$4,140,000	Assume 200,000\$ for 30% of buildings
Community Impact Fund (REIT)	Loan	\$100,000,000	at 2% interest for 25 yrs
Grant from Social Investors	Grant	\$10,000,000	
Student Union Contribution	Loan	\$4,500,000	at 2% interest for 25 yrs
Equity: Unit Sales	Equity	\$789,851,920	From Co-Ownership Units
Private Loan	Loan	\$493,678,260	at 5% interest
MLI insured Private Loan	Loan	\$1,621,390,719	at 1% interest
<b>Total Sources</b>		<b>\$4,662,620,434</b>	

Figure 18. Financing Breakdown by Source

## 5. Building Level Assessment

### Building A- Private Loans

Obtaining private loans will be necessary for financing a number of buildings either in full or in part. However, due to relatively high interest rates (5-6%), adjustments to the tenure structure and the unit types would have to be made in order for the financial model to remain viable. In this example, the count of single and double bedroom units is greater than that of 3-bedroom units. Building A is made up solely of Co-ownership and rental subsidized units.

<b>Quick Facts</b>	
<b>100</b> units	
<b>7</b> stories	
<b>17,025 sqft</b>	commercial and community space
<b>Tenure</b>	
<b>40%</b>	Rent subsidized
<b>60%</b>	Limited equity co-op
<b>Unit breakdown</b>	
1 bdrm	35%
2 bdrm	35%
3 bdrm	15%
4 bdrm	20%

In this scenario, the project would be bringing in \$94,6 Million over 25 years, and would have a net surplus after 31 years. While selling prices will remain lower than if the (co-ownership) units were to be developed for profit, the need for larger (3 and 4-bedroom) rental units will not be addressed.

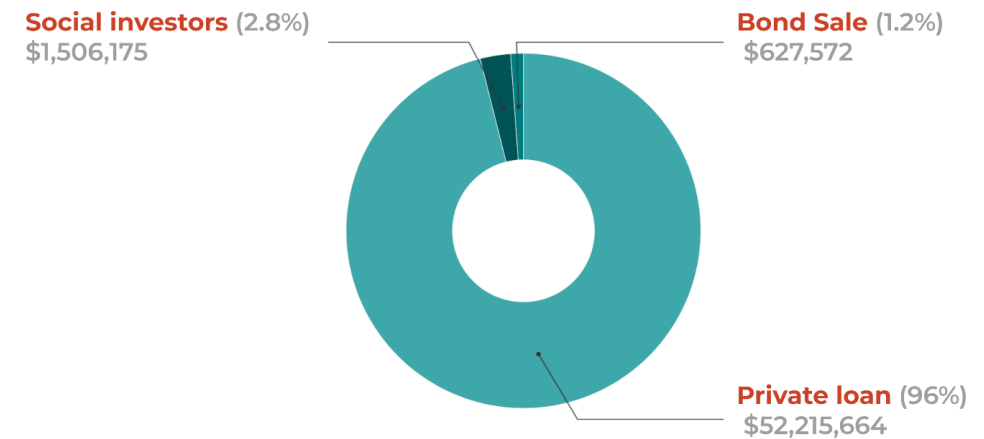


Figure 19. Proposed Financing Sources for Building A

## Building B- CMHC Supported

With support from the CMHC, a number of positive changes can be made. Here, this development will obtain a substantial low interest CMHC CO-Investment repayable loan, as well as a number of grants such as the Co-Investment forgivable loan, and the FCM-GMF Grant. With this investment, significantly more market rate rental and affordable rental units can be introduced, as well as a greater proportion of 3 and 4 bedroom units, which are critically lacking in the region.

**Quick Facts**

**100** units  
**7** stories  
**17,025 sqft** commercial and community space

**Tenure**  
**25%** Rent subsidized  
**25%** Affordable  
**20%** Market rate  
**30%** Limited equity co-op

**Unit breakdown**

1 bdrm	15%
2 bdrm	20%
<b>3 bdrm</b>	<b>45%</b>
4 bdrm	20%

The building proposed in this scenario would bring in around \$83,4 Million over 25 years, and would have a net surplus after 26 years. Private loans will still have to be acquired, however the more these can be minimized, the more current shortcomings of the housing market can be addressed.

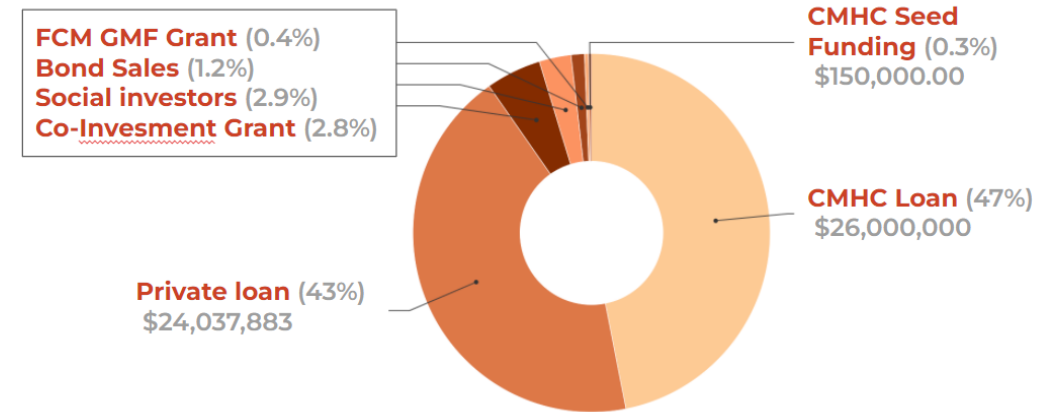


Figure 20. Proposed Financing Sources for Building B

## Building C- PHAQ Supported

New provincial legislation is certainly encouraged; however, requirements for municipalities to provide 40% of the capital funds poses a serious problem for the smallest order of government. That being said, municipal support combined with that of the province would help create more possibilities in facilitating such projects.

<b>Quick Facts</b>	
<b>28 units</b>	
<b>5 stories</b>	
<b>7,053 sqft</b>	commercial and community space
<b>Tenure</b>	
<b>50%</b>	Rent subsidized
<b>50%</b>	Affordable
<b>Unit breakdown</b>	
1 bdrm	20%
2 bdrm	20%
3 bdrm	30%
4 bdrm	30%

In the scenario presented here, the entire building consists of affordable and subsidized units, with the majority being three and four bedrooms. This building would be bringing in \$7,7 Million over 25 years, and would have a net surplus after 24 years.

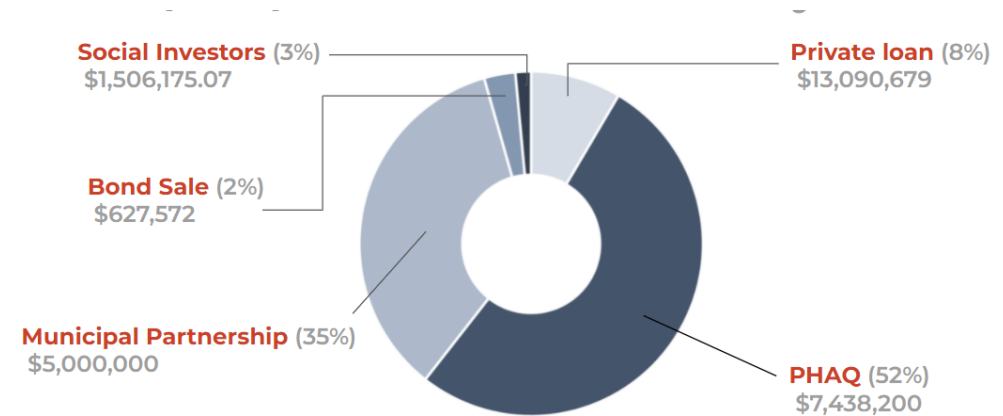


Figure 21. Proposed Financing Sources for Building C

## Conclusion

This report is the culmination of a great amount of research and creative labor. It details all the steps taken and assumptions made in order to arrive at precise figures through many attempts and iterations. Incorporated into this analysis is the feedback from professionals representing various actors involved in the affordable housing field in Montreal and in Canada. Furthermore, it is important to note that this was a great undertaking of a macro analysis of the financial feasibility associated with the development and operation of 6,721 residential units in Cote des Neiges' Blue Bonnets Hippodrome site. And as such, all costs and amounts noted in this report are associated with this grand scale project as a whole and over the span of many years.

From the onset, one of the key priorities was to avoid losing sight of the greater vision for this project; that is, to provide affordable housing with a social purpose in what will hopefully be an inclusive and sustainable neighborhood. This proved to be extremely challenging as there is currently a significant mismatch between the rising development costs and the limited support provided for projects of this nature.

The main discovery made through this analysis is that a project of this size and nature, if not well supported by government funds, will either be unfeasible for the developer or unaffordable for low income tenants. In an optimistic scenario, the developer would have increased government subsidy at their disposal in lieu of further high interest loans from private institutions. Ultimately, this analysis makes a case for the inescapable need for more support from the public sector. The findings implore all levels of the government to allocate more funding towards existing programs or introduce new financing programs and tools to help bridge the gap. Beyond the project at hand, this report prompts an important conversation regarding the long term sustainability of the entire housing sector.

On a more positive note, this study has found that with governmental support, particularly for the first 20 years of development period and a total of 30+ years of operation, a project of this scale can meet development and operational costs. At a future point, the project promises to turn profitable which can then be directed towards other public interest projects, more social and affordable housing perhaps. This creates a scenario of long-term financial sustainability which is often overlooked when considering proposals for affordable housing. Furthermore, the costs and benefits of such a project goes well beyond the limits of finances; the social benefits of housing the population at affordable prices benefits not only the tenants, but the community at large. It is therefore paramount that governments, policy makers, planners, and the citizen community at large, support greater investment in social housing, and make strides to regulate the housing market in the country.

## Mise en garde

This financial assessment is based on a preliminary analysis. Although we ventured to create realistic feasible scenarios, they remain hypothetical and subject to change. We are not qualified experts on the topic of affordable housing development; however, we've taken into consideration a tremendous amount of literature, feedback from professionals, and the input of other teams.

Please keep in mind that the affordable housing landscape in Montreal is an ever-changing one. It is challenging – and in fact impossible – to predict market trends or COVID-19 impacts on the costs and supply of materials and labor. We estimate that it will be quite some time before the housing market stabilizes. If not, we fear that governmental support in its current state may never catch up with the rapidly growing need and costs.



# Appendix - I

