Housing Assessment Resource Tools (HART)

More Housing Here

Understanding how many homes could be built on government land

A report from the Housing Assessment Resource Tools (HART) Project

Prepared by:
Rudrasen Sheorey

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1. Introduction

1.1 Looking at the Housing Crisis: Exploring Potential Solutions

Canada is in the midst of an unprecedented housing crisis that has been brewing for several decades. Rising demand and limited supply, along with rising costs and a growing population, have propelled this crisis to outsized proportions.

One of the rising costs of housing over the last decade has been the land to build on. Finding suitable land for housing development, particularly affordable housing development, is extremely difficult. The cost of land has risen nearly three times as fast as the cost of building in Vancouver, and many communities across the country are facing land costs that are multiples higher than they were a decade ago. The cost of housing development, already significant, is inflated by land costs, which in many communities can be upwards of 30% of the total costs of construction.

There are strategies to lower these rising costs, and land is at the center of it. By using public land for housing development, parcels already in the public trust could remove nearly one-third of housing construction costs from the equation entirely. In this paper, we will investigate how much of an impact the use of public land could have in Canada by estimating housing yield on existing parcels of public land.

1.2 Purpose and Scope of the Study

This study aims to understand and quantify the potential for housing development on government-owned lands in Canada. By evaluating these lands, the study provides a systematic approach to classify and prioritize government land sites based on key factors, including proximity to existing infrastructure, current utilization, and site size. The goal is to demonstrate the development potential (the yield) of these lands and how they could contribute to increasing Canada's housing supply.

Using data from the Housing Assessment Resource Tools (HART) project, based at UBC, this study focuses on federal government land data from the following Canadian cities:

- Toronto
- Peel
- York
- Durham
- Halton
- Ottawa
- Hamilton
- Calgary
- Edmonton
- Gatineau

Through this approach, the study evaluates the amount of new residential floor space that could be accommodated on these government-held sites. By considering factors like amenity scores and parcel size, the study classifies these sites and estimates the potential gross floor area. This allows for an assessment of how many homes and people could be housed if these lands were developed to their full potential, demonstrating the significant impact that utilizing government land could have on the housing landscape in Canada.

1.3 Why Publicly-Owned Lands?

These lands offer a significant opportunity for housing development, as they are publicly owned and can be repurposed more efficiently than acquiring private land. Acquiring private land typically involves negotiating a purchase at market value with the landowner, who must also be willing to sell that specific parcel or parcels. An example of using public lands for affordable housing has recently been demonstrated by the Federal Lands Initiative where the federal government has provided land at no cost to organizations that can build affordable housing on these lands. Here are some advantages that public lands provide.

- **Zoning:** Public lands can often be expedited by the government and bypass municipal bottlenecks. This is because governments can direct development on these lands. An example that we can see is the setting up of Special Planning areas in Halifax where the province can directly make decisions related to zoning in these areas.
- **Location:** These lands are often located in prime locations, with access to existing transit and public infrastructure making them ideal for adding density. This also means that local infrastructure would require little to no upgrades, enabling development to proceed with fewer barriers.
- **Maximising underutilization of land:** Many of these lands contain existing buildings that underutilize the true developable potential of the site. For example, the post office located at 2405 Pine Street in Vancouver is on the Broadway corridor where similar land parcels are being developed to a height of 30 stories , while the post office building is just three stories. There are several such sites located in prime locations in Vancouver and Toronto that could be developed into housing that currently only have one- or two-storey buildings located on them.
- **Cost of Land:** With the government using land that they already own, they can roll in land at no cost to mitigate inflated land costs and enable these savings to be reflected in delivering more affordability.

2. Methodology of the Study

2.1 Overview of the study

The overall methodology of the study can be divided into six clear steps and works around the creation of three two aspects which are as follows –

Step 1: Sort parcels into **Site Size Classes** for each of the cities.

Step 2: Define **Amenity Score Classes** based on parcel proximity to key infrastructure.

Step 3: Calculate FSR values with a **Comparable Building Database**.

Step 4: Define **Building Density Classes** based on the FSR values for sites in the **Comparable Building Database**.

Step 5: Build an **FSR Matrix** that quantifies the FSR (derived from Step 3) that a site with a specific amenity score can achieve based on site size.

Step 6: Build a **Yield Table** that uses the **FSR Matrix** (derived in Step 6) and apply it on each of the mapped sites to determine the total gross floor area that can be accommodated on all the sites.

Step 7: Divide yield into different **Priority Classes** ranging from most suitable sites to least suitable sites.

2.2 Steps of the Study.

Step 1: Sort parcels into Site Size Classes

The HART project collected data on government lands in the selected cities between 2021 and 2023. Maps of these lands, built in collaboration with the municipalities, regions, and some provincial agencies, included federal, provincial, and municipally-owned land, included the following datapoints:

- Site size (in sq m)
- Location (coordinates)
- Occupancy (indicating whether the site was vacant or occupied)
- Municipality (in which site is the municipality located)
- Amenity Scores (a score that quantifies how well public amenities serve a site)

For more information on how HART developed these maps or determined amenity scores, read their methodology online. For this project, we recognized the need to classify sites in a way that would allow us to evaluate development scenarios effectively. To achieve this, we first categorized the sites based on size. Grouping sites of similar sizes would make it easier to assess their development potential.

This gave us our **Site Size Classes**:

a. less than 0.5 acres
b. 0.5 to 1 acre
c. 1 to 2 acres
d. 2 to 3 acres
e. 3 to 4 acres
f. 4 to 5 acres
g. 5 to 7 acres
h. 7 to 10 acres
i. 10 to 15 acres
j. 15 to 25 acres

Sites smaller than 0.5 acres were excluded, as they are typically too small and difficult to develop. We also set an upper limit of 25 acres, as this is the largest size for which we have comparable examples of successful developments. Projects larger than 25 acres would likely require extensive infrastructure upgrades and significant effort, making them less feasible for this study.

Step 2: Define Amenity Score Classes

What Are Amenity Scores?

Amenity scores are derived from the Proximity Measure Database published by Statistics Canada and the Canada Mortgage and Housing Corporation (CMHC). Drawing on various open data sources, the Proximity Measures Database reports on ten measures of proximity at the dissemination block level with national coverage. The measures capture the possibility of multiple points of access to a given amenity, and accounts for the size of service provision where relevant (for instance, weighting proximity to transit stops by trip frequency). CMHC provides a set of ten social inclusion proximity services and amenities it uses in scoring land. HART's methodology for deriving amenity proximity scores for land parcels comprises a 20-point system that measures walking distance to childcare, schools, healthcare, parks, and grocery sites. The allocation of the 20 points is organized as follows:

- Childcare (1)
- Primary school (1)
- Secondary schools (1)
- Healthcare (2)
- Pharmacies (2)
- Parks (3)
- Grocery stores (4)
- Public transit (4)
- Libraries (1)
- Community & Recreation Services (1)

A site that is well served by all the above amenities would receive a perfect score of 20 points while a site that is not served by any of these amenities would score 0 points. The amenity scores help identify which sites are best served by existing infrastructure and therefore ideal for development.

For our analysis, we looked at the maximum possible density that could be built on that site. In this regard, we divided the sites into three classes based on their amenity scores giving us our **Amenity Score Classes**.

- **High Amenity Score sites (20 - 16)**: These sites are served well by public transit and have several other amenities nearby.
- **Medium Amenity Score sites (15 – 11):** These sites are served by public amenities but may lack all high points due to missing out on having abundant public transit or grocery stores. These sites would still at least most likely be serviced by schools and other public facilities.
- **Low Amenity Score sites (10 - 1):** These sites have few of the crucial amenities required for an accessible, complete community.

Cross-referencing **Site Size Classes** and **Amenity Score Classes**, we are able to establish a preliminary prioritization: the highest priority parcels are the largest sites with the highest amenity scores, because these sites would be the most logical sites for development (greater densities are possible and infrastructure already exists).

Site Size Class and **Amenity Score Class** form the X- and Y-axis of our matrix.

Step 3: Calculate FSR values with a Comparable Building Database

The next step is to calculate the Floor Surface Ratio (FSR), which will help us understand the size of homes that could be developed on a particular parcel. To get the FSR numbers we built a comparable database that would help us inform the FSR values for different sites.

What is FSR?

Floor Surface Ratio (FSR), also known as Floor Area Ration or FAR, is a key metric used in urban planning and real estate development to regulate building size and density. It represents the ratio of a building's total floor area to the size of the lot on which it is built. FAR is calculated by dividing the total building floor area by the total land area of the site. Here's how it works:

FSR=Total Building Floor Area ÷ Area of the site

For example, if a site has an area of 10,000 square feet and the allowable FSR is 2.0, the developer can build up to 20,000 square feet of floor space, spread across multiple stories.

- **Higher FSR**: Encourages denser development, allowing taller buildings or more floor area within a given lot.
- **Lower FSR**: Implies less dense development, with smaller or shorter buildings relative to the size of the lot.

FSR helps regulate the intensity of land use and ensures a balance between open space, building mass, and infrastructure capacity in urban areas. For our study with site sizes and amenity scores, it was crucial to understand and quantify what FSR would work for each classification that we had built according to the amenity score and site sizes.

Building a comparative database to enable analysis

To estimate what each site (given its respective size and amenity score) could accommodate, it was essential to collate a database of comparable projects that considered various densities. This involved calculating the FSR of existing developments in Canada by analyzing site size, building height, and permit data to establish feasible density ranges. By studying comparable developments with specific characteristics, we were able to gain insight into the types of FSR that could realistically be achieved on different site sizes, helping guide future planning and development strategies. It is important to note that this methodology may reflect artificially suppressed densities in some communities. We decided to look at a variety of developments that had the following characteristics:

- Designed and completed in the last 5 to 6 years to ensure that we are looking at newer built developments that take into account new planning practices and zoning requirements.
- Built to high building & liveability standards and in a major municipality of Canada (Metro Vancouver & Greater Toronto Area).

The Rationale for choosing Metro Vancouver & Greater Toronto Area[1]

The selection of Vancouver and Toronto as comparable for development analysis is based on several key factors that reflect their shared urban design philosophies, architectural parallels, and reciprocal policy influences.

- **Approach to Urban Density and Design:** Vancouver and Toronto both embrace high-density urban planning with a commitment to enhancing livability. Vancouver's "Vancouverism" concept, which promotes tall, slim towers separated by low-rise structures to preserve light, air, and views, creates a balance of density and openness that enhances the urban experience. Toronto has adopted similar principles, particularly in developments like City Place, which applies Vancouver's podium-and-tower model, including guidelines for tower separation and floorplate size.
- **Sustainability and Transit-Oriented Design:** Both cities prioritize sustainable, transit-oriented development, with walkable streets, green spaces, and active transit options. Vancouver's leadership in sustainable transportation solutions—such as pedestrian-friendly streets and extensive cycling infrastructure—aligns closely with Toronto's recent advancements in green transit, making the two cities relevant comparables for sustainable urban planning.
- **High Building Standards:** Vancouver and Toronto showcase a commitment to high-quality building standards, with many Toronto structures mirroring Vancouver's materials, color palettes, and forms. These similarities underscore Vancouver's influence on Toronto's urban planning and design, ensuring aesthetic cohesion and structural excellence. By incorporating amenities and supporting high-end living, these developments set a benchmark for quality, offering insights for projects prioritizing aesthetics and durability across diverse development types.
- **Policy and Planning Influence:** Vancouver's zoning and development policies, especially those regulating tower separation and floorplate dimensions, have significantly shaped Toronto's urban planning framework. Examining projects in both cities provides valuable insights into how specific guidelines can affect urban density, resident satisfaction, and the character of neighborhoods.
- **Livability in High-Density Neighborhoods**: Vancouver's West End, with a population density comparable to Paris's most populated areas, demonstrates that urban density can coexist with a high quality of life. Vancouver's effective integration of green spaces, public amenities, and sustainable transit options in dense neighborhoods provides a valuable model for Toronto as it develops its own high-density communities. This approach highlights how thoughtful urban planning can enhance livability even in highly populated areas.

1 We note that using Vancouver and Toronto as models may not suit some communites, but for the intents and purposes of this study they provide a better idea of the kinds of density and yield that could be achieved with policies that have been implemented in Canadian examples.

These factors make Vancouver and Toronto ideal comparables, providing valuable insights for creating attractive, sustainable, and livable high-density communities through innovative urban design, policy, and architectural practices. Using the FSR comparables from these cities allows us to model homes on public lands that embody high-quality, livable urban design.

This approach emphasizes creative planning and a diverse mix of housing options. To ensure comprehensive comparables, we specifically included a range of development sizes and housing typologies—such as towers, mixed-use buildings, and stacked townhomes—reflecting the variety of housing options needed for dynamic communities.

This data was gathered on 64 different projects in Canada, including:

- Site size of the project (in acres)
- The FSR of the project (taken from the building/development permit)
- Height (no. of floors)

This data from the **Comparable Building Database** is entered into a matrix. Because the comparable developments we evaluated did not have amenity scores, we used building heights as a comparable replacement, because buildings that are taller and denser are generally in areas where the enough services and amenities to accommodate higher density (and thus are likely to have higher amenity scores). The matrix was developed as follows:

- **X-Axis:** Building Height (ranging in classes of 1 to 2 floors, 2 to 3 floors, 3 to 6 floors, 6 to 8 floors, 8 to 12 floors, 12 to 20 floors, and 20+ floors)
- **Y-Axis:** Site size (ranging in classes of sites less than 0.5 acres, 0.5 to 1 acre, 1 to 2 acres, 2 to 3 acres, 3 to 4 acres, 4 to 5 acres, 5 to 7 acres, 7 to 10 acres, 10 to 15 acres, and 15 to 25 acres)

Step 4: Define Building Density Classes based on the FSR values in the Comparable Building Database

Insights from Comparative Analysis and Building Density Classes

Looking at examples compiled in the **Comparable Building Database**, we determined that FSR classes and building heights tend to follow specific ranges that correlate with common development types. Townhome developments typically range from 2 to 3 storeys and lower FSR, followed by mid-rise multifamily buildings, which are generally 5 to 6 storeys. The next major category consists of buildings in the 14 to 18 storey range, with the final category being those over 20 storeys and higher FSR. This analysis allowed us to establish **Building Density Classes**:

- **Low buildings (0 to 6 storeys):** FSR range of 2.5 to 3.5
  - o Consisted mostly of townhomes, stacked townhomes, and lower-density multifamily developments
- **Medium buildings (12 to 20 storeys):** FSR range of 3.5 to 7
  - o Consisting mostly of medium-scale tower developments and some large master-planned developments.
- **High buildings (20+ storeys):** FSR range of 3 to 8
  - o Tower developments predominately located downtown with several large master planned developments.

We observed a significant variance in FSR as building heights increased. For larger developments with multiple towers, the tallest tower height was used for comparative analysis. Additionally, we found that smaller sites tend to have higher FSRs for the same building heights, while larger master-planned sites generally have lower FSRs due to the allocation of space for other uses, such as open areas and amenities.

Step 5: Build an FSR Matrix

To build an **FSR matrix** that we could derive housing yield from, we amalgamated our **Building Density Classes** with our **Amenity Score Classes**. Sites with higher amenity scores can sustain more density without excessive upgrades to public infrastructure, so we assume a relationship between the three classes of density with the three classes of amenity scores:

- **High Amenity Score sites (20 – 16 points)** = **High Density (buildings more than 20 storeys)**
- **Medium Amenity Score sites (15 – 11 points) = Medium Density (buildings ranging 12 to 20 storeys)**
- **Low Amenity Score sites (10 – 1 points) = Low Density (buildings up to 6 storeys)**

This is then fed into the **FSR matrix** that drives calculations. It has the following axis that helps to drive calculations.

- X-Axis: **Amenity Score Classes**: high amenity score, medium amenity score, and low amenity score
- Y-Axis: **Site Size Classes**: less than 0.5 acres, 0.5 to 1 acre, 1 to 2 acres, 2 to 3 acres, 3 to 4 acres, 4 to 5 acres, 5 to 7 acres, 7 to 10 acres, 10 to 15 acres, and 15 to 25 acres

The comparative analysis helps us determine the FSR values for a specific site, considering its size and density class. This provides us with two key data points that we use to calculate the gross floor area.

From our **Comparative Building Database**, we observed that a site with a certain amenity score corresponds to a specific FSR. We have established that as the density of development increases, the FSR value also rises.

This approach gives us two points of reference: the amenity score range and the FSR value. These values are derived by analyzing both the average and maximum FSR that can be accommodated on a site, which is influenced by its building height and density, and is directly related to its amenity score. This culminates in our **FSR Matrix**, which indicates that a site of a certain effect size will have a defined FSR value.

FSR Matrix

Amenity Score	(20 - 16)	(15 - 11)	(10-1)
Site Size (Acres)			
0.5 to 1	8	4.5	3
1 to 2	5	4.5	2.5
2 to 3	5	4	2.5
3 to 4	4.5	3.5	2
4 to 5	4	3	2
5 to 7	3	2.8	1.5
7 to 10	2.8	2.5	1.5
10 to 15	2.7	2.2	1.2
15 to 25	2.6	2	1

Step 6: Building the Yield Table

The **Yield Table** uses the values from the **FSR matrix** to estimate how much FSR could be accommodated on each of the mapped sites, and ultimately the housing yield for the mapped communities in each amenity class. This data was then extrapolated across all site sizes to build the FSR matrix that would help drive the calculations for the yield across sites. This is how the framework produces the given density on a site:

1. The site is filtered according to site size and put in a specific **Site Size Class**
2. Site is eliminated if it is smaller than 0.5 acres or is larger than 25 acres.
3. The site is matched with the FSR value of the corresponding site size and amenity score.
4. The FSR is multiplied by the land area of the site to give the total gross floor area for a site.
5. This site information on a gross floor area (GFA) is collected and sorted by amenity scores and their vacancy status (whether they are currently vacant or occupied)

Yield Table on all Priorty Classes (Toronto)

Community	**Toronto**
Total Properties	517
Total Developable Properties	193
Total Properties site area in sqm	1,900,290
Total Vacant area	296,939
Total Developable site area	1,603,352
% Developable	84%
Weighted FSR*	3.66
Total Residential GFA	5,870,692
Efficiency (assuming 80%)	4,696,553
Total Units (assuming 67 sqm per unit)	70,098
Total potential population (assuming 2.51 pp/ household)	173,142
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Prioritizing Sites for Development: From High-Priority to Long-Term Potential

Establishing Priority Tiers

The total FSR Yields for all the eligible sites (sites that are larger than 0.5 acres) are according to the amenity score classes (high, medium, and low). They were further divided into two categories depending on whether or not the sites were vacant. This enables us to derive the following breakdown in terms of priority of development.

- **Priority 1:** sites with high amenity scores (20 – 16 points) and that are vacant most immediate development potential.
- **Priority 2:** sites with high amenity scores (20 – 16 points) and that are occupied sites that require redevelopment.
- **Priority 3:** sites with medium amenity scores (15 – 11 points) and that are vacant most immediate development potential.
- **Priority 4:** sites with medium amenity scores (15 – 11 points) and that are occupied sites that require redevelopment.
- **Priority 5:** sites with low amenity scores (10 – 1 points) and that are vacant and low development potential.
- **Priority 6:** sites with low amenity scores (10 – 1 points) and that are occupied and low development potential.

Addressing Lower-Priority Sites

All the properties combined represents all the sites that could be developed and what is the maximum number of units that could be developed. This however does not consider several other factors that affect the actual development potential of these sites:

The sites in Priority 5 and 6 require are significantly larger:

- As they may be in greenfield locations (i.e. on the outskirts of the city).
- They also don't have any or very few public amenities around, and governments would have to allocate significant funding to upgrade the infrastructure.
- Cities like Ottawa and Hamilton have significant numbers of federal lands that are large and in the priority 5 and 6 categories that are extremely difficult to develop as they would require significant investment in public infrastructure, amenities and servicing that would take a long period to develop.
- Sites that are larger than 25 acres.
- Acres are difficult to develop and require a large master planning process to be developable

To account for all these variables and limitations the analysis was limited to only priority 1 to 4 sites across all the cities thus limiting the yield matrix to only the following classes this gave us the housing yield across the cities.

Step 7: Summarizing Development Potential

The final output of total potential housing yield in the selected cities is determined by adding up all the properties and their FSR yields for all the developable sites. The total developable area is the total gross floor area that can be built on all these sites. We calculated the number of possible units and number of people that could be housed in these sites as follows:

1. Add up total properties from priority categories 1-4 in each municipality
2. Calculate total developable site area of these properties
3. Calculate total residential gross floor area (the FSR yield of the developed sites) from total developable area
4. Calculate efficiency to give us the Net Residential Floor Area (taken at 80% of GFA, which considers area lost for amenities and common areas).
5. Multiply the efficiency by the residential gross floor area
6. Divide the actual residential floor area by 67 sqm (721 sqft, the average size of the unit) to achieve total unit yield.
7. Multiply by 2.47 people per unit to get the total number of people that could be housed in these sites.

Estimating Housing Capacity

By following the above methodology, the following results were obtained for the following Municipalities

Community	Toronto
Total Properties	517
Total Developable Properties	158
Priority 1	924,217
Priority 2	1,929,160
Priority 3	367,173
Priority 4	1,877,705
Total Residential GFA	5,098,255
Efficiency (assuming 80%)	4,078,603
Total Units (assuming 67 sqm per unit)	60,875
Total potential population (assuming 2.51 pp/ household)	150,360
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Overall output of the study

- Total sites = 3,971 Properties
- Total Developable sites (Priority 1 to 4) = 856 Properties
- Total Residential GFA = 35,999,336 sqm
- Total units = 429,843 units
- Total people housed = 1,061,172 people

3. Implications of the Findings

There is a significant gap between the total number of properties and how many are developable. While cities like Ottawa, Hamilton, and Calgary have a large number of sites, most of these are not feasible for development, as they are located outside the core of the city and would largely involve greenfield developments. In contrast, Toronto has the highest number of developable sites, highlighting its potential to help address housing shortages. These yields demonstrate the opportunity to leverage public lands to deliver housing that aligns with existing development practices. Despite fewer developable sites, Ottawa and Hamilton still show strong housing yields due to the larger size of available parcels.

4. Conclusion

The study highlights the untapped housing potential of government-owned lands, focusing on areas already well-served by existing infrastructure for more efficient and cost-effective development. This approach helps address a significant portion of Canada's housing shortage while minimizing the need for extensive public investment in new infrastructure. It also demonstrates how Statistics Canada's proximity measures database can be leveraged to identify optimal development sites. By showing that approximately one million people could be accommodated just on these lands mapped by the HART project, the study underscores the potential to significantly enhance housing supply strategically and sustainably across Canada. Moreover, this methodology could be applied to identify additional sites and foster greater discussions around the use of public lands for housing development.

5. Appendix

Yield Tables (All Priority Classes 1-6)

Community	Toronto
Total Properties	517
Total Developable Properties	193
Total Properties site area in sqm	1,900,290
Total Vacant area	296,939
Total Developable site area	1,603,352
% Developable	84%
Weighted FSR*	3.66
Total Residential GFA	5,870,692
Efficiency (assuming 80%)	4,696,553
Total Units (assuming 67 sqm per unit)	70,098
Total potential population (assuming 2.51 pp/ household)	173,142
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Peel
Total Properties	334
Total Developable Properties	162
Total Properties site area in sqm	2,211,972
Total Vacant area	151,975
Total Developable site area	2,059,996
% Developable	93%
Weighted FSR*	2.55
Total Residential GFA	5,249,348
Efficiency (assuming 80%)	4,199,478
Total Units (assuming 67 sqm per unit)	62,679
Total potential population (assuming 2.51 pp/ household)	154,817
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	York
Total Properties	314
Total Developable Properties	151
Total Properties site area in sqm	2,169,097
Total Vacant area	171,561
Total Developable site area	1,997,536
% Developable	92%
Weighted FSR*	2.56
Total Residential GFA	5,118,284
Efficiency (assuming 80%)	4,094,627
Total Units (assuming 67 sqm per unit)	61,114
Total potential population (assuming 2.51 pp/ household)	150,951
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Durham
Total Properties	404
Total Developable Properties	154
Total Properties site area in sqm	1,744,522
Total Vacant area	190,224
Total Developable site area	1,554,298
% Developable	89%
Weighted FSR*	2.72
Total Residential GFA	4,230,970
Efficiency (assuming 80%)	3,384,776
Total Units (assuming 67 sqm per unit)	50,519
Total potential population (assuming 2.51 pp/ household)	124,782
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Halton
Total Properties	287
Total Developable Properties	175
Total Properties site area in sqm	3,065,875
Total Vacant area	103,980
Total Developable site area	2,961,894
% Developable	97%
Weighted FSR*	2.40
Total Residential GFA	7,097,467
Efficiency (assuming 80%)	5,677,974
Total Units (assuming 67 sqm per unit)	84,746
Total potential population (assuming 2.51 pp/ household)	209,322
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Ottawa
Total Properties	555
Total Developable Properties	322
Total Properties site area in sqm	17,731,783
Total Vacant area	203,617
Total Developable site area	17,528,166
% Developable	99%
Weighted FSR*	1.36
Total Residential GFA	23,843,830
Efficiency (assuming 80%)	19,075,064
Total Units (assuming 67 sqm per unit)	284,702
Total potential population (assuming 2.51 pp/ household)	703,215
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Hamilton
Total Properties	611
Total Developable Properties	170
Total Properties site area in sqm	4,934,098
Total Vacant area	282,351
Total Developable site area	4,651,747
% Developable	94%
Weighted FSR*	1.75
Total Residential GFA	8,138,666
Efficiency (assuming 80%)	6,510,933
Total Units (assuming 67 sqm per unit)	97,178
Total potential population (assuming 2.51 pp/ household)	240,030
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Calgary
Total Properties	552
Total Developable Properties	115
Total Properties site area in sqm	2,853,135
Total Vacant area	306,101
Total Developable site area	2,547,034
% Developable	89%
Weighted FSR*	2.00
Total Residential GFA	5,102,124
Efficiency (assuming 80%)	4,081,699
Total Units (assuming 67 sqm per unit)	60,921
Total potential population (assuming 2.51 pp/ household)	150,475
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Edmonton
Total Properties	147
Total Developable Properties	37
Total Properties site area in sqm	489,293
Total Vacant area	76,826
Total Developable site area	412,467
% Developable	84%
Weighted FSR*	2.62
Total Residential GFA	1,080,359
Efficiency (assuming 80%)	864,267
Total Units (assuming 67 sqm per unit)	12,900
Total potential population (assuming 2.51 pp/ household)	31,863
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Gatineau
Total Properties	250
Total Developable Properties	90
Total Properties site area in sqm	1,583,419
Total Vacant area	129,711
Total Developable site area	1,453,708
% Developable	92%
Weighted FSR*	2.14
Total Residential GFA	3,110,754
Efficiency (assuming 80%)	2,488,603
Total Units (assuming 67 sqm per unit)	37,143
Total potential population (assuming 2.51 pp/ household)	91,744
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

All Mapped Communities	Total
Total Properties	3,971
Total Developable Properties	1,569
Total Properties site area in sqm	38,683,485
Total Vacant area	1,913,286
Total Developable site area	36,770,199
% Developable	95%
Weighted FSR*	1.87
Total Residential GFA	68,842,494
Efficiency (assuming 80%)	55,073,995
Total Units (assuming 67 sqm per unit)	822,000
Total potential population (assuming 2.51 pp/ household)	2,030,340
**Weighted FSR – Total Average FSR of all the developable properties.*	

Yield Tables (Priority 1-4 Classes)

Community	Toronto
Total Properties	517
Total Developable Properties	158
Priority 1	924,217
Priority 2	1,929,160
Priority 3	367,173
Priority 4	1,877,705
Total Residential GFA	5,098,255
Efficiency (assuming 80%)	4,078,603
Total Units (assuming 67 sqm per unit)	60,875
Total potential population (assuming 2.51 pp/ household)	150,360
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Peel
Total Properties	334
Total Developable Properties	90
Priority 1	323,362
Priority 2	758,960
Priority 3	839,178
Priority 4	1,673,505
Total Residential GFA	3,595,005
Efficiency (assuming 80%)	2,876,004
Total Units (assuming 67 sqm per unit)	42,925
Total potential population (assuming 2.51 pp/ household)	106,206
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	York
Total Properties	314
Total Developable Properties	74
Priority 1	385,219
Priority 2	758,960
Priority 3	1,120,903
Priority 4	1,410,122
Total Residential GFA	3,645,241
Efficiency (assuming 80%)	2,916,193
Total Units (assuming 67 sqm per unit)	43,525
Total potential population (assuming 2.51 pp/ household)	107,507
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Durham
Total Properties	405
Total Developable Properties	85
Priority 1	574,476
Priority 2	599,759
Priority 3	562,747
Priority 4	989,403
Total Residential GFA	2,726,385
Efficiency (assuming 80%)	2,181,108
Total Units (assuming 67 sqm per unit)	32,554
Total potential population (assuming 2.51 pp/ household)	80,408
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Halton
Total Properties	287
Total Developable Properties	94
Priority 1	492,204
Priority 2	1,643,009
Priority 3	368,630
Priority 4	2,363,696
Total Residential GFA	4,867,539
Efficiency (assuming 80%)	3,894,031
Total Units (assuming 67 sqm per unit)	58,120
Total potential population (assuming 2.51 pp/ household)	143,556
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Ottawa
Total Properties	555
Total Developable Properties	110
Priority 1	1,295,388
Priority 2	1,777,038
Priority 3	1,703,393
Priority 4	1,967,460
Total Residential GFA	6,743,280
Efficiency (assuming 80%)	5,394,624
Total Units (assuming 67 sqm per unit)	80,517
Total potential population (assuming 2.51 pp/ household)	198,876
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Hamilton
Total Properties	611
Total Developable Properties	81
Priority 1	1,591,959
Priority 2	374,793
Priority 3	1,289,547
Priority 4	604,102
Total Residential GFA	3,860,402
Efficiency (assuming 80%)	3,088,322
Total Units (assuming 67 sqm per unit)	46,094
Total potential population (assuming 2.51 pp/ household)	113,853
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Calgary
Total Properties	522
Total Developable Properties	83
Priority 1	508,565
Priority 2	1,108,156
Priority 3	553,220
Priority 4	816,420
Total Residential GFA	2,986,360
Efficiency (assuming 80%)	2,389,088
Total Units (assuming 67 sqm per unit)	35,658
Total potential population (assuming 2.51 pp/ household)	88,705
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Edmonton
Total Properties	147
Total Developable Properties	20
Priority 1	56,765
Priority 2	217,274
Priority 3	248,829
Priority 4	93,066
Total Residential GFA	615,934
Efficiency (assuming 80%)	492,747
Total Units (assuming 67 sqm per unit)	7,354
Total potential population (assuming 2.51 pp/ household)	18,165
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Community	Gatineau
Total Properties	250
Total Developable Properties	61
Priority 1	360,423
Priority 2	793,968
Priority 3	199,212
Priority 4	507,333
Total Residential GFA	1,860,936
Efficiency (assuming 80%)	1,488,749
Total Units (assuming 67 sqm per unit)	22,220
Total potential population (assuming 2.51 pp/ household)	54,884
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

All Mapped Communities	Total
Total Properties	3971
Total Developable Properties	856
Priority 1	6,512,578
Priority 2	9,931,114
Priority 3	7,252,832
Priority 4	12,302,812
Total Residential GFA	35,999,336
Efficiency (assuming 80%)	28,799,469
Total Units (assuming 67 sqm per unit)	429,843
Total potential population (assuming 2.51 pp/ household)	1,061,712
**Weighted FSR – Total Average FSR of all the developable properties in the city.*	

Housing Assessment Resource Tools (HART)

hart.ubc.ca