MEMO / NOTE DE SERVICE

To / Destinataire	Mayor and Council	File/N° de fichier:
From / Expéditeur	Debbie Stewart General Manager Strategic Initiatives Department	
Subject / Objet	Housing Acceleration Plan (Bloomberg Methodology)	Date: December 18, 2025

As directed by motion FCSC-PHC2025-03-04, the purpose of this memorandum is to provide Council with information on the methodology developed by Bloomberg Associates (BA) to explore what makes a housing project financially viable.

BA's methodology, adapted to the Ottawa market with the support of a sub-group of the Housing Innovation Task Force, is designed to help evaluate the anticipated effectiveness of the actions identified within the Housing Acceleration Plan. It is not intended to serve as an assessment of the strength or performance of the local real estate market.

The results of this analysis will inform the Housing Acceleration Plan reports brought back to Council for its consideration over this and the next term of Council. It is intended to support Council's decision on whether to adopt a recommended action.

The information included below has been provided by Bloomberg Associates. In addition to this information, detailed briefings for interested Members of Council will be offered in January 2026.

Bloomberg Feasibility Model

Bloomberg Associates is the pro-bono consulting arm of Bloomberg Philanthropies, working explicitly with mayors to support cities around the world across nine different practice areas. Bloomberg Associates began working with the City of Ottawa in August 2024. In May 2025, the housing practice, led by Namon Freeman, began supporting the City's Housing Innovation Task Force by providing bespoke advisory services and leading the development of a feasibility model.

BA leverages staff expertise in development finance, planning, and housing policy to undertake development feasibility studies for many of its municipal clients. This work consists of creating development scenarios to better understand the types of housing that are built within the current market. BA then adjusts micro-economic, macro-economic, and policy variables to observe how

development scenarios respond. The result of this work ultimately informs policy recommendations and decisions. BA has completed these types of studies in other markets such as Charleston, South Carolina, Tampa, Florida, and other cities across the United States of America.

1. Foundational assumptions

BA's methodology for assessing real estate project feasibility is built on several foundational assumptions about housing market dynamics:

- Market conditions, pricing trends, and development costs can be reliably researched and quantified. Doing so underpins BA's approach to housing policy in any city that BA works with.
- Real estate developers operate as rational, profit-maximizing entities, driven by financial returns and risk assessment.
- Projects must "pencil out", or demonstrate sufficient financial returns to justify investment, for developers to choose to proceed with them and to be able to obtain necessary financing.
- Real estate developers generally do not "self finance" their projects and are generally dependent on third parties for equity contributions and/or debt financing; these partners and lenders are driven by their own financial return targets and risk assessment metrics.
- Developers can choose between purpose-built rental and homeownership product types based on prevailing market conditions and projected returns.
- While there is no substitute for a detailed "pro forma" analysis conducted by a developer to determine the financial feasibility of a given project, assumptions about "typical" development projects can inform assessments about the broader real estate market. A "typical" project represents a development with average characteristics, construction methods, costs, and pricing for its building typology and submarket location.

All of these assumptions are incorporated into BA's modelling approach, which aims to understand local property market dynamics and real estate developer decision-making to inform policy.

2. Methodology: Local Market Assumptions

BA conducts comprehensive research to develop a nuanced understanding of a local real estate market, including:

A. Building Typology Assessment

Identifying typical building types in the market (e.g., single-family detached, townhomes, low-rise multifamily, mid-rise, high-rise). This will vary by market - in some markets, there is a thorough mix of lower- and higher-density housing stock, whereas in other markets, particularly in urban areas, only higher density developments exist. BA primarily focuses analysis on what is still being built in the market, rather than on the full stock of existing housing.

Once BA has identified typical building types in a market, standard characteristics for each typology are documented including typical unit sizes and construction methods. While of course these can range and vary, BA tries to gather as much data as possible to inform what a “typical” unit in each typology looks like and how it is built. BA also captures details about common variations in building types (e.g., whether they have elevators or underground parking) so that these variations can be incorporated into our modelling approach.

B. Submarket Differentiation

Next, BA aims to understand the distinct neighbourhoods and submarkets within each city. This entails characterizing each area of a city by predominant building typologies and land, rent, and sales prices. Oftentimes, this mapping will roughly mirror existing neighbourhood or political boundaries within a city, with some adjustments generally. In conducting this exercise, the goal is not to create a static map that strictly defines submarkets. Rather, the goal is to generally understand how many different sub-markets there are, and to group these into “tiers” that can be incorporated in the analysis. This helps capture variations in cost and revenue assumptions by sub-market.

For example, a city may have a built-out historic downtown neighborhood in which rents and sales prices are highest, relative to other neighborhoods. It may also have several “up and coming” urban neighbourhoods in which sales and rental prices are on average approximately 30 per cent lower than in the most expensive neighbourhoods. And it may have several more suburban neighborhoods, in which sales and rental prices are again lower. In this example, BA would identify three broader “sub-markets”, and capture average sales, rental, and land prices for each of them. This would then inform assessments of future projects by allowing BA to map specific sub-market attributes to them, rather than having to start from scratch with assumptions that could vary widely based on location.

C. Comprehensive Cost Analysis

Next, BA works to develop an understanding of all the cost components that impact development feasibility. These include the following:

- Hard Costs: These are generally defined as direct construction expenses including materials, labor, and site preparation. These costs are the biggest category of any real estate development project and are often measured by square footage.

- Soft Costs: These are generally defined as costs incurred for professional fees (e.g., for architecture, engineering, design, and project management support) or insurance costs. These costs will vary by project type, and each developer captures these slightly differently, but they are a part of any project. Some developers will cover some soft costs internally (e.g., by having in-house staff do design or project management work), while others will outsource everything. However, all developers

will account for these costs in their “pro formas”, and they are generally represented as a percentage of hard costs (and therefore also by square footage).

- Fees and Taxes: These are often also considered as “soft costs”, but BA likes to capture these as a separate category because they can vary widely from jurisdiction to jurisdiction, and because they represent an obvious lever that jurisdictions can use to impact the housing market. Many of BA’s modelling approaches look at the impact that varying fees and taxes can have on development feasibility. These costs are generally expressed per unit, by square footage, or as a percentage of rental or sales prices.

- Land Costs: This is the estimated purchase price or value of land. Land costs generally are related to the sub-markets discussed above. Land costs also reflect zoning permissions, or what can legally be built on a given piece of land, and therefore the model tries to capture the average price of land for each building typology in each sub-market. In many cases, developers will already own land that they are trying to develop. However, they will reflect the market value of that land on their “pro formas” to justify their projects. These costs are usually captured either per acre of land, or per buildable square footage.

- Development Timeline and Carrying Costs: Time is one of the biggest factors in the cost of real estate development. This is because developers use varying sources of financing to cover pre-development and construction costs, and these loans generate significant interest payments or come with significant costs of capital. The longer a project’s pre-development or construction phase takes, the higher the “carrying costs” for developers. Therefore, the model aims to understand “typical” pre-development and construction phase duration and any variations by building typology and sub-market. The model also captures financing and interest costs before and during development.

- Sales and Marketing Costs: These costs generally include commissions, marketing expenses, and closing costs. They will vary by market and by the type of housing “product” (e.g., for sale versus for rent, and the size of a development). While these costs are generally not that significant, they impact a project’s returns and therefore must be considered.

- Operating and Maintenance Costs: For purpose-built rental products, ongoing property management, maintenance, repairs, utilities, and taxes all get subtracted from revenue to impact gross profits. Therefore, these costs play an important role in understanding the medium- and long-term profit potential of a project. They are generally expressed as a percentage of total rental revenue.

- Other Development Cost Assumptions: This can include various other costs related to development, including the typical financing structure of projects in a given market, typical equity requirements, and contingencies that developers build into account for cost overruns. These assumptions are often fairly typical across most markets, but the model aims to ensure that any variations specific to a local market are captured.

D. Comprehensive Revenue Opportunity Analysis

In addition to fully capturing all of the cost components that impact development feasibility, the model of course also needs to look at the other side of the ledger: revenue. Specifically, this means understanding sales and rental prices across the real estate market. For sales prices, BA aims to understand market-rate pricing by unit type and building typology, adjusted for location premiums or discounts. For rental pricing, BA aims to understand achievable rents by unit type and building typology, adjusted for submarket dynamics. In both cases, prices are generally expressed by price per square foot, to allow for normalization and comparative analysis across units of different sizes.

3. Methodology: Data Sources and Consultation

BA's analysis draws upon multiple authoritative sources to ensure accuracy and credibility of the model assumptions on the local market. These sources generally fall into three categories. First, BA gathers perspectives and input from local government staff (in this case, with City of Ottawa staff focused on housing). This can include general observations on market dynamics, a review of fee schedules and related documents, and an overview of any previous studies and/or reports prepared by, or for, the City.

Second, BA leverages industry and market data. Publicly available data (e.g., listings and adverts) is scanned to understand sales and rental market dynamics. BA also analyzes proprietary data from companies like the Altus Group or from estimating databases like RSMeans. These proprietary data sources capture significant levels of detail around construction costs, which are important to incorporate into the model.

Finally, BA works to capture input from the local developer and institutional finance community directly. This is both to validate initial findings, and to obtain additional insights on current market conditions and underwriting standards. In the case of Ottawa, BA consulted regularly with active developers serving on the Housing Innovation Task Force.

4. Methodology: Financial Feasibility Modeling

Once BA has gathered all the information laid out in part two (local market assumptions), this information is used to calculate standard real estate industry financial metrics to determine the viability of a "typical" project for each building typology in each submarket. It is important to note that these metrics can be calculated in different ways, meaning the feasibility assessments may

differ slightly from those of individual developers or funders. However, the goal of the model is not to assess specific projects, but rather to inform typical development scenarios. Therefore, BA prioritizes the consistent application of the methodology across all building typologies and submarkets to enable effective comparison.

The metrics calculated include:

A. **Yield to Cost** (Simplest metric for cross-project comparisons for purpose-built rental projects)

For purpose-built rental projects, the yield to cost (YTC) is calculated, which measures the annual yield (rental income) of a potential project relative to total development costs. YTC is calculated by dividing the first year stabilized net operating income (NOI) by the total development costs, which include land acquisition costs aggregated at the project level. Importantly, the YTC calculation does not consider the impact of pre-development or development timelines or any financing costs; it is a simplified metric that compares stabilized income to total invested capital. This metric matters because it allows developers and investors to assess whether the stabilized return justifies the development risk, and because it can be compared directly to prevailing market capitalization rates to determine if a project will create value upon completion. Generally, developers and their financing partners require a YTC that exceeds the prevailing market cap rate by at least 100 to 200 basis points (one to two per cent) to justify taking on development risk rather than simply acquiring existing stabilized assets. In Ottawa's current market, this typically translates to an ideal YTC in the range of 6.5 per cent or higher.

B. **Gross Margin** (Simplest metric for cross-project comparisons for homeownership projects)

For homeownership developments, the gross margin is calculated, which is the total project revenue minus total costs, expressed as a percentage of revenue. The calculation includes all development costs (land, construction, fees) aggregated at the project level, with an assumed exit immediately after construction is complete. Financing costs include loan origination fees, provincial land transfer taxes, and sales commissions. Gross margin provides a threshold to measure profitability based on what is considered a typical project and indicates a project's ability to absorb cost overruns or market softening without becoming unprofitable. It represents the cushion protecting lender and equity partner investments against downside scenarios. In Ottawa's challenging market, developers and financing partners typically require margins above 20 per cent for true feasibility. Projects with margins of 10 to 20 per cent may proceed under certain circumstances but face heightened scrutiny, while projects below 10 per cent are generally considered too risky to attract financing.

C. **Internal Rate of Return** (More complex metric, used to compare between homeownership and purpose-built rental projects and to properly capture the impact of timing on returns)

Internal Rate of Return (IRR) represents the annualized rate of return on invested capital over the entire project lifecycle, accounting for the timing of all cash inflows and outflows from initial

investment through project completion and eventual exit. This metric is critical because it allows developers and their financing partners to compare the risk-adjusted returns of a real estate project against alternative investment opportunities and to assess whether projected returns justify the development risk. IRR is particularly sensitive to project timing—longer development periods and delayed revenue realization reduce returns, while faster execution and earlier cash generation improve them. For a project to be considered feasible, developers and their equity partners typically require IRRs of at least 15 per cent or higher, though specific thresholds vary based on market conditions, project risk profile, and investor requirements.

For homeownership developments, IRR is calculated by measuring the annualized return rate that accounts for the timing of negative cash flows until the project is fully sold. The methodology treats land costs as an upfront investment and sequences development costs over the project lifetime based on typical construction timelines. Development charges are incorporated into predevelopment and construction loan payments, with associated interest costs included in the overall financing assumptions. Financing costs in the model include loan origination fees, provincial land transfer taxes, and sales commissions. The model assumes that units are sold once construction is complete, allowing BA to model the timing of revenue realization against the phased cost outlays.

For purpose-built rental developments, IRR is calculated by measuring the annualized return rate that accounts for all cash flows—both costs and rental income—and their timing over the investment hold period. Land, development, and financing cost assumptions for purpose-built rental projects are identical to those used in homeownership IRR calculations to ensure consistency. However, the revenue model differs significantly: it assumes full rental cash flow begins immediately after construction is complete, with no ramp-up period to full occupancy. The model assumes an exit event 36 months after construction completion, with the property sold at approximately a six per cent capitalization rate based on stabilized NOI.

5. Ottawa-specific Findings and Results

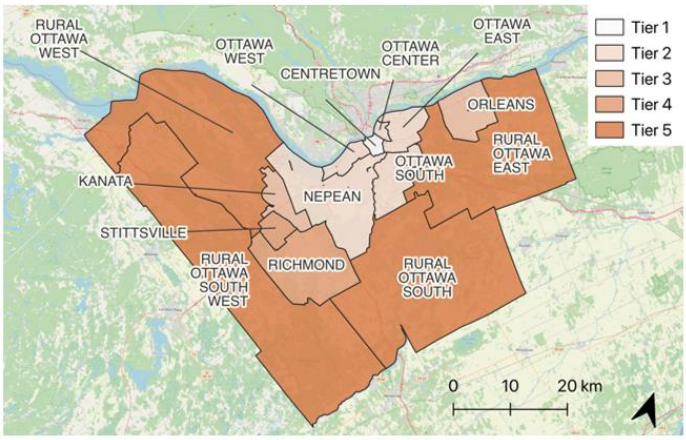
A. Modeled Building Typologies

In Ottawa, the following six common building typologies were identified, and assumptions gathered for each:

Typology		# Floors	Avg. Unit	Construction type	Parking	Typical development project Site Size	# of units
High-rise Urban		12-60	~700-800 sq ft	Primarily concrete (with Wood and Steel)	Underground, ~0.6 spots per unit	~1-2 acres	~200+
Mid-Rise Urban		6-9	~700-800 sq ft	Primarily concrete (with Wood and Steel)	Underground, ~0.7 spot per unit	~1-2 acres	~120
Low-rise Urban		3-5	~850-950 sq ft	Wood-frame (stick)	Surface, ~1.1 spot per unit	~1-4 acres	~80-120
Stacked townhouse		3-4	~1400-1600 sq. ft	Wood-frame (stick)	Surface, ~1.1 spot per unit	~1-6 acres	~30-110
Townhouse (Suburban)		2-3	~1700-1900 sq. ft	Wood and brick	Surface/ garage, 1-2 spots per unit	~5-15 acres	~75-150
Single Family (Suburban)		1-2	~2000-2400 sq. ft	Wood and brick	Surface/ garage, 1-2 spots per unit	~5-15 acres	~50-90

B. Land Value Tier Assumptions

BA then assessed the sub-market dynamics, and identified five distinct submarkets, or “land tiers”, within the city. They are represented visually here:



Downtown “Tier 1” areas: Significantly above average land value

Very dense urban areas, e.g., Downtown/Centretown

Inner City Urban “Tier 2” areas: Above average land value

Dense inner and outer urban areas, e.g.,
Ottawa West, Ottawa East, Parts of Kanata,
Ottawa Center, Ottawa South, Nepean

Outer Urban/Dense Suburban “Tier 3” areas: Average land value

Low density urban and higher density suburban, e.g.,
Less dense parts of Kanata, Nepean; Denser parts of Richmond, Stittsville, Orleans

Suburban “Tier 4” areas: Below Average land value

Lower density suburban areas, e.g., in Richmond, Stittsville, Orleans and in rural areas

Rural/Township “Tier 5” areas: Below average land value

Township areas, with significantly larger lot sizes, e.g.,
Rural Ottawa W, Rural Ottawa S,
Rural Ottawa SW, Rural Ottawa E

It is important to note that this is a general categorization that allows BA to vary assumptions about land costs, rents, and sales prices across different areas of the city and is not a deterministic assessment of every development in every neighborhood. For example, while the Ottawa Centre and Nepean neighborhoods are categorized as "Tier 2," certain blocks or properties within those neighborhoods may be particularly desirable and therefore behave more like "Tier 1" areas with higher land values and achievable prices. By capturing broader submarket trends rather than parcel-level variations, BA can analyze development feasibility

city-wide and assess how policies might impact multiple project types across different contexts.

C. Feasibility Assessment Summary

BA then aims to assess the feasibility of each typology in each submarket, using a grid visual like the below:

Typology	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
High-rise Urban				N/A	N/A
Mid-Rise Urban				N/A	N/A
Low-rise Urban				N/A	N/A
Stacked townhouse					
Townhouse (Suburban)	N/A	N/A			
Single Family (Suburban)	N/A	N/A			

Each cell in the grid represents a typology/submarket combination showing the calculated metric for that scenario. Some combinations are marked "N/A" because they represent unrealistic development patterns not worth modeling (e.g., a 10 plus story high-rise in a rural area, or a single-family home in the downtown core).

As noted above, BA calculates two metrics for homeownership developments (IRR and Gross Margin) and two for purpose-built rental developments (IRR and YTC). The grids below present each of these metrics for the Ottawa market, color-coded to indicate which typology/submarket combinations are most feasible (green), maybe feasible (yellow), or least feasible (red).

D. Key Feasibility Drivers and Barriers

Several major factors driving current market dynamics are fundamentally outside the City of Ottawa's control. These include construction costs (particularly materials like concrete, which increased significantly following pandemic-related supply chain disruptions), interest rates, (which directly affect required developer returns), and broader macroeconomic conditions. While it is reasonable to expect that interest rates or materials costs may eventually decline, basing policy on such predictions would be imprudent, particularly given the equal possibility of further increases.

Rather than focus on factors beyond its control, the Housing Acceleration Plan aims to address the three primary pathways where the City’s own policies influence development feasibility.

1. Development Timelines and Process Predictability
The City's policies significantly impact pre-development and development timelines, which directly affect project costs through carrying costs and financing expenses. Plan review and permit approval timeframes translate directly into developer costs. Plans requiring unreasonably lengthy reviews, or review standards applied inconsistently, undermine predictability and complicate project planning. Policy changes that streamline these processes and improve timeline certainty could markedly improve development feasibility across all project types.

2. Direct Cost Impacts: Fees and Charges
City policies directly affect development costs, primarily through fees and charges. Development charges often exceed $50,000 per unit and prior to the Housing Acceleration Plan, had to be paid when plans were submitted, adding both a direct cost and significant carrying cost throughout the pre-development and construction periods. While these fees generate essential revenue for the City, and eliminating them entirely would be fiscally irresponsible, the City should clearly understand how they affect development feasibility and identify opportunities to reduce development costs while maintaining fiscal sustainability. The Housing Acceleration Plan includes actions that restructure payment timing, offer deferrals, and provide targeted reductions for priority project types.

3. Strategic Use of Public Land
The City, along with provincial and federal entities, controls significant land assets. While land represents just one cost among many in real estate development, contributing public land to projects dramatically improves feasibility and provides leverage to advance policy goals such as higher-density development, affordability requirements, or other public benefits. Each potential land contribution would require case-by-case evaluation, but there is substantial opportunity to more strategically deploy publicly controlled land to catalyze development aligned with City objectives.

The methodology described in this memo will be used to undertake a market-informed evaluation of specific recommendations included in the Housing Acceleration Plan, helping ensure that potential policy interventions are calibrated to meaningfully improve development economics and achieve the City's housing goals.

If you have any further questions on the information provided in this memorandum, or if you are interested in receiving a briefing on the feasibility model, please contact me at Debbie.Stewart@ottawa.ca.

Sincerely,

Debbie Stewart
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cc: Senior Leadership Team
Strategic Initiatives Department Leadership Team
Chief Communications Officer, Public Information and Media Relations