

LAND-USE REGULATION AND HOUSING AFFORDABILITY: CHARACTERIZING THE IMPACTS OF RESTRICTIVE  
ZONING ON TORONTO'S HOUSING MARKET THROUGH A CASE STUDY OF WARD 8 NEIGHBOURHOODS

By

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In

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## Abstract

Toronto's housing affordability crisis continues to escalate. Increasing demand and land supply constraints prevent the housing and land market from reaching equilibrium, resulting in skyrocketing house prices and a disproportionately small number of additional units built. Despite efforts from City Council to increase affordable housing options, housing affordability concerns have yet to be adequately addressed. By collecting and analysing the market, zoning, and minor variance/consent data in Toronto's Ward 8 neighbourhoods, this MRP argues that much of Toronto's inner-suburban neighbourhoods contain overly restrictive land-use regulations that may worsen housing affordability and perpetuate suboptimal land values. The most restrictive areas and neighbourhoods appear to be experiencing the greatest effects of supply constraining regulations, as they have the highest growth in house prices, the greatest increase in housing services per unit upon rebuild, and disproportionately low per-square-foot property values in comparison to its sale price. This MRP also finds that community and institutional support for new development in Toronto's *neighbourhoods* are contingent on conformity with existing physical neighbourhood character, whose definition favours the detached home. To help ease the housing affordability crisis, it is recommended that Toronto encourage a range and mix of housing typologies by removing policies and regulations that reinforce single-family only neighbourhoods.

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## Introduction

Toronto is facing a housing crisis that threatens the well-being of its people and their ability to achieve the Canadian Dream (Florida, 2018). As the economic and financial engine of the nation and considered a world leader in areas such as business and technology, Toronto is ranked among the top ten global cities world-wide (WSP, 2018). However, with house prices and rents accelerating at a rate faster than incomes, lower- and middle-income households are increasingly unable to access adequate and affordable housing (CCEA & CUI, 2019); let alone the options afforded to generations prior (Clayton, Petramala & Amborski, 2018).

Increased demand from immigration and new household formations along with a history of land supply issues have contributed to significant affordability concerns for Toronto (PWC Canada, 2019), where current trends indicate that only one of five families can afford to own a home in the region (RBC, 2019). With a lack of missing-middle housing options (Clayton & Petramala, 2019), an undersupplied rental market, and population growth expected to rise at a faster pace than in the last decade (CCEA & CUI, 2019), Toronto is faced with a complex and multifaceted housing affordability problem.

While it is certain that house prices are high in Toronto because of strong demand, supply conditions also impact the housing market. Specifically, the elasticity of housing supply within a given land market can play a large role in the determination of house price, and subsequently affordability and welfare (Quigley & Rosenthal, 2005). Due to their effect on supply conditions, inefficient or overly restrictive use of local land-use regulation can inadvertently impact housing affordability concerns by raising housing prices (Downs, 1991), financially benefiting incumbent homeowners and subsequently reducing affordability for renters and those entering the ownership market (Glaeser & Gyourko, 2018).

Restrictive land-use regulations are of concern to planners and policymakers as their supply-constraining effects can substantially inflate house prices, truncate density levels, and encourage socio-economic exclusion, in effect exacerbating affordability concerns and further impacting wider economic productivity. Potential effects of restrictive land-use regulations are important to explore in the context of Toronto, where affordable housing is out of reach for many households, yet its neighbourhoods consist of restrictive zoning that limits development to a singular low-density built form typology.

Toronto's restrictively zoned neighbourhoods are generally referred to as the "yellow belt" among Planners and City Staff. There is currently a push at City Council to tackle housing affordability through increasing missing-middle housing typologies within the yellow belt, where Mayor John Tory and Deputy Mayor Ana Bailão have requested a staff report and timeline for increasing housing options and permissions in areas designated as *neighbourhoods* within the Official Plan (City of Toronto, 2019b).

To further explore the effects of restrictive land-use regulations on Toronto's housing market, this MRP aims to analyze the trends associated with varying levels of restrictiveness throughout several of Toronto's neighbourhoods. The primary goal of this paper is to draw connections between zoning restrictions and housing affordability by investigating any potential supply constraining effects on the housing market, and to delineate their impacts in order to produce recommendations on improving the municipal planning policies and regulations for greater affordability.

Using house sales data, zoning data, and active minor variance and consent applications from the eight neighbourhoods that comprise Toronto's Eglinton-Lawrence (Ward 8), the following questions were explored:

- Are house price listings accelerating differently based on zoning restrictiveness?
- What is the magnitude of housing service change among rebuilds, and is there any correlation to zoning restrictiveness?
- Is there a difference between the residential property values of varying zoning permissions, calculated on the intensive versus extensive margin?
- What types of new developments are being proposed within neighbourhoods, and do they vary by zoning restrictiveness?
- What role do incumbent homeowners play when new development is proposed within their neighbourhoods, and what are common rationales for opposing development?

Through a preliminary analysis of house price trends in Toronto's Ward 8 neighbourhoods, it appears that growth in house prices, and particularly among rebuilds, are highest in the most restrictive areas and neighbourhoods. Housing services, which in this MRP is understood by the sum of bathrooms and bedrooms within each housing unit, appears to increase the most among the most restricted parcels, with over twice the amount of housing services occupied in new units. Despite that the most restricted areas have the highest average house price on the intensive margin, their price per square foot of the lot area understood as the extensive margin, is typically lower than for less restricted parcels. These results imply that Toronto's inner-suburban neighbourhoods are likely experiencing the unintended effects of restrictive zoning and that its impacts are worsening housing affordability.

From analyzing a small sample of 27 minor variance and consent applications, the majority were rebuilds of detached homes. The only instances of new development transitioning from a single-family to a multi-family built-form typology were in the least restrictive areas, however intensification in the form of lot severance was equally as common in the most restrictive areas. There were two instances of community mobilization to oppose new development, where both these instances involved opposition to increasing density. As the majority of applications involved rebuilds of detached homes, the primary complaint among other residents was the proposed increase in structure size, which subsequently impacts a variety of quality of life considerations.

The first section of this paper surveys the relevant literature with a focus on the impacts of regulatory-induced supply constraints on cities. The second section of this paper discusses the methodology used to investigate potential supply constraining effects in Toronto's housing market, and the third section introduces the Ward 8 neighbourhood study area. The fourth section documents the results found from the research collected and the fifth section discusses the results. The sixth section provides recommendations and the seventh section concludes the paper.

## Literature Review

In order to draw preliminary findings regarding the potential effects of restrictive zoning on Toronto's housing market, this paper turns to theoretical and empirical literature to characterize the supply constraining implications of restrictive zoning. This literature review will first briefly discuss economic theory to lay the foundation for an understanding of land supply and zoning. Then, the potential impacts of restrictive land-use regulation on Toronto's housing market is explored.

## Economic Theory and Planning Constraints

The interplay between supply and demand in the housing and land market is complex. First, Ricardian rent theory establishes that when supply is fixed, land price change is a result of a change in market



conditions (Evans, 2004). In the case of housing, his theory infers that the price of land in which a house is situated increases when the market demand for housing increases. While Ricardo's theory established that land prices are demand-driven, a variety of other factors are at play in a city's land market. Neoclassical rent theory stipulates that land can be utilized in a variety of capacities, and landowners must evaluate the opportunity costs associated with their choice of use (Evans, 2004). In a perfectly elastic market, landowners would convert their activities based on market conditions to maximize their land value.

In reality, land and housing markets in cities are far from perfectly elastic. One contributor to this inelasticity is the role of planning controls that separate land markets for different uses; this effectively allows for different land prices to be charged for otherwise identical lots (Evans, 2004). As planning controls can create inelastic supply-sides, these land markets are emblematic of Ricardian theory in terms of demand driving price (Evans, 2004). While at times planning constraints are necessary for the responsible development of cities and can generate efficiencies by internalizing externalities (Quigley & Rosenthal, 2005), overly restrictive zoning can be problematic in terms of affordability (Glaeser & Gyourko, 2003) and welfare (Brueckener, 1990).

A number of economists hypothesize that homes are expensive in high-cost areas primarily because of government regulation that artificially restricts new housing, where this regulatory-induced price increase generates a significant wedge between selling prices and building costs (Glaeser & Gyourko, 2003). While a healthy housing market hovers around its minimum profitable production cost (MPPC), certain high-demand, highly regulated areas have new house prices worth more than double their MPPCs; these markets are not considered healthy as inflated prices make housing unaffordable for everyone (Glaeser & Gyourko, 2018).

## Impacts of Land-Use Regulation

While land-use regulations can be amenity enhancing and can efficiently internalize externalities, it is also expressed in the literature that restrictive land-use regulations worsen affordability and welfare. The unintended effects of land-use regulation empirically include increases in house price and price growth, less new construction and low density levels, socio-economic exclusion, sub-optimal land values, and reduced economic productivity. Of the literature surveyed, the following discussion lists five themes of potential impacts that Toronto may be experiencing due to its restrictive zoning, and questions to further explore this preliminary analysis.

1. Highly regulated, high demand cities have inflated housing prices.

The most discussed impact of restrictive land-use regulation is its effect on house prices. Urban economists and policymakers are increasingly concerned with the impact of land-use regulation on house prices, as inflated prices as a result of artificial supply constraints can reduce affordability (Glaeser & Gyourko, 2003; Quigley & Rosenthal, 2005). Regulations can directly increase house prices by raising the cost of construction; by limiting the supply of new housing; by encouraging builders to shift to larger, more expensive homes, and, by improving amenities and quality of life factors (Landis, 1992; Ihlanfeldt, 2004; Levine, 1999). Regulations that are of most concern of the above are those that limit

new supply and encourage re-orientation of new housing projects towards higher-income households, as these may have the greatest impact on affordability in a jurisdiction.

The longest studied region with consistently high housing prices is California, and particularly the San Francisco Bay Area. In the San Francisco Bay Area, Rosen and Katz (1981; 1987) find a significant positive relationship between housing prices and growth controls. The specific growth controls identified directly control housing supply, such as building permit caps or complete building moratoriums. From their analysis, they interpret that the price differential between growth-controlled and non-growth-controlled communities is systematic and thus reflect the supply restriction and market-reorientation effects of growth control policies (Rosen & Katz, 1987). Dowall & Landis (1982) find that density controls and land availability affect the price of new housing units in the San Francisco Bay Area, thus indicating supply constraints in the Bay area are contributing to the climb of new and existing house prices. Quigley and Raphael (2005) confirm that housing prices and accelerated price growth in both owner-occupied and rental units have a positive relationship with the degree of regulatory stringency in California cities.

While highly productive cities typically have households with higher incomes and therefore higher house prices, the price inflation experienced in cities with extensive regulation such as San Francisco have house prices well beyond their MPPCs, indicating that the link between price and new supply has been broken (Glaeser & Gyourko, 2018). This can be attributed to the inelastic supply side of the housing market, where strengthening demand is met by increases in house price rather than quantity of units (Glaeser & Gyourko, 2018). As Toronto's demand for housing continues to increase alongside a relatively weak supply response, its house prices continue to accelerate (CMHC, 2018). To investigate the relationship between local land-use regulations and house prices in Toronto, this research paper will document and analyze the price nuances between varying levels of zoning restrictiveness among sold homes in Ward 8's neighbourhoods.

2. High priced areas with restrictive zoning will not see traditional density increases and may lead to suboptimal land values and luxury housing.

In high-priced and highly regulated areas, there is a lack of typical correlations between increasing house prices and density (Glaeser & Gyourko, 2003). While traditional urban growth models indicate that increased housing and land prices warrant more construction and increased densities, empirically there is little connection between house prices and density in highly regulated high price areas (Glaeser & Gyourko, 2003). Instead, increasing restrictions on building are found to be negatively correlated with new construction and growth in the housing stock (Quigley & Raphael, 2005; Glaeser & Ward, 2009). This is prevalent in Glaeser & Ward's (2009) study investigating the impact of minimum lot size restrictions on new housing construction, where larger lot size requirements are correlated with significant decreases in new housing permits (Glaeser & Ward, 2009). This implies that enforcing large minimum lot sizes may pose a supply constraint towards increasing the housing stock.

As a constraint on supply, restrictive land-use regulations can also be a significant factor in the determination of developer profits. This is particularly prevalent as land becomes more expensive. To compensate for rising land costs, developers will either build denser housing types or will build more expensive homes (CMHC, 2018). Binding supply constraints set below equilibrium levels can increase the

price per unit of housing services, and developers may respond to these constraints by also increasing the quantity of housing services per unit to increase their profits (Ihlanfeldt, 2004). With restrictions on density and rising land values, developers in effect re-orient their housing projects towards more expensive units (Katz & Rosen, 1987). This process of increasing the price and quantity of housing services per unit may both work towards lowering the affordability in a jurisdiction (Ihlanfeldt, 2004).

Empirically, it has been discussed that density levels among communities with restrictive land-use regulations such as minimum lot sizes are too low to be maximizing land values (Glaeser & Ward, 2009). This can be understood in terms of the extensive margin of house price determination - while larger zoned residential parcels are more expensive, the cost per square foot of these parcels are typically less valuable than the per square foot cost of smaller, less regulated parcels (Dowall & Landis, 1982). In areas with regulatory restrictions on building more housing, it is noted that land is worth far more when sitting under a new home than when it extends the lot of an existing home (Glaeser & Gyourko, 2003). As such, the disconnect between price and housing stock among highly regulated areas may have welfare implications as land values tend to be slightly depreciated than what would exist in an unregulated market (Kulish, Rochards, & Gillitzer, 2011). This agrees with Brueckner's (1990) findings regarding the welfare implications of mild versus stringent growth controls - he demonstrates that while mild growth controls are likely to be welfare improving by generating amenities that increase demand, a stringent control may be worse from a welfare standpoint than no control at all (Brueckner, 1990).

Preliminary evidence indicates a disconnect between housing price and density in Toronto as well, where despite increasing demand for housing, density levels in many of Toronto's neighbourhoods are either stagnating or declining (Case & Bailey, 2017). It is also noted that supply responses to market demand in Toronto are weaker than other Canadian cities (CMHC, 2018), thus affecting price more than quantity. With minimum lot size and detached house restrictions, developers are unable to spread higher land costs among multiple buyers by increasing density, and instead must reorient their projects towards higher-income households. These market re-orientation effects may be empirically prevalent in Toronto, with those who live in restrictive neighbourhoods witnessing the transition of built form from modest post-war bungalows to the erection of "monster homes" (Miller, 2019). This agrees with the shift in the distribution of sales toward high-end homes in Toronto, with price growth coming from more expensive single-detached units (CMHC, 2018). Further, it may be apparent that Toronto's restrictive zoning is enforcing suboptimal land values, with homeowners attempting to minimally increase the unit count on their property and failing due to regulatory constraints (Kalinowski, 2019). This MRP aims to further contextualize developer re-orientation trends by investigating the change in housing services among rebuilds, and to further contextualize welfare implications by analyzing the extensive versus intensive value of owning a residential property.

### 3. Restrictive zoning disadvantages lower-income and younger households and entrenches wealth inequality among households.

With trends of re-orientation towards luxurious housing projects and accelerated house price increases, income and wealth disparities between incumbent homeowners and renters or those looking to enter the ownership market may increase. In America, higher-income areas tend to adopt more restrictive land-use regulations (Ihlanfeldt, 2004), and there have been correlations found between restrictive

regulations and a reduction of growth among lower-income and minority households (Levine, 1999). While incumbent homeowners are made more wealthy from increasing housing prices, renters and those looking to enter the market are directly impacted by this increase and become poorer as a result (Glaeser & Gyourko, 2018). Thus, the benefits of these regulation-induced price increases are noted to be distributed regressively, with incumbent homeowners generating windfall gains at the exclusion of lower and moderate-income households (Downs, 1991).

City-wide socio-economic segregation by income is already evident in Toronto, with spatial polarization of incomes being more prominent today than thirty years ago (Hulchanski, 2010). However, it is unclear if this segregation is correlated with restrictive residential land-use regulation, as many factors surely contribute to this spatial divide. This MRP aims to shed light on the exclusionary impacts of restrictive zoning in Toronto by better contextualizing neighbourhood change in terms of housing price growth and price of units, housing services, and incomes.

#### 4. Homeowner motivations can disproportionately shape neighbourhood development.

The evolution of zoning has broadened in scope, from mitigating physical externalities to the inclusion of preserving the social and fiscal values of homeowners and neighbourhoods. The stark protection of these values is regarded in the Euclid case in 1926, where the courts reasoned that multi-family homes have negative social and fiscal impacts on the single-family neighbourhood; this case normalized the practice of protecting single-family detached and characteristic zoning. (Quigley & Rosenthal, 2005).

In America, the widespread adoption of restrictive land-use regulations occurred in the 1970s. During this period, the purchase of housing shifted from a consumer good to an investment. (Fischel, 2015 pp. 163). It is hypothesized that the attachment of fiscal motives to homeownership encouraged homeowners to become watchful of changes in their neighbourhood and to act as “homevoters” in devising means to protect and enhance their property values (Fischel, 2015, pp. 214). Deemed “fiscal zoning,” homevoter efforts were realized by inflated property values, which in turn galvanized more demand for regulation (Fischel, 2015, p. 215). However, while land-use regulations may in theory be efficiently internalizing externalities generated by increased new housing, empirically these externalities are not large enough to justify the costs of regulation (Glaeser & Gyourko, 2018). As such, overly restrictive regulations can lead to a loss in welfare, sometimes more so than if no regulations existed at all (Brueckener, 1990).

It is possible that the homeowners in Toronto’s restrictively zoned communities are fiscally motivated to protect their property values, and that they enjoy the amenities available to them. However, the homeowner’s involvement in the creation of a restrictive zoning regime and their role in its enforcement is unclear. In other words, what prevalence does fiscal zoning and homevoting have throughout Toronto’s neighbourhoods? Understanding homeowner involvement in creating and enforcing the restrictiveness of regulations is important to consider from a policy perspective, as the extent of their involvement may shape the effectiveness of potential solutions. More research should be done to better understand the interaction between community attitudes and growth policies, specifically for Toronto’s incumbent homeowners and their role in the enforcement of strict land-use regulations. This MRP aims to better contextualize community attitudes towards new development in Toronto’s neighbourhoods by understanding their rationales for opposition and support.

#### 5. Restrictive land-use regulations can limit mobility and negatively impact the wider economy.

Restrictions on housing supply and correspondingly high house prices may also have significant impacts on labour markets and the productivity of cities (Glaeser & Gyourko, 2018; Furman, 2015). To the degree that regulatory barriers limit individual mobility, they also interfere with economic productivity by reducing the reallocation of labour where it has the greatest return (Furman, 2015). Subsequently, this deepens inequality by removing a channel that workers use to grow their careers, specifically by moving from job to job (Furman, 2015). A recent study investigates the broader economic impacts that local housing constraints have on the economy and finds that housing supply constraints in highly productive cities such as San Francisco have lowered income and welfare for all US workers and that removing housing supply constraints in these highly regulated markets may significantly increase GDP (Hsieh & Moretti, 2019).

As Toronto's economy is significant in fueling the national economy, the impacts of restrictive land-use regulation may also impact GDP and economic growth. More research is required to understand the extent of impact restrictive land-use regulations have on housing affordability and consequently on truncating mobility and economic productivity. While this MRP will not be directly investigating the correlations between the economy and land-use regulations, it can be inferred that high price growth in restrictively zoned areas may also be working to limit mobility and economic productivity.

### Types of Land-Use Regulations

Land-use regulations are widely used and with varying intentions and outcomes, and many of which act as a regulatory barrier to housing affordability. In a national advisory commissioned review of regulatory barriers to housing affordability, Downs (1991) lists eighteen regulatory constraints that can create barriers to housing affordability; some of which include large-lot zoning, single-family zoning, building requirements, impact fees, historic preservation, subdivision regulations, environmental regulations, and parking requirements (Downs, 1991). As this paper is scoped to understanding the supply-constraining impacts of Toronto's restrictive residential land supply, discussed further will be zoning regulations that resemble those in its neighbourhoods.

Toronto's neighbourhoods contain a combination of land-use and characteristic requirements that can indirectly constrain supply and, as such, can have the effect of raising house prices. The City's zoning by-law includes a variety of performance standards, such as residential detached zoning, minimum lot sizes, setback requirements, and height and density limits. In addition, Toronto's Official Plan contains policies that reinforce a neighbourhood's prevailing character by establishing building and dwelling type conformity, along with the existing massing, size, density, setbacks, frontage, and other characteristic features emblematic in neighbourhoods (City of Toronto, 2015).

Toronto also adheres to a growth management system in the form of Provincial Policies that generally encourage intensification and limit sprawl by delineating settlement areas and prohibiting expansion into the Greenbelt (Government of Ontario, 2017), and Toronto also has a comprehensive development charges regime that includes hard and soft costs and is charged per unit type (City of Toronto, 2019). While growth management systems and development charges are often discussed in the literature as supply-constraining and a factor in housing cost increases, this report will not discuss these policies as their purpose and effect differ from growth control motivations and outcomes. As such, growth management and development charges would require an entirely different review and are out of the scope of this paper.

Category of Land-Use Regulation	Type of Land-Use Regulation	In Toronto?	Potential Impacts on Affordability
<b>Land-use</b>	Single-family zoning	Yes	Indirectly limiting housing supply by restricting the amount of land available to higher densities; re-orienting housing projects towards higher-incomes as land value increases
<b>Characteristic</b>	Minimum lot sizes, lot frontages and setbacks, lot-coverage ratios	Yes	Increasing the cost of housing by increasing land requirements and adhering to additional regulations; re-orienting demand towards higher-income earners; indirectly limiting housing supply by restricting density through minimum lot sizes
<b>Density Controls</b>	Maximum housing units per hectare	No	Directly limits housing supply
	Building permit caps	No	
	Population limits	No	
	Development moratoria	No	
<b>Other</b>	Development charges	Yes	Increasing the cost of housing by imposition of hard and soft growth costs
	Growth Management System	Yes	Restricts outward growth of cities therefore increasing land value within growth boundary

*Figure 1: Non-Comprehensive List of Land-Use Regulations*

Figure 1 is a non-exhaustive list of supply-constraining land-use regulations, and which ones exist in Toronto along with their potential impacts to affordability. While Toronto does not contain land-use policies that directly limit the supply of housing through density controls, it is possible to hypothesize that restrictive zoning in many of its neighbourhoods can truncate supply elasticity through single-family zoning, which explicitly prohibits multi-family structures, and minimum lot size zoning, which inadvertently limits the density levels of an area. As Pollakowski and Watcher (1990) mention, it is important to take into consideration the cumulative degree of supply constraints in the housing market, as together they can have exacerbated effects. Thus, it is hypothetical that the combination of the Official Plan policy direction and zoning by-law have significant supply-constraining and market re-orienting impacts on Toronto's housing market.

## Methods

This research paper encompasses a mixed-methods approach to address the research questions posed. Data such as house price, housing services, lot area, zoning, and community attitudes are analyzed on a parcel-by-parcel basis, further categorized by neighbourhoods and restrictiveness.

### Case Study

To investigate the potential effects of restrictive zoning on Toronto's housing market, this research paper uses the *neighbourhoods* of Ward 8 as a case study for collecting and analyzing data. While these research questions are best explored on a city-wide or regional level, data constraints limited this MRP's scope in geography to analysis on the Ward level.

Out of the 25 Wards in Toronto, Ward 8 contains some of the original suburbs of Toronto, comprising the former municipality of North York, and the former township of North Toronto. It's spread in geography, from Yonge Street to Caledonia Road and from the Highway 401 to Eglinton Avenue, is quite diverse and encompasses a range of residential building typologies and permissions. Ward 8's geography is congruent with literature analyzing the supply-constraining impacts of growth controls, as they typically target inner and outer suburbs of major cities (e.g., see Zabel and Dalton, 2011). Despite the *avenues*, *growth centres* and public land designated for intensification, Ward 8 has a relatively large *neighbourhood* composition in comparison to its inner-city counterparts, with a built-form typology predominately being single-family detached houses. This sample is also congruent with literature that investigate growth controls, as a number of them specifically investigate single-family detached houses (e.g., see Mark & Goldberg, 1986). Ward 8 is also a high amenity location due to its proximity to transit, prevalence of public parks, and recent investments in infrastructure upgrades. Thus, the suburban neighbourhoods enclosed within Ward 8 represented an ideal sample size.

A drawback of using Ward 8 is that it encompasses three submarkets according to the MLS Home Price Index: C03 containing Yonge-Eglinton; C04 containing Lawrence Park North, Lawrence Park South, Bedford Park-Nortown, Forest Hill North and Eglinton-Lawrence; and, W04 containing Yorkdale-Glen Park and Briar Hill-Belgravia. While the C03 and C04 submarkets are relatively similar, the difference between these and the W04 submarket is substantial in terms of house price. This nuance is noted as a caveat, as it may bias the data when analyzing house sales prices.

### Restrictiveness Index

A common method employed by urban economists for creating a restrictiveness index is to sum up the number of individual restrictiveness measures used by a jurisdiction, where areas with higher index values have more regulatory stringency (Ihlanfeldt, 2007; see also Gyourko et al., 2008; Quigley & Raphael, 2004; and, Pollakowski & Watcher, 1990). An index is constructed in a similar fashion for the Toronto context through classifying areas with varying zoning restrictiveness.

This MRP's restrictiveness index is a simplified, scoped, and nuanced version of the current indices used in the urban economics literature. Many restrictiveness indices are created to analyze data on the city, regional or national level, and a restrictiveness level is typically created and assigned to each jurisdiction. This MRP differs in that it is scoped to specifically investigate the supply-constraining impacts of restrictive zoning on a parcel-by-parcel basis and on the neighbourhood level. While the intent of the index is the same, it's application differs as its geography and restrictiveness measures are heavily scoped to a local context.

By bounding the index to a geography of Ward 8, slight nuances may be identified that would otherwise be aggregated in a larger-scale index. These nuances may provide further insight on the trends associated with varying levels of restrictiveness in Toronto’s neighbourhoods. This index is also bound by only investigating zoning permission and prohibition. While other indices may use measures such as time required to review residential projects or development charges, this index does not account for these variables as length of time and ancillary charges are likely to be uniform across the City. Focusing on zoning permissions allows for a more direct analysis regarding the impact of regulatory supply constraints on neighbourhood change and the housing market.

This MRP outlines a restrictiveness index for Ward 8. This index was created by investigating the nuances between different zoning regulations within Ward 8’s neighbourhoods, and ranking them based on the least permissive in terms of density controls, to the most permissive. Thus, an index of 3 levels was created. RD zoning with large minimum lot size requirements was identified as the most restrictive and given an index measure of R3. RD zoning with smaller minimum lot size requirements was given an index measure of R2. Finally, Residential (R) or Residential Multiple Unit (RM) was identified as the most permissive and given an index measure of R1. This is further explained in Figure 2 below and illustrated in Figure 3.

Restrictiveness Index			
Category	Examples	Range	Restrictiveness
Residential Detached Zoning with Large Minimum Lot Size Requirements	RD, f15, a550	RD, "f "≥12, a690 to a360)	3
Residential Detached Zoning with Moderate Minimum Lot Size Requirements	RD, f9, d0.6	RD, f11 to min	2
Permissive Residential	RM f12; R, f9, u2, d0.6; RM f12, u2, d0.8; R f9	R/RM	1

Figure 2: Zoning Restrictiveness Index within Toronto’s Ward 8 Neighbourhoods

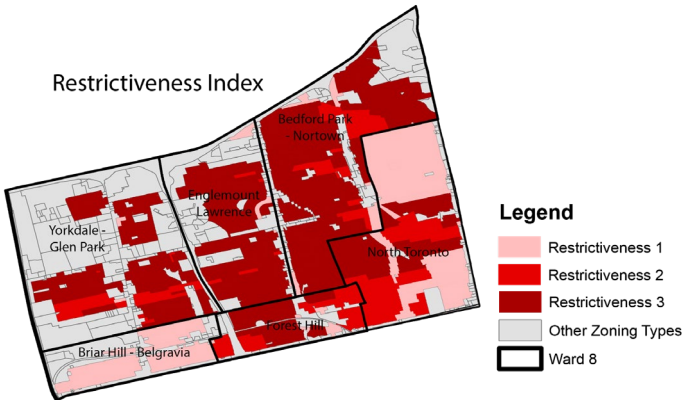


Figure 3: Spatial Illustration of Zoning Restrictiveness Index within Ward 8



## Market Research

In order to understand the role of supply constraining regulations on neighbourhood change, this research paper employs a quantitative analysis of house price, property value, and housing services throughout Toronto's Ward 8 neighbourhoods. Websites that use the MLS, such as House Sigma, display sale records of houses circa 2003, and list subsequent transactions to date, along with the address, lot size, sale price, and the number of bedrooms and bathrooms. These data points are collected and analyzed to identify trends similar to those apparent in a housing market exhibiting regulatory supply constraints. Data is analyzed by restrictiveness and by neighbourhood to identify correlational trends between zoning and neighbourhood change. Trends identified can be extrapolated to shed light on the supply-constraining impacts that restrictive zoning may have on the housing market.

As discussed in the below literature review, areas that are more restrictively zoned typically have higher housing prices and price growth than less restrictive areas (see Quigley & Raphael, 2005). Using the basis of a repeat sales methodology, house price growth will be analyzed by two sale transactions: one in 2019 and one from as early as 2003. The formula for house price (HP) growth is as follows:

$$\% \text{ HP Growth} = \frac{[(\text{Current HP} - \text{Earliest HP}) \div \text{Earliest HP}]}{(\text{Current HP year} - \text{Earliest HP year})}$$

As the base year of housing sales vary, biases may be present in this growth measure. The methodology used only takes into account the base year and price of each housing unit, and does not take into account external events that may have had an impact on the housing market. For example, the 2008 financial crisis in the United States or the number of "boom and bust" cycles Canada has experienced since the Second World War surely impacts Toronto's house price trends. Ruling out "outlier" years was not an optimal strategy given the data limitations of this MRP, however, this bias is somewhat minimized given the relatively short time frame being examined.

Particular attention will be paid to properties that have rebuilt their structures upon the second sale, versus original houses. In the instance of a rebuild, the change in housing services will be analyzed, as increases in the number of housing services are understood to be a potential impact of regulatory constraints (Ihlanfeldt, 2004). For this MRP, housing services is measured by the sum of bedrooms and bathrooms contained within a housing unit. The formula for housing service (HS) change is calculated as follows:

$$\text{HS Change} = \frac{(\sum \text{Current Bedrooms, Bathrooms})}{(\sum \text{Former Bedrooms, Bathrooms})}$$

This MRP also conducts a preliminary analysis of the nuances in valuing a property, and whether there are differences between its value calculated on the intensive margin (the sale price) and the extensive margin (the price per square footage). These are two separate methods for valuing a house, and according to neoclassical economic theory they should be the same in a functioning housing market; however, when the two are different, this may imply that supply constraints are impacting the market

(Glaeser & Gyourko, 2003). For a preliminary understanding of whether there may be a substantial difference between these two methods of valuing a property, the following formula is used to calculate price per square foot (PSF):

$$\$PSF = \frac{\text{Current Sale Price}}{\text{Lot Area}}$$

This MRP uses a weighted averaging technique to demonstrate changes in housing services overtime in Ward 8 neighbourhoods. By aggregating census tracts within neighbourhoods, the weighted averages technique allows for a high-level analysis of housing service trends overtime and establishes a benchmark of housing services to compare with the housing services data collected from HouseSigma.

Data is collected on the census tract level for 1986 and 2016 on the average number of rooms per household (avg) and the number of households (HH) per census tract (i) for comparing trends over time. The weighted average (WA) technique involves aggregating all census tracts within each neighbourhood, using the following formula for each neighbourhood:

$$\text{Neighbourhood WA} = \frac{\sum(HH_i \times Avg_i)}{\text{Total HH}}$$

The difference between neighbourhood weighted averages from 1986 to 2016 is then calculated simply by subtracting the 2016 average from the 1986 average.

### Thematic Analysis

In order to understand community attitudes towards new development, a sample of 27 active minor variance and consent applications are documented based on neighbourhood, restrictiveness measure, date of submission and decision notice, and application type and intent. The public comments from each application are reviewed to understand the public's rationale for opposing various developments. Specific questions are explored, such as:

- What is the prevalence and types of intensification occurring within neighbourhoods, and what are community responses to these applications?
- Are there instances of community mobilization against specific applications, and if so what is the rationale behind this opposition?
- What are the most common types of applications employed within neighbourhoods, and what are the most common public complaints associated with residential applications?

## Case Study: The Neighbourhoods of Ward 8

### Planning Policy Framework

The *Planning Act* considers the provision of a full range of housing, including affordable housing, as a matter of provincial interest (Planning Act, 1990). The *Planning Act* also promotes development designed to be sustainable and to be transit and pedestrian oriented (Planning Act, 1990). The Provincial Policy Statement (PPS) calls for a range and mix of housing types and densities, encouraging residential intensification and redevelopment. It directs planning authorities to support all forms of residential intensification and to develop new housing where appropriate levels of infrastructure and public service facilities are available to support current and projected needs. The PPS encourages planning authorities to promote densities for new housing that efficiently uses land, resources, infrastructure, and public service facilities, to support active transportation and transit in areas where it exists, and to establish standards for residential intensification that facilitate compact built form. (Ministry of Municipal Affairs and Housing, 2014).

The 2019 Growth Plan for the Greater Golden Horseshoe emphasizes optimization of existing urban land supply within delineated built-up areas as an “intensification first” approach to city-building that focuses on making better use of existing infrastructure and public service facilities (Ministry of Municipal Affairs and Housing, 2019). The Plan specifically supports housing choice to achieve intensification targets by providing a diverse range and mix of housing options and densities, including affordable housing, intended to serve all sizes, incomes, and ages of households (Ministry of Municipal Affairs and Housing, 2019). The Plan supports the achievement of complete communities by considering the range and mix of housing options and densities of the existing housing stock with a plan to diversify the overall housing stock of the municipality (Ministry of Municipal Affairs and Housing, 2019).

The City of Toronto Official Plan supports vibrant neighbourhoods that are part of complete communities, and affordable housing choices available for all people in their communities at all stages of their lives. The Official Plan also designates the land-use “*neighbourhoods*” as physically stable areas and considers its physical character to be one of the keys to Toronto’s success. Physical changes to established neighbourhoods must be sensitive and “fit” in with the existing physical character, where new development must respect and reinforce the physical patterns in each geographic *neighbourhood*. Examples of preserving physical character include conforming with prevailing heights, massing, scale, density, and dwelling type of nearby residential properties, and being reinforcing the prevailing building type. The Official Plan also contains a “prevailing building type” policy that reinforces existing physical character within *neighbourhoods* by reinforcing the prevailing building typology, which in many of Toronto’s inner-suburban neighbourhoods is the detached house. (City of Toronto, 2014).

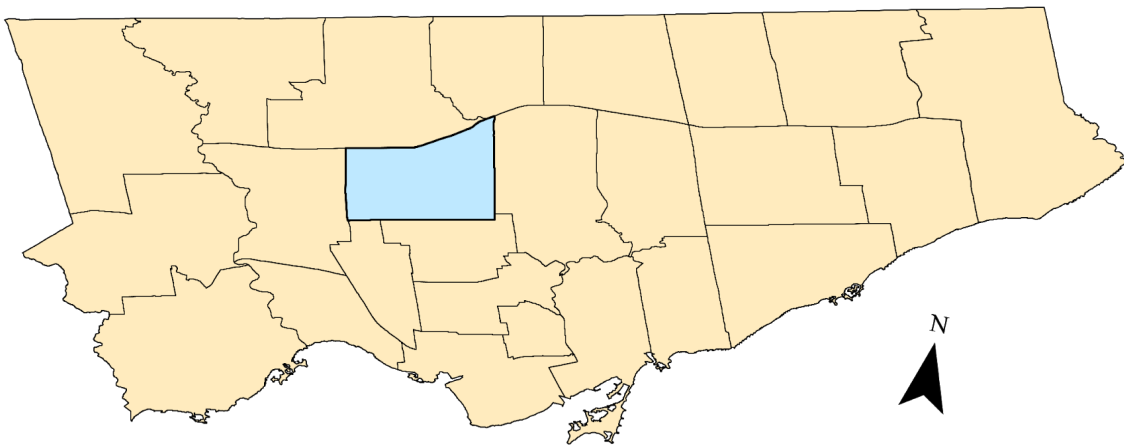
The Lawrence-Allen Secondary Plan guides growth and development for parts of the Englemount-Lawrence and Yorkdale-Glen Park neighbourhoods. Its study area focus is Lawrence Heights, a large public housing complex undergoing redevelopment. This secondary plan guides growth directly to the focus area by permitting significant intensification, yet leaves the directly adjacent and surrounding neighbourhoods completely untouched (City of Toronto, 2011). The Yonge-Eglinton Secondary Plan guides growth for the Yonge-Eglinton neighbourhood and designates mixed-use areas for intensification, while maintaining and reinforcing the stability of its *neighbourhoods* (City of Toronto, 2018).

Zoning By-Law 569-2013 is congruent with the Official Plan by reinforcing the detached single-family built form typology through its Residential Detached (RD) zoning, along with a plethora of performance standards such as minimum lot size requirements (City of Toronto, 2013). This zoning by-law broadly includes different zoning codes, such as detached (RD), and more permissive (R/RM) land-use zoning, along with characteristic zoning such as lot frontage (“f”), setbacks, height (“HT”) and story (“ST”) limits, floor space index (“d”) limits, lot coverage, and minimum lot sizes (“a” or in RD zones “f” multiplied by 30).

Ontario’s provincial policies and plans promote intensification, efficient utilization of resources, a range and mix of housing, and affordable housing. While Toronto lives up to provincial direction in many areas throughout the City, the re-enforcement of its detached single-family neighbourhoods do not.

### Study Area Overview

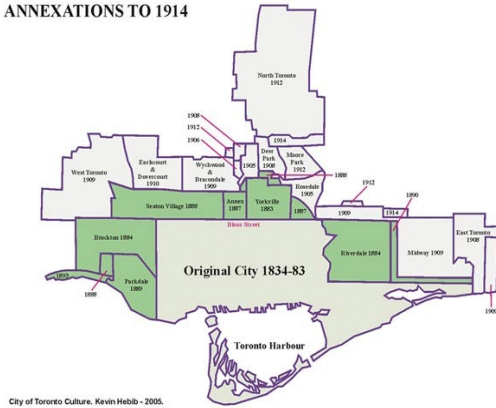
The study area focuses on the neighbourhoods of Ward 8, located in a central-west inner-suburban area in Toronto. Ward 8 is bounded by the Canadian National Railway (just west of Caledonia Road) to the west, Yonge Street to the east, Eglinton Avenue to the south, and Highway 401 to the north. Figure 4 displays Ward 8 in the context of Toronto.



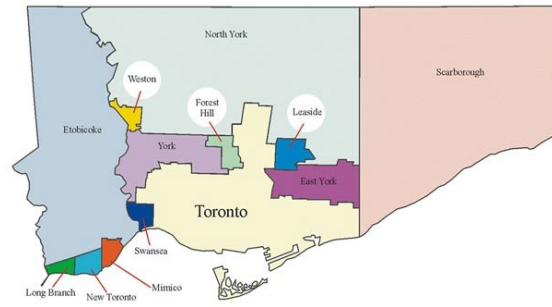
*Figure 4: Context Map of Ward 8, highlighted in blue, within Toronto.*

Within this boundary are eight neighbourhoods, which include Yorkdale-Glen Park, Briar Hill-Belgravia, Englemount-Lawrence, Forest Hill North, Bedford Park-Nortown, and a portion of Lawrence Park North, Lawrence Park South, and Yonge-Eglinton. These neighbourhoods were part of former townships, villages or municipalities that became annexed or amalgamated into Toronto and its former lower-tier municipalities at different periods of time. The neighbourhoods of Lawrence Park North, Lawrence Park South, and Yonge-Eglinton were originally part of the Township of North Toronto and were annexed into the City of Toronto in 1914 as depicted in Figure 5 (City of Toronto, 2006). In 1953, Metropolitan Toronto was created, including the remainder of the Ward 8 neighbourhoods within its city boundaries. These former areas are depicted in Figure 6 (City of Toronto, 2006). Metropolitan Toronto amalgamated into the Mega-City of Toronto in 1998, becoming what we know as Toronto today.

#### ANNEXATIONS TO 1914



City of Toronto Culture, Kevin Habib - 2005.



City of Toronto Culture, Kevin Habib - 2005.

Figure 5: Toronto Annexations to 1914 (City of Toronto, 2006) Figure 6: Metropolitan Toronto, 1953. (City of Toronto, 2006)

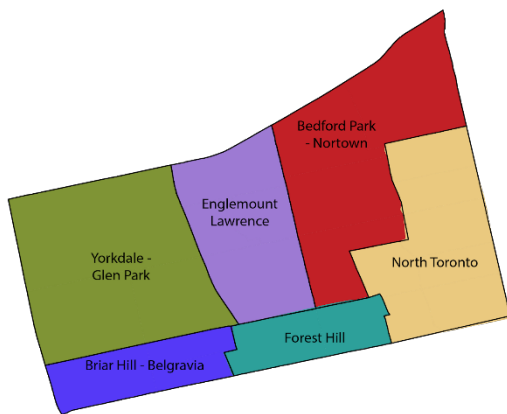


Figure 7: Ward 8 Neighbourhoods

For ease of analysis and in alignment with historical context, the parts of Lawrence Park North, Lawrence Park South, and Yonge-Eglinton neighbourhoods encompassed in Ward 8 have been combined and labelled as the “North Toronto” neighbourhood, making six distinct neighbourhoods within the study area. The six neighbourhoods to be analyzed are displayed in Figure 7.

Ward 8 overall has less population growth than the city of Toronto (1.1% vs. 4.5% from 2011-2016, respectively), however, has slightly more density than Toronto as a whole (50 vs. 43 people per hectare). The median household income is modestly higher than Toronto’s, at \$78,626 vs. \$65,808 respectively, and the Ward has a larger dependency ratio than the City as well (68.9 vs. 55.1, respectively). (City of Toronto, 2019a).

The most predominant residential built form type in Ward 8 is the single-family house at 39%, with apartments greater than five stories at 33%, apartments less than five stories at 18%, and other attached ground-oriented houses at 10% collectively. (City of Toronto, 2019a). Most dwellings in Ward 8 are ageing, as 71% were constructed before 1981, and 54% of ground-related dwellings were built before 1960. The average number of persons per household for all structure types and periods of construction for Ward 8 is 2.55, with single-detached houses at 3.17, and the most recent period of construction at 3.90. The Toronto average number of persons per household is 2.42, 3.02, and 3.67 respectively.

Only two of Ward 8’s neighbourhoods in 1986 had median incomes above the Toronto average, with North Toronto incomes over \$15,000 greater than the average, and Bedford Park-Nortown with incomes just under \$5,000 greater than the average. Both Bedford Park-Nortown and North Toronto have incomes almost double the Toronto average in 2016. Bedford Park-Nortown has accelerated in median income level the most among all Ward 8 neighbourhoods, with North Toronto and Englemount-Lawrence also accelerating at relatively faster rates. However, Englemount-Lawrence has the lowest median income in both 1986 and 2016, followed by Briar-Hill Belgravia and Yorkdale-Glen Park.

(Statistics Canada, 1986; 2016). Below is a more detailed yet brief overview of each neighbourhood within Ward 8.

## Yorkdale - Glen Park

Yorkdale-Glen Park is bound to the north by Highway 401, to the west by the Canadian National Railway, to the south by Stayner Avenue, and to the east by the Allen Expressway, and is illustrated in Figure 8. Over half of the population was born outside of Canada and are predominantly from Italy. From 2011-2016, the population grew by 0.8%, which is below both the Ward 8 and City of Toronto averages. The average household size for this neighbourhood is 2.62 and the dependency ratio is 63.8, both higher than the Toronto averages. Just over a quarter of the population has a university degree. (City of Toronto, 2019a).

Household median incomes for this neighbourhood have maintained well below the Toronto average from 1986 to 2016 at \$58,376 (adjusted to inflation) and \$64,001 respectively, with Toronto averages at \$71,125 (adjusted to inflation) and \$78,373 respectively. Average dwelling values for Yorkdale-Glen Park have remained slightly below the Toronto average for 1986 and 2016, at \$295,650 (adjusted to inflation) and \$732,579 respectively. (Statistics Canada, 1986; 2016).

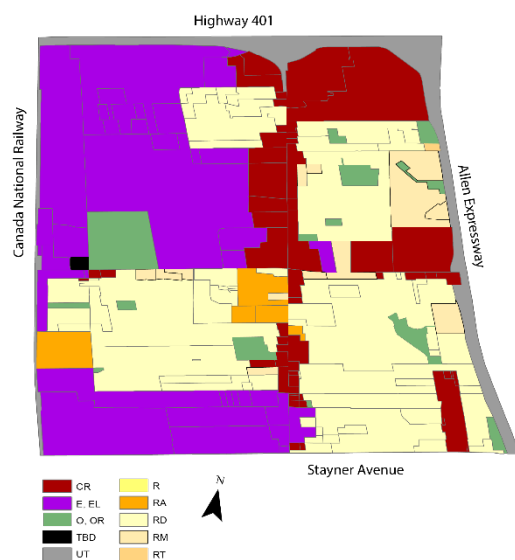


Figure 8: Yorkdale-Glen Park Zoning Designation

Yorkdale-Glen Park's land-use composition is quite mixed, consisting predominately of employment lands in the west, commercial/mixed-use along the *Avenues*, and residential detached zoning (RD) within its neighbourhoods. The residential multiple unit zoning (RM) is predominately encompassed in the Lawrence Heights housing complex, and with a slight presence along Dufferin Street, Lawrence Avenue West, and the Allen Expressway. Apartment zoning has a small presence along Dufferin Street and Caledonia Road. This neighbourhood has the highest proportion of non-residential land uses than its Ward 8 counterparts, and as such has a relatively small housing stock of 5,847. The mixed-use portions of this neighbourhood include Yorkdale Mall, Lawrence Allen Centre (previously known as Lawrence Square), Marlee Avenue, and the non-residential land-uses consist of commercial and employment uses west of Dufferin and along Caledonia Road.

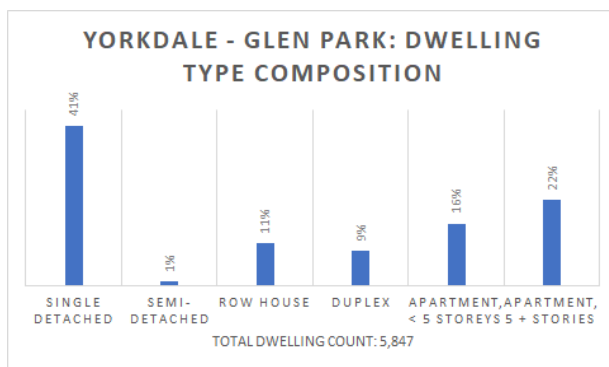


Figure 9: Dwelling Type Composition (City of Toronto, 2019a)

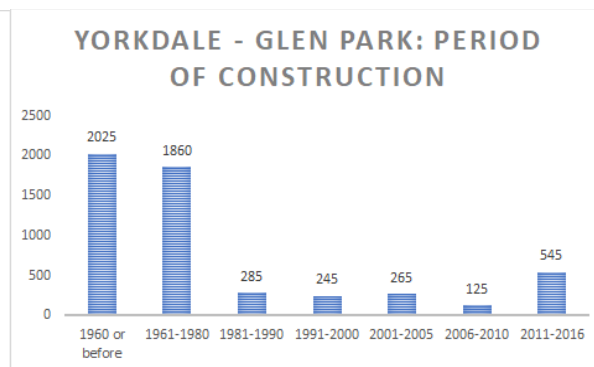


Figure 10: Period of Construction (Statistics Canada, 2016)

As indicated in Figure 9, Yorkdale-Glen Park comprises of predominately single detached houses, followed by apartments and other ground-oriented attached houses. While the prevailing built form in its residential neighbourhoods is detached houses and the prevailing residential zoning designation is RD, a significant portion of duplexes are also prevalent at 9% of the housing stock. As this neighbourhood contains *avenues* such as Lawrence Avenue West and Dufferin Street, a significant portion of its housing stock comprises of apartments and townhouses. Additionally, the western portion of the Lawrence Heights public housing complex is contained within this neighbourhood and is set for redevelopment and intensification. Three-quarters of the housing stock was built from before 1960 to 1980, with a small uplift in construction in recent years. This implies that much of this neighbourhood consists of ageing houses that are ready for redevelopment.

## Englemount - Lawrence

Englemount-Lawrence is bound to the north by Highway 401, to the south by Glencairn Avenue, to the west by the Allen Expressway, and to the east by Bathurst Street. The majority of residents in Englemount-Lawrence were born in Canada at 53%, and the largest place of birth outside of Canada is the Philippines. From 2011-2016, the population of Englemount-Lawrence grew by 1.3%, which is significantly lower than the Toronto average at 4.5%. The average household size in this neighbourhood is 2.65 and with the highest dependency ratio among all Ward 8 neighbourhoods at 80. 43.9% of Englemount Lawrence is educated with a university degree or higher, which falls slightly below the Toronto average of 44.1%. (City of Toronto, 2019a).

Household median incomes for 1986 and 2016 are well below the Toronto average and are the lowest among all Ward 8 neighbourhoods, at \$48,437 (adjusted to inflation) and \$59,596 respectively, with Toronto averages at \$71,125 (adjusted to inflation) and \$78,373 respectively. Dwelling values for Englemount-Lawrence remain slightly above the Toronto average in 1986 and 2016, at \$341,233 (adjusted for inflation) and \$746,744, respectively. (Statistics Canada, 1986; 2016).



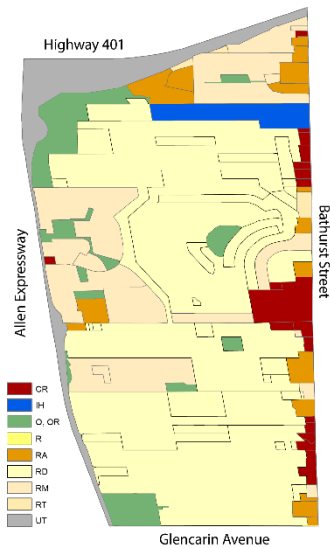


Figure 11: Englemount-Lawrence Zoning Designation

Englemount-Lawrence consists of predominately residential detached (RD) zoning, with a mix between residential and mixed-use zoning (CR) along the *Avenues* of Bathurst Street and Lawrence Avenue West. Institutional zoning (IH) is prevalent just west of Bathurst in the northern part of the Neighbourhood, consisting of Baycrest Geriatric Hospital and Care Centre. Apartment zoning (RA) exist in pockets throughout the neighbourhood along either Lawrence Avenue West or Bathurst Street, and with one pocket of RA zoning just south of the 401 by Baycrest Park consisting of the Neptune public housing complex. Residential multiple unit zoning (RM) is prevalent mostly within the Lawrence Heights housing complex, along with multiplexes just north of Baycrest and just north of the Bathurst and Lawrence intersection. RM zoning also exists along Lawrence Avenue West as a co-operative housing complex consisting of multiplexes, and south of Lawrence consisting of six-plexes.

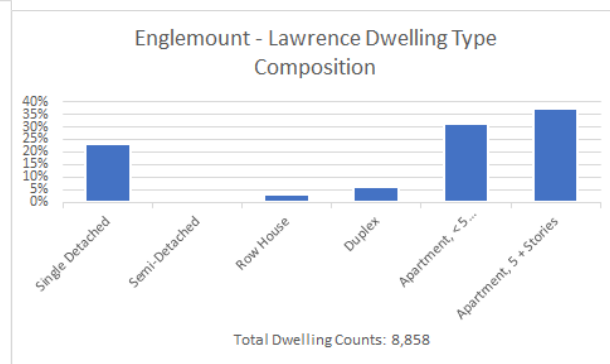
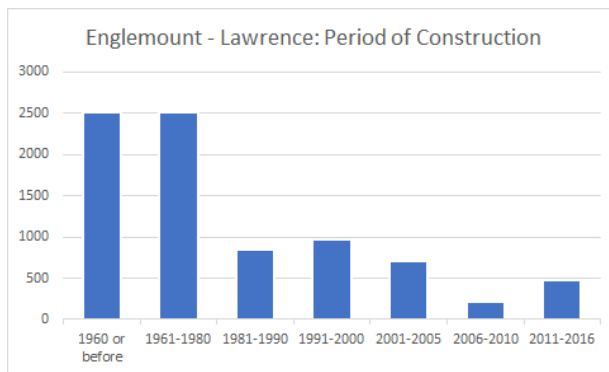


Figure 12: Period of Construction (Statistics Canada, 2016) Figure 13: Dwelling Type Composition (City of Toronto, 2019a)

Englemount-Lawrence was largely built during the postwar era, where CMHC was eager to address housing affordability issues and purchased large tracts of these lands to help households finance and build their own single-family houses (City of Toronto, 2010). The majority of the housing stock likely still comprises of the original houses built during this era, with much of construction occurring from before 1960 to 1980. As such, a significant built form typology consists of modest post-war bungalows.

Two-thirds of the housing stock in Eglinton-Lawrence is comprised of apartments, with 30% being less than five stories and just over 35% being greater than five stories. The large proportion of low-mid rise apartments likely consist of the multiplexes discussed above. The remainder of the housing stock is comprised of predominantly detached houses and a small proportion of other ground-oriented attached houses. As this neighbourhood encompasses *Avenues* such as Lawrence Avenue West and Bathurst Street, along with social housing complexes such as Lawrence Heights and Neptune, intensification in the form of apartments and townhouses form a significant part of the neighbourhood's housing stock and will continue to be in the future.



## Bedford Park - Nortown

Bedford Park-Nortown is bound to the north by Highway 401 with the eastern-most boundary being Yonge Street, the southernmost boundary being Hillhurst Boulevard, and with Bathurst Street to the south. The majority of residents in Bedford Park-Nortown were born in Canada at 69%, with the largest proportion of immigrants coming from the Philippines. From 2011-2016, the population of Bedford Park-Nortown grew 0.2%, the second lowest growth rate among Ward 8 neighbourhoods and significantly less than the Toronto average. The average household size is 2.69 and the dependency ratio is 76.9, both higher than the Toronto average. The majority of residents in Bedford Park-Nortown have a university degree or higher, at 64.7%. (City of Toronto, 2019a).

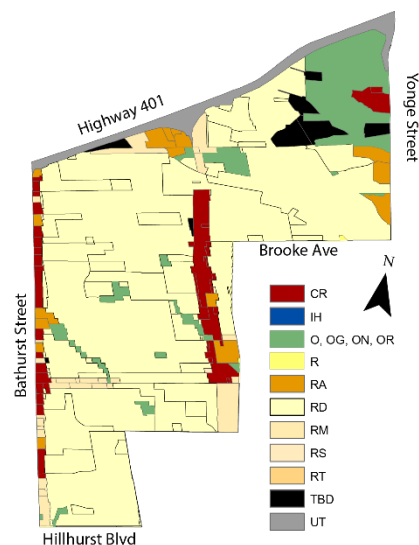


Figure 14: Bedford Park-Nortown Zoning Designations

The median income for Bedford Park-Nortown grew significantly from 1986-2016, at \$75,756 (adjusted to inflation) and \$121,289 respectively, compared to being slightly higher than the Toronto average in 1986 at \$71,125 to almost double in 2016 with a Toronto average at \$78,373. This neighbourhood has seen the largest annual increase in dwelling value at 9% from 1986 to 2016, moving from the third to the first highest average dwelling value among Ward 8 neighbourhoods. From 1986-2016, Bedford Park-Nortown's average dwelling value from 1986-2016 has consistently been more expensive than the Toronto average, increasing from \$453,242 to \$1,648,465, respectively. (Statistics Canada, 1986; 2016).

As visually depicted in Figure 14, Bedford Park-Nortown consists of the largest proportion of residential detached zoning (RD) among all other Ward 8 neighbourhoods. Other zoning designations include mixed-use (CR) and apartment (RA) zoning along Bathurst Street, Avenue Road, and Yonge Street. A small proportion of residential multiple unit (RM) zoning exists along Lawrence Avenue West, along Avenue Road, and Bathurst Street.

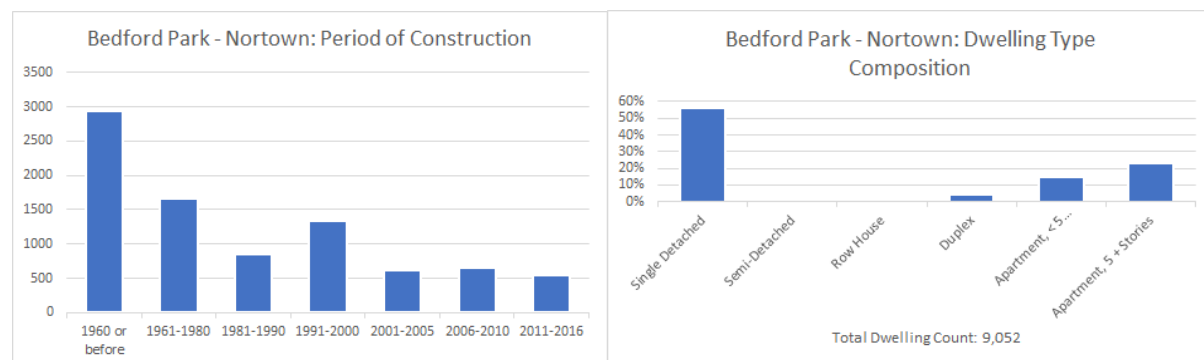


Figure 15: Period of Construction (Statistics Canada, 2016) Figure 16: Dwelling Type Composition (City of Toronto, 2019a)

Over half of Bedford Park-Nortown's dwelling type composition is single detached houses. The remainder of the housing stock mainly consists of apartments, as this neighbourhood encompasses *avenues* designated for intensification such as Bathurst Street, Avenue Road, and Yonge Street. Around half of the neighbourhood's housing stock was built from before 1960 to 1980, comprising of the original housing stock, with the other half presumptuously consisting of rebuilds.

## Briar Hill-Belgravia

Briar-Hill-Belgravia is directly south of the Yorkdale-Glen Park neighbourhood, with boundaries of Briar Hill Avenue to the North, the CNR to the west, Eglinton Avenue West to the south, and Marlee Avenue to the east. The majority of residents in Briar Hill-Belgravia were born outside of Canada at 63%, with the predominant ethnicities being Philipino, Italian, and Portuguese. The population from 2011-2016 has declined by 0.3% in Briar Hill-Belgravia, which is the lowest population growth among all Ward 8 neighbourhoods. The average household size in this neighbourhood is 2.48 and with a dependency ratio of 49.3, making these higher and lower than the Toronto average, respectively. The proportion of residents with a university degree or higher is 34.7%, which is lower than the Toronto average and the lowest among all Ward 8 neighbourhoods. (City of Toronto, 2019a).

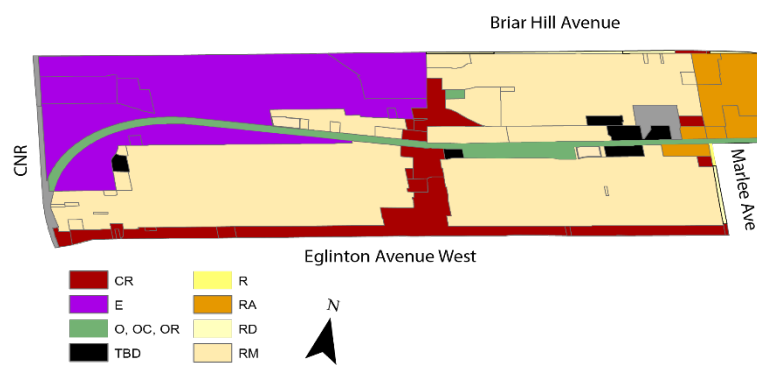


Figure 17: Briar Hill-Belgravia Zoning Designations

Household median income from 1986-2016 has stayed well below the Toronto average, at \$52,887 and \$60,858 respectively. Average dwelling values from 1986-2016 have also stayed below the Toronto average, at \$224,991 (adjusted for inflation) and \$560,068, respectively. (Statistics Canada, 1986; 2016).

Briar-Hill Belgravia is diverse and permissive in its zoning designations. The north-west consists predominantly of employment lands, with the mixed-use (CR) zoning along Dufferin Street and Eglinton Avenue West. Its residential portion consists mostly of residential multiple unit zoning (RM), with some apartment zoning (RA) in the northeast.

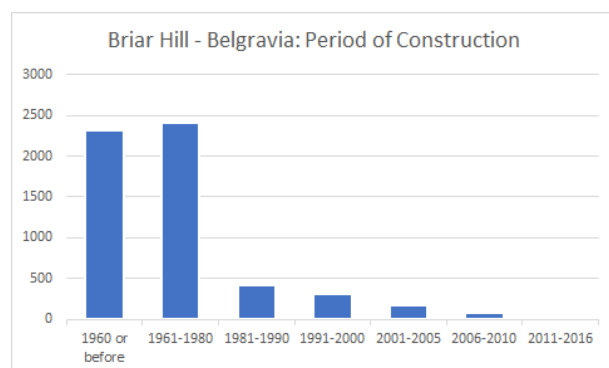


Figure 18: Period of Construction (Statistics Canada, 2016)

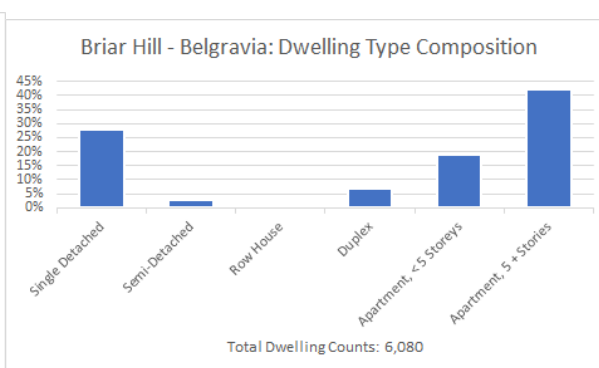


Figure 19: Dwelling Type Composition (City of Toronto, 2019a)

Briar-Hill Belgravia has a diverse and ageing housing stock. Over half of the neighbourhood's housing stock consists of apartments, with almost half being higher than five stories, and around a fifth with less than five stories. Around a fourth of the housing stock consists of single detached h, with the remaining tenth of the housing stock consisting of other ground-oriented houses such as duplexes, semi-detached, and row houses. The vast majority of Briar Hill-Belgravia's housing stock is ageing, with over three quarters being built before 1980, and with very little new development occurring in recent years. This statistic implies that most of this neighbourhoods housing stock consists of its original houses.

## Forest Hill North

Forest Hill is a mature and affluent suburb of Toronto, incorporated as a village in 1923 and annexed into the City of Toronto in 1967 (Toronto Neighbourhoods, 2019). Its southern portion, south of Eglinton Avenue, was fully developed by the 1930's, however, Forest Hill North was slower to develop due to previous utility and industrial uses (Toronto Neighbourhoods, 2019). Forest Hill North is bounded to the north by Briar Hill Avenue, to the east by Latimer Avenue, and to the south by Eglinton Avenue West.

The majority of Forest Hill North residents were born in Canada at 57%, with immigrants most commonly from the Philippines. Forest Hill North has seen a population growth of 2.7% from 2011-2016, which is lower than the Toronto average but higher than most of its Ward 8 counterparts. The average household size in Forest Hill North is 2.33 with a dependency ratio of 60.6. At 57.9%, the majority of residents in Forest Hill North have a university degree or higher. (City of Toronto, 2019a).

Forest Hill North has had a lower household median income than the Toronto average in both 1986 and 2016, at \$66,803 (adjusted to inflation) and \$73,269 respectively. In 1986, Forest Hill had the highest average dwelling value among all Ward 8 neighbourhoods at \$594,787, and in 2016 has the third highest dwelling value at \$1,455,524. (Statistics Canada, 1986; 2016).

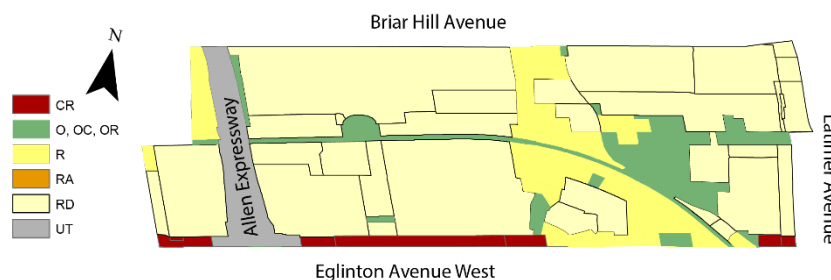


Figure 20: Forest Hill North Zoning Designations

Forest Hill North consists of predominately residential land-use designations, with the majority being detached (RD) zoning. A significant proportion of the zoning is more permissive for residential zoning (R) and throughout this area the predominant built form typology are apartments. This neighbourhood also contains mixed-use zoning (CR) along Eglinton Avenue West.

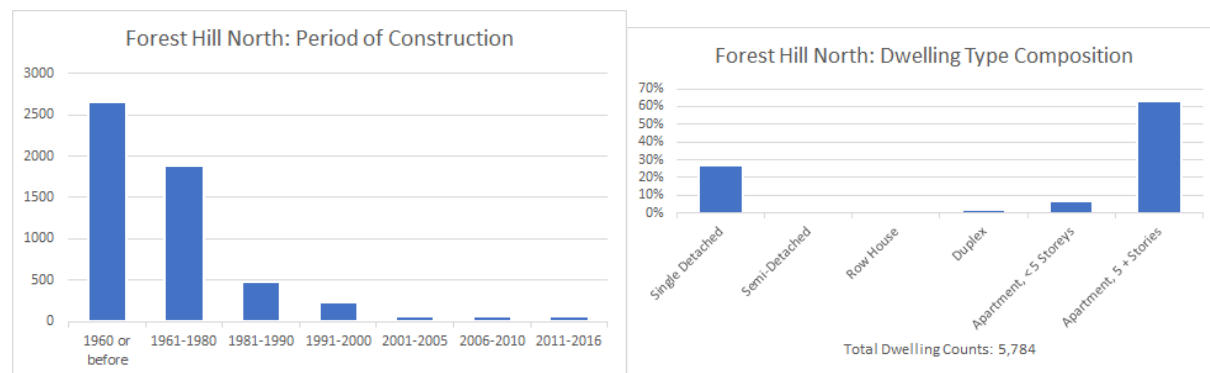


Figure 21: Period of Construction (Statistics Canada, 2016) Figure 22: Dwelling Type Composition (City of Toronto, 2019a)

Forest Hill North has an overwhelmingly large housing stock composition of apartments greater than five stories, with the second most significant built form type being the detached house at around a quarter of the housing stock. The remainder consists of apartments less than five stories, and a small portion of duplexes. Forest Hill North also has an ageing housing stock, with most houses being built before 1980, and in effect presumptuously the original houses.

## North Toronto

North Toronto is a mature suburb of Toronto, previously incorporated as a village in 1889 with boundaries of Avenue Road to the west, Bayview Avenue to the East, Glen Echo in the north, and Merton Street to the south (Toronto Public Library Board, 1974). These historical boundaries closely align with the neighbourhoods known today as Lawrence Park North, Lawrence Park South, Yonge and Eglinton, and Mount Pleasant. By 1907, all the land within North Toronto's boundaries was developed, with Lawrence Park North being the slowest to develop (Toronto Public Library Board, 1974). By 1912, North Toronto was annexed into the City of Toronto (Toronto Public Library Board, 1974). The neighbourhood of North Toronto encompassed within Ward 8 comprises of the western half of the Lawrence Park North and South neighbourhoods, and the north-west part of the Yonge-Eglinton neighbourhood. This neighbourhood is depicted in Figure 23, with the boundary to the north being Roe Avenue, Yonge Street to the east, and Eglinton Avenue West to the south.

The majority of residents in Yonge-Eglinton, Lawrence Park North and Lawrence Park South were born in Canada, at 68%, 76%, and 77% respectively, with the greatest proportion of immigrants born in the United Kingdom. From 2011-2016, population growth for Lawrence Park North and South has been slow at 0.5% and 0.7% respectively, with Yonge-Eglinton growing rapidly at 11.7%. Dependency ratios for Lawrence Park North and South are higher than the Toronto average at 71.8 and 68.6 respectively, with Yonge-Eglinton at 49.4. The average Household size in Lawrence Park North and South are similar at 2.69 and 2.63 respectively, with Yonge-Eglinton at 2.08. (City of Toronto, 2019a).

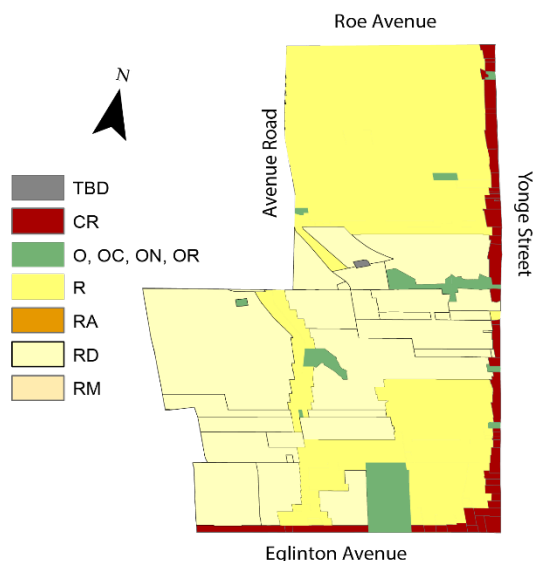


Figure 23: North Toronto Zoning Designations

Median household income from 1986-2016 for the North Toronto neighbourhood have stayed consistently well above the Toronto average, at \$94,016 and \$132,914, respectively. North Toronto had the second highest dwelling values in both 1986 and 2016 among all Ward 8 neighbourhoods, at \$508,739 and \$1,504,007, respectively. (Statistics Canada, 1986; 2016).

The North Toronto neighbourhood is predominately residential, with mixed-use (CR) designations along Yonge Street and Eglinton Avenue. The residential zoning designations are split between detached (RD) and more permissive (R) residential zoning.

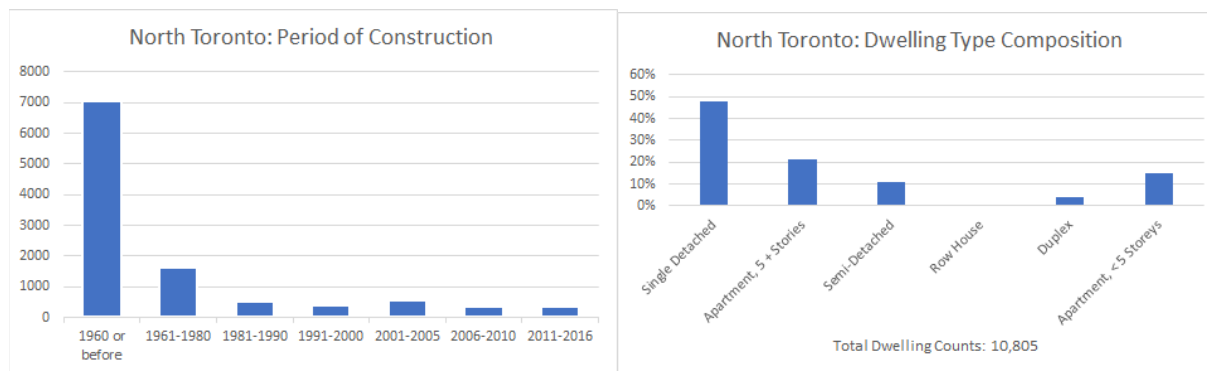


Figure 24: Period of Construction (Statistics Canada, 2016) Figure 25: Dwelling Type Composition (Statistics Canada, 2016)

The predominant residential built form is the detached house in North Toronto, followed by apartments. Semi-detached and duplexes also make up a significant portion of the housing stock. Most of the housing stock in North Toronto was built before 1980, with new development occurring incrementally since this period. As this area has been developed for over a hundred years, it is uncertain whether those houses built before the 1980's are originals or rebuilds.

### Housing Services Change

As discussed in the literature review, a method of understanding the supply-constraining impacts of restrictive zoning is to analyze the change in housing services over time. If this analysis depicts an increase in the number of housing services embodied in a unit over time, this implies the developer re-orientation of residential projects. Figure 26 and 27 illustrate a high-level narrative of this neighbourhood change over time. Bedford Park-Nortown experienced the most drastic increase in their average room numbers, from 5.89 in 1986 to 7.01 in 2016, resulting in an average increase of 1.12 rooms per household. The North Toronto neighbourhood also experienced a slight increase, from 5.95 in 1986 to 6.4 in 2016, resulting in an average increase of 0.45 rooms per household. The remaining neighbourhoods did not see a significant change, with Englemount-Lawrence and Briar Hill-Belgravia exhibiting slight decreases in average room number since 1986, and with Forest Hill and Yorkdale-Glen Park seeing slight increases since 1986.

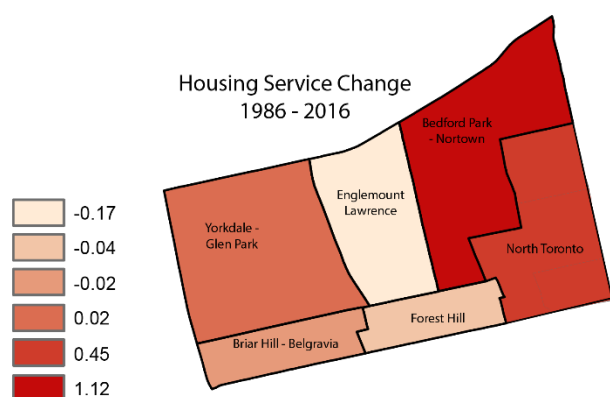


Figure 26: Difference in weighted averages for the number of rooms per household by neighbourhood from 1986-2016 (Statistics Canada, 1986; 2016).

Neighbourhood	1986 Average	2016 Average
Englemount-Lawrence	5.22	5.05
Forest Hill North	5.16	5.12
Briar Hill-Belgravia	4.77	4.75
Yorkdale-Glen Park	5.60	5.62
North Toronto	5.95	6.40
Bedford Park-Nortown	5.89	7.01

Figure 27: Weighted averages for the number of rooms per household by neighbourhood for 1986 and 2016 (Statistics Canada, 1986; 2016).

However, it should be noted that the census tracts used in this dataset include the *avenues* and other areas outside of Toronto's *neighbourhoods* that are designated for intensification. Thus, the above maps represent a high-level picture of residential change within each neighbourhood, rather than what is specifically occurring in its *neighbourhoods*. These maps may more accurately depict certain neighbourhoods such as Bedford Park-Nortown which is predominately zoned residential, and the majority of its housing stock is the single-family detached house, mostly comprised in its *neighbourhoods*. Other neighbourhoods such as Englemount-Lawrence whose housing stock is significantly comprised of apartments along the *avenues* and within Lawrence Heights may not be giving an accurate description of the average room number change occurring specifically in its *neighbourhoods*.

## Results

### Trends in House Price

#### By Neighbourhood

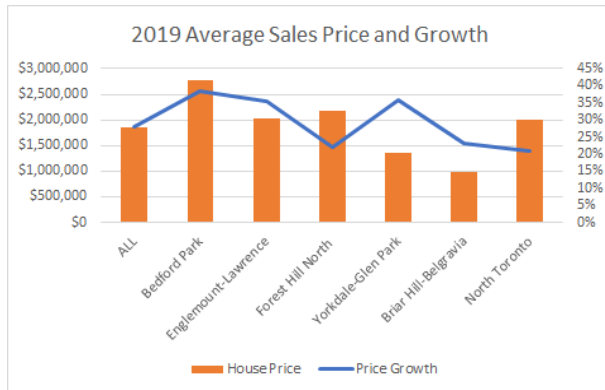


Figure 28: Average sales price per neighbourhood in 2019 and price growth among repeat sales. Data retrieved from HouseSigma.

House Price and Growth by Neighbourhood					
Neighbourhood	Total Counts	Repeat Sales	Average Price Growth	Average House Price	Average Restrictiveness
Bedford Park-Nortown	13	12	32%	\$ 2,763,992	3.0
Englemount-Lawrence	19	16	30%	\$ 2,037,053	2.7
Yorkdale-Glen Park	15	9	30%	\$ 1,354,427	2.6
Briar Hill-Belgravia	20	12	19%	\$ 976,990	1.1
Forest Hill North	10	5	18%	\$ 2,187,250	2.3
Lawrence Park South (North Toronto)	13	7	15%	\$ 2,664,000	2.0
Lawrence Park North (North Toronto)	14	10	18%	\$ 1,642,485	1.0
Yonge-Eglinton (North Toronto)	10	8	17%	\$ 1,646,079	1.1
All	114	79	23%	\$ 1,850,541	

Figure 29: Data for House Price, Growth, and Restrictiveness by Neighbourhood

Figure 28 and 29 depict the average sales price in 2019 among each neighbourhood, and the subsequent price growth experienced in each neighbourhood. The average sales price was compiled by collecting and averaging all the sales listings in each Ward 8 neighbourhood for 2019. Average price growth was compiled by subsequently documenting the earliest sales price and date for each listing (if applicable) and using the following formula (as discussed in the Methods chapter) to calculate house price growth:

$$\% \text{ HP Growth} = \frac{[(\text{Current HP} - \text{Earliest HP}) \div \text{Earliest HP}]}{(\text{Current HP year} - \text{Earliest HP year})}$$

As depicted in Figure 28, Bedford Park-Nortown has the highest sales prices among all Ward 8 neighbourhoods, followed by North Toronto and Forest Hill North, which is consistent with the 2016 census on dwelling values and overall 2019 market conditions (see Appendix A for more information). While Englemount-Lawrence and Yorkdale-Glen Park had modest dwelling values in the 2016 census, their sales prices in this data set and among overall 2019 market conditions are substantially higher. This

correlates to the accelerated price growth experienced by these neighbourhoods, which surpass all other neighbourhoods in Ward 8 except for Bedford Park-Nortown by a 2% margin.

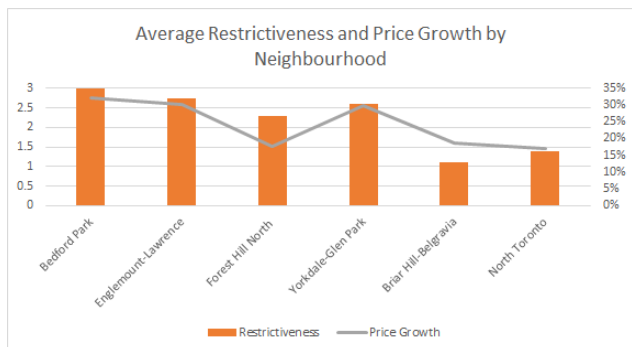


Figure 30: Average restrictiveness and price growth by neighbourhood. Data retrieved from HouseSigma.

Figure 30 depicts price growth in each neighbourhood in comparison to the restrictiveness exhibited in each neighbourhood. As discussed in the Methods chapter, a restrictiveness measure from R1 to R3 is assigned to each parcel within the house sales dataset. These measures were averaged out to display average restrictiveness per neighbourhood in Figure 30. Average price growth per neighbourhood was calculated using the formula discussed above.

As is evident with both Figure 28 and 30, less restrictive neighbourhoods such as those within North Toronto and Briar Hill-Belgravia appear to experience less price growth than their more restrictive counterparts. The most restrictive neighbourhoods, which are Bedford Park-Nortown, Englemount-Lawrence, and Yorkdale-Glen Park, are experiencing the most accelerated price growth from this sample, followed by Forest Hill North. This mostly agrees with 2019 market conditions as depicted in Figure 49 in Appendix A, where Englemount-Lawrence is experiencing the most accelerated house price growth, followed by Yorkdale-Glen Park and Forest Hill North, with Bedford Park-Nortown experiencing a decline in price growth this year. This stark difference in price growth within Bedford Park-Nortown may be because the neighbourhood has already rebuilt a great deal of its original housing stock and as such prices may not have grown as rapidly this year, however from a repeat sales perspective this neighbourhood is still experiencing rapid price growth.

#### By Restrictiveness



Figure 31: Average Sale Price by Restrictiveness

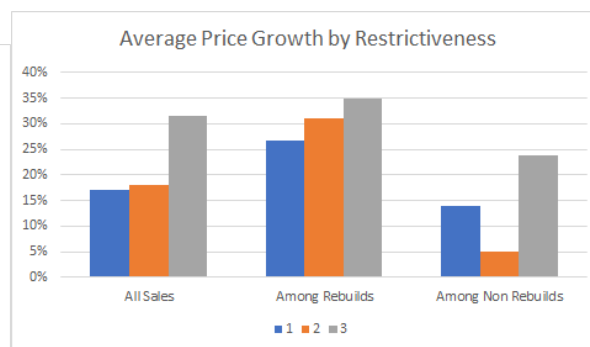


Figure 32: Average Price Growth by Restrictiveness



House Price and Growth by Restrictiveness			
Restrictiveness	1	2	3
Total Counts	50	13	49
Repeat Sales Counts	35	5	37
Rebuilds Counts	8	2	20
Non Rebuilds Counts (Repeat Sales)	27	3	17
Average House Price (All Sales)	\$ 1,393,294	\$ 1,901,869	\$ 2,358,169
Average House Price (Rebuilds)	\$ 1,845,813	\$ 2,805,000	\$ 2,948,120
Average House Price (Non Rebuilds)	\$ 1,336,025	\$ 1,437,500	\$ 1,888,406
Average Price Growth (All Sales)	17%	18%	32%
Average Price Growth (Rebuilds)	27%	31%	35%
Average Price Growth (Non Rebuilds)	14%	5%	24%

Figure 33: Total Counts, House Price, and Price Growth by Restrictiveness

Figure 31 depicts the average sale price among each measure of restrictiveness, and Figure 32 depicts the average price growth experienced among each measure of restrictiveness, both further categorized into rebuilds and non-rebuilds. As depicted in Figure 31 and 32, it is evident that the most restrictive areas experience the highest prices and the highest price growth. The difference in sales price is especially prevalent among rebuilds, where R3 is over a million dollars greater than R1. However, sale prices for R3 are still \$500,000 greater than R1 among non-rebuilds. All restrictiveness measures experience high price growth, with R3 experiencing the greatest house price growth among all sales, rebuilds, and non-rebuilds. Average price growth among non-rebuilds is interesting to note, with R3 experiencing almost double the price growth than R1. This may be a sign of land-use regulations being capitalized into the land values of R3 parcels.

## Trends in Housing Services

### By Neighbourhood

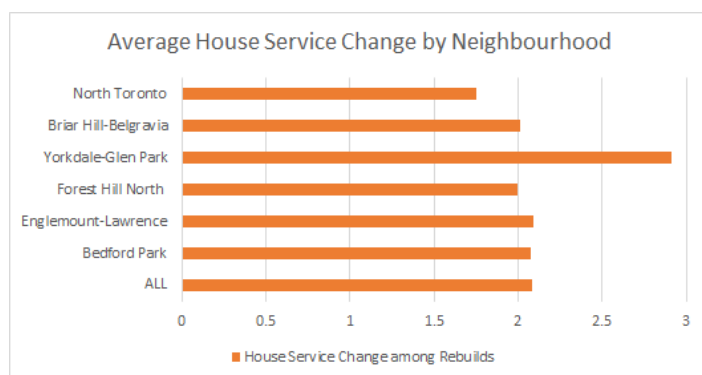


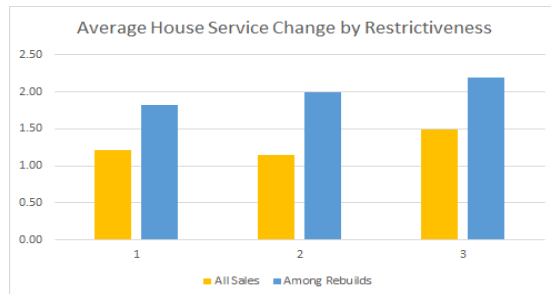
Figure 34: Average Housing Service Change by Neighbourhood

Figure 34 depicts the average housing service change by neighbourhood, further broken down into changes among all sales and rebuilds. Average housing service change was compiled by documenting the number of bedrooms and bathrooms among each house listed for sale in 2019, and subsequently documenting the number of bedrooms and bathrooms listed among the earliest sale of the same property. As discussed in the methods chapter, the following formula was used for calculating housing service change among all sales and rebuilds:

Housing service change = (current # bed + bath)/(former # bed + bath)

As depicted in Figure 34, it is prevalent that Yorkdale-Glen Park has experienced the greatest change in housing services among rebuilds, at almost triple, followed by Englemount-Lawrence and Bedford Park-Nortown. The greatest housing service change among all sales is Englemount-Lawrence, followed by Bedford Park-Nortown and Yorkdale-Glen Park. The lowest neighbourhood housing service change among rebuilds is North Toronto, and the lowest housing service change among all sales is Forest Hill North.

### By Restrictiveness



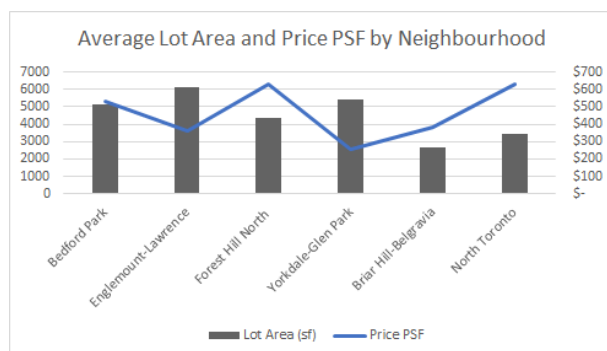
Housing Service Change by Restrictiveness			
Restrictiveness	1	2	3
Total Counts	50	13	49
Rebuilds Counts	8	2	20
Average Housing Service Change (All Sales)	1.21	1.14	1.50
Average Housing Service Change (Rebuilds)	1.83	2.00	2.20

Figure 35: Average Housing Service Change by Restrictiveness Figure 36: Total Counts, Housing Service Change by Restrictiveness

Figure 35 depicts the average housing service change by restrictiveness, further broken down into changes among all sales and among rebuilds. As depicted by Figure 35, it is evident that the most restrictive neighbourhoods experience the greatest housing service change. This is especially prevalent for rebuilds, where housing services increase by more than double for the most restrictive measure. While the most restrictive areas are increasing the most in terms of housing services, it should be noted that all rebuilds appear to be greatly increasing their housing services, with the least restrictive measure seeing increases of almost double.

### Extensive vs. Intensive Value of Land

#### By Neighbourhood



Lot Area and Price Per Square Foot (PSF) by Neighbourhood			
Neighbourhood	Total Counts	Average Lot Area	Average Price PSF
Bedford Park-Nortown	13	5113	\$ 529
Englemount-Lawrence	19	6104	\$ 360
Yorkdale-Glen Park	15	5437	\$ 256
Briar Hill-Belgravia	20	2682	\$ 386
Forest Hill North	10	4391	\$ 631
Lawrence Park South (North Toronto)	13	4948	\$ 577
Lawrence Park North (North Toronto)	14	2618	\$ 653
Yonge-Eglinton (North Toronto)	10	2659	\$ 669
North Toronto	37	3448	\$ 631
All	114	4276	\$ 488

Figure 37: Average Lot Area and Price Per Square Foot by Neighbourhood

Figure 38: Counts, Average Lot Area and Price Per Square Foot by Neighbourhood

Figure 37 depicts the average lot area and price per square foot of each parcel analyzed by neighbourhood. Average lot area was compiled by documenting the lot width and depth of each sales

listing and multiplying the two to calculate lot area. Price per square foot was calculated using the following formula:

Price per square foot = current sale price / lot area

As depicted in Figure 37, it appears that the neighbourhoods with the largest lot areas, Englemount-Lawrence and Yorkdale-Glen Park, also have the lowest average price per square footage. These two neighbourhoods are also among the most restrictive. The most historically affluent neighbourhoods, which are North Toronto, Forest Hill North, and Bedford Park-Nortown, contain the highest price per square footage, however, it appears that North Toronto and Forest Hill may be more affordable considering their lot area is smaller. While Briar-Hill Belgravia contains the lowest income demographics and subsequently has the most affordable housing along with weaker market conditions than its neighbours, it has a higher price per square foot than both Yorkdale-Glen Park and Englemount-Lawrence. It is also among the least restrictive neighbourhoods.

#### By Restrictiveness

Lot Area and Price PSF by Restrictiveness			
Restrictiveness	1	2	3
Total Counts	50	13	49
Lot Area (PSF)	2669	3852	6269
Price PSF	574	516	388

Figure 39: Lot Area and Price Per Square Foot by Restrictiveness

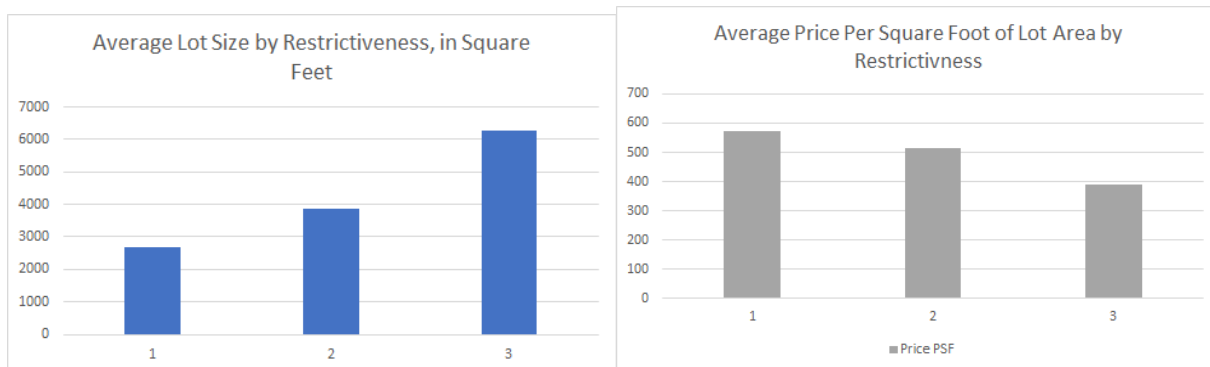


Figure 40: Average Lot Size in Square Feet by Restrictiveness      Figure 41: Average Price PSF by Restrictiveness

Figure 40 depicts the average lot size per square foot, and Figure 41 depicts the average price per square foot of a lot, by restrictiveness. Figure 41 was calculated using the same method as for calculating price PSF for neighbourhoods above. As depicted in Figure 40, it is evident that the more restrictive an area is, the larger the lot area is as well. As depicted in Figure 41, the least restrictive areas have the highest price per square foot, whereas the most restrictive areas have the lowest price per square foot. This is interesting to note, as according to Figure 31, the most expensive houses were in the most restrictive areas. This may imply a supply constraint, where larger lots and higher house prices in the most restrictive areas equate to a lower per-square-foot property value than in less restrictive, more affordable areas, implying that the land is not being utilized in a fully optimal capacity.

## Prevalence of Intensification

From analyzing a small sample of minor variance and consent applications, the majority of new developments proposed were rebuilds of single-family detached houses. The minor variances requested typically involved an increase in building height, depth, and footprint, along with decreased setback and frontage requirements. The only instances of new development transitioning from a single-family to a multi-unit built-form typology were in the least restrictive areas, where one application for a triplex was approved and another for a four-story semi-detached was rejected. The approval and rejection of these applications both stemmed from conformity with neighbourhood character.

Intensification in the form of lot severance was more commonly found in the most restrictive areas, where one of the three applications analyzed was approved, one was rejected, and one awaiting a decision. A singular instance of a lot severance was observed in a less restrictive area, and this application was rejected. The approved lot severance was in a restricted area with a minimum lot size requirement of 550 square meters (sqm), where the application proposed to sever the lot into two undersized units of 250sqm each. The rationale on behalf of City Staff for recommending to approve this severance was that the proposed application remained consistent with the prevailing character of the neighbourhood despite non-conformity with zoning requirements. This is prevalent in Figure 42, which depicts a large lot where the proposed application severance would occur, and Figure 43, which depicts immediately adjacent properties with lot sizes similar to that being proposed. Letters of public support were signed without any opposition noted, and within four months the application was approved. This instance signals that the idea of neighbourhood character prevails over any technicality within the zoning code; while approving half of the minimum lot size requirement appears to be quite drastic, Figures 42 and 43 show that the lot severance would indeed be appropriate in terms of neighbourhood character.

In another instance, a lot severance application in the same neighbourhood with the same zoning restrictiveness requested a lot size of 318sqm along with a variety of other minor variances such as increased building footprint and decreased lot frontage was rejected. While this application would technically be considered less drastic in terms of deviation from the zoning code, City Staff's rationale was that no other properties in the surrounding neighbourhood have lots of the proposed size and that the vast majority of all other properties maintain the frontage requirements set out in the zoning by-law. Despite that, there was no noted public opposition and that this application was technically less drastic than the application discussed above, it was not approved as it did not conform to the prevailing character of the neighbourhood.



*Figure 42: 433 Deloraine Avenue. Retrieved from Google Maps.*



Figure 43: 423-427 Deloraine Avenue. Retrieved from Google Maps.

### Trends in Community Attitudes Towards Development

From analyzing public letters of objection and support for minor variance and consent applications in neighbourhoods, there were two instances of the community mobilizing to oppose the application, where both these instances involved opposition to increased density. The first application was in a restrictive neighbourhood and proposed to rebuild a new single-family detached house (31 Regina Ave), however a number of neighbours and City Staff reviewed the application and felt that a variety of proposed features resembled a semi-detached unit. Twelve neighbours signed a petition, noting issues with a semi-detached structure including the depreciation of property values for surrounding houses, rising population density, and anticipated parking issues, as indicated in their letter:

"We welcome new big houses, parks, and big yards into our old neighbourhood. But we oppose semi-detached homes for reasons including but not limited to a rise in population density, crowded parking and the potential for a decrease in property value of surrounding homes"

City Staff recommendations to the Committee of Adjustment to reject variances that could anticipate a conversion to a semi-detached house, as it does not keep with the prevailing neighbourhood character and is contrary to the intent of the by-law. There is a hearing scheduled for this application.

The second instance of community mobilization to oppose minor variance and consent applications was for a lot severance to construct two detached units (116 Briar Hill Avenue) in a less restrictive area with the zoning "R f7.5 u2". This proposal would have severed the existing 45ft lot frontage into two almost 20ft long frontages with significantly decreased side setbacks, a longer building depth, larger building footprint and a taller structure. Along with a number of opposition letters, the Lytton Park Residents Association spearheaded an opposition letter that received 66 signatures, and the City Councillor wrote a letter in support of her constituents. Rationales for community opposition generally stem from their perception that the application does not respect the current character of the neighbourhood and that

allowing this development would set a dangerous precedent for future developments. This application is currently under appeal.

The two instances of conversion from a single-family to multi-family dwelling generated public opposition. While approved within two months, the application for a triplex (82 Livingstone Ave) received multiple complaints opposing the development, which were particularly rooted in anti-rental attitudes. One neighbour indicated that allowing rental properties would decrease property values for the area and posited “what potential property owner would want to move to a residential street and be surrounded by rental units?” From an analysis of opposition letters, it appears that 82 Livingstone operates as a rental, where neighbours seem to have negative interactions and perceptions of the tenants that have lived there, and do not want additional tenants in their neighbourhood.

The second instance of single to multi-family conversion was an application to convert a single story, single-family detached house, to a four-story semi-detached structure (485 Ridelle Ave). One neighbour opposed this development because four stories would decrease visual separation and solar access, that the proposed structure height is almost twice the height of neighbouring properties. It was also mentioned that increased density would exacerbate parking issues in the neighbourhood. This application was rejected.

92% of proposed developments that received opposition posed issues with the increase in structure size. Complaints regarding increases in structure size were typically the symptom of the crux of the public’s issue, which would often be regarding decreased sunlight, less privacy, or environmental factors such as less green space and increased flooding risk.



## Discussion

This MRP provides preliminary evidence that confirms restrictive zoning in Toronto's neighbourhoods has unintended effects on the housing market. Unintended effects are discussed in academic literature by urban economists who have studied the impact of artificially restrictive land-use regulation on the housing market and have found that their implications work to lower housing affordability in the area. This MRP aimed to test the prevalence of three unintended effects that overly restrictive land-use regulations are known to exhibit, which include higher sales prices and price growth, developer reorientation of housing projects, and a difference in property value on the intensive and extensive margin. The preliminary findings of this MRP conclude that restrictive zoning in Toronto's neighbourhoods create unintended consequences of accelerated house price growth, luxury housing, and truncated land values. This MRP also examined new developments proposed within Ward 8's neighbourhoods, finding that their approval and acceptance is strictly bound to existing and prevailing physical character, and neighbours either support or oppose new development based on this idea. Below is a discussion of the prevalent findings from this MRP, along with a discussion about Toronto's yellow belt and the importance of exploring missing-middle housing typologies within its neighbourhoods.

1. Higher house prices and price growth are observed in the most restrictive areas and neighbourhoods.

As discussed in the literature review, strict land-use regulation can reduce the housing market's elasticity of supply, where an increase in demand disproportionately increases price rather than the quantity of housing (Monkkonen, Lens & Manville, 2020). This is a documented problem in Toronto, with supply responses to price increases being weak relative to other Canadian cities (CMHC, 2019). This response is not surprising considering residential land-use regulation in Toronto overall is noted to be more stringent in comparison to other cities in the Greater Golden Horseshoe (Green, Herzog & Filipowicz, 2015), and with increased regulatory stringency in Canadian cities correlated to slower growth in the housing stock (Green, Filipowicz, Lafleur & Herzog, 2016). While the neoclassical land model suggests that higher densities should be observed in areas with a high cost of land, artificially restrictive regulation can distort this model, leading to highly regulated areas with large lots and high prices (Glaeser & Gyourko, 2003).

Despite Toronto continuing to grow with demand for housing exceeding supply, much of the City's inner-suburban neighbourhoods, referred to as the "yellow belt," are experiencing population decline (Canadian Centre of Economic Analysis & Canadian Urban Institute, 2019). With little growth observed in these neighbourhoods, this MRP aimed to further investigate the relationship between local land-use regulation and house price within eight inner-suburban neighbourhoods in order to characterize the effects of restrictive zoning on the housing market. From analysis of 2019 sale prices among sold houses in Ward 8's neighbourhoods, this MRP finds accelerated price growth and higher prices for the most restrictive areas and neighbourhoods in comparison to less restrictive areas and neighbourhoods.

The most restrictive and high price neighbourhood analyzed is Bedford Park-Nortown. This mature suburb has, since 1986, experienced the largest annual increase in dwelling value, and contains the highest average dwelling value, exceeding both the North Toronto and Forest Hill North neighbourhoods (Statistics Canada, 1986; 2016). Median incomes in Bedford Park-Nortown have seen the greatest annual increase, hovering just above the Toronto average in 1986, amounting to almost double the

Toronto average in 2016 (Statistics Canada, 1986; 2016). Bedford Park-Nortown is the most expensive neighbourhood as per the sample of 2019 sold houses, and population growth has remained relatively stagnant (City of Toronto, 2019a). From this analysis, it is evident that the most restrictive neighbourhood, while starting off in 1986 with modestly higher dwelling values and median incomes than the Toronto average, has greatly surpassed this average and subsequently the more historically affluent yet less restrictive neighbourhoods of Forest Hill and North Toronto. This accelerated increase in comparison to its more affluent, yet less restrictive inner-suburban neighbourhoods suggests that strict regulations may be contributing to Bedford Park-Nortown's inflationary house prices.

The second most restrictive neighbourhood is Englemount-Lawrence, followed closely by Yorkdale-Glen Park. These neighbourhoods have only seen modest annual dwelling value growth, with average dwelling values hovering around the Toronto average and median incomes significantly lower than the Toronto average for both 1986 and 2016 (Statistics Canada, 1986; 2016). Despite these historical results, 2019 sales prices for sold houses in Englemount-Lawrence and Yorkdale-Glen Park are substantially higher than historical house prices, with price growth among repeat sales surpassing all other neighbourhoods in Ward 8 besides Bedford-Park Nortown. Despite accelerated price growth, population growth in Englemount-Lawrence and Yorkdale-Glen Park remain lower than the Toronto average (City of Toronto, 2019a). This recent uptick in price growth and house price in compilation with slow population growth may be emblematic of the supply constraining impacts associated with zoning restrictiveness in these neighbourhoods. As these neighbourhoods had historically modest median incomes and dwelling values, yet are being rebuilt for a significantly higher income demographic, it is likely that Englemount-Lawrence and Yorkdale-Glen Park are on the same trajectory as Bedford Park-Nortown in terms of income distribution skewing to the right. The contributing factors of stagnant population growth and the drastic appreciation in house prices are emblematic of the supply-constraining impacts of land-use regulation that work to lower housing affordability in the area.

From a cross-sectional analysis of all sampled parcels within Ward 8, the most restrictive parcels experience the highest prices and price growth. The persistently higher sales prices and price growth among the most restrictive parcels are congruent with the housing market impacts of overly restrictive zoning, where constrained supply leads to increased price growth and house prices. These results indicate that price nuances exist between varying levels of zoning restrictiveness in Toronto's neighbourhoods. While all of the parcels in this sample exhibit price growth, the most accelerated price growth and the highest-priced houses are found in the most restrictive areas. Instead of house prices correcting through increasing density, house prices are accelerating at a remarkably high rate, especially in the most restricted areas and neighbourhoods.

2. Housing services per housing unit are increasing throughout all Ward 8 neighbourhoods, with the most drastic changes in the most restrictive areas.

Developer re-orientation of housing projects towards an increase in housing services appears to be prevalent in all Ward 8 neighbourhoods, with an average housing service increase of double among rebuilds. Housing service change among rebuilds is the greatest in the most restricted areas and neighbourhoods, with Yorkdale-Glen Park seeing an increase of almost triple, and the most restrictive areas seeing an average increase of 2.20. These results may imply that supply constraining impacts in the form of market reorientation towards luxury housing may be prevalent. While the most restricted areas appear to be experiencing the greatest reorientation effects, it appears that the less restrictive



areas are also experiencing reorientation effects, implying that supply is being constrained throughout the entire neighbourhood. This may be in part due to the idea of neighbourhood character, as discussed later on.

These results coincide with the “monster house” phenomenon occurring throughout Toronto’s inner-suburbs, where the original housing stock of post-war bungalows are being torn down and replaced by large luxury houses. With household sizes in Toronto getting smaller, it is unlikely that latent demand is driving the building of larger units. Rising land values and restrictions on density may cause this reorientation towards more expensive units, as developers aim to increase their profits by increasing the housing services embodied in each unit (Katz & Rosen, 1987; Ihlanfeldt, 2004). This reorientation towards large luxury houses may be occurring throughout many Toronto neighbourhoods as the ageing housing stock is rebuilt. With high house prices and few housing units, this phenomenon creates considerable barriers to entry within certain neighbourhoods, and potentially the City as a whole, that were not prevalent decades ago. This may provide evidence that zoning does not follow the market, as median household sizes and incomes do not substantiate the development of large luxury houses, and gentle intensification of these neighbourhoods would likely reap greater developer profit.

3. The most restrictive areas and neighbourhoods have the lowest prices per square foot, indicating the possibility of regulatory-induced suboptimal land values

Academic literature has discussed the role of density constraining land-use regulations such as minimum lot sizes and how they may be enforcing suboptimal land values (Glaeser & Ward, 2009), where despite a large-lot zoned residential parcel being more expensive, the price per square foot of this parcel is typically less valuable than the per square foot cost of smaller, less regulated parcels (Dowall & Landis, 1982). This MRP finds similar results, where the most restrictive areas have the largest lots and highest selling price, yet the lowest prices per square foot, whereas the least restrictive areas have the most affordable houses, with the highest price per square foot and the smallest lots. The mismatch of house price on the intensive and extensive margins point to the role of regulatory constraints in creating high house prices (Glaeser & Gyourko, 2003), with excessive regulation suppressing land values in comparison to had there been no restrictions (Kulish, Rochards, & Gillitzer, 2011).

These nuances are also prevalent on a neighbourhood scale, with Englemount-Lawrence and Yorkdale-Glen Park, two of the most restrictive neighbourhoods sampled, exhibiting the largest lot areas and the lowest price per square foot. Briar Hill-Belgravia, the least restrictive and most affordable neighbourhood, has average sale prices much lower than that of Englemount-Lawrence and Yorkdale-Glen Park, yet contains a higher price per square foot than both these neighbourhoods. Bedford Park-Nortown has a per square foot price that is substantially lower than its affluent neighbourhood counterparts of Forest Hill North and North Toronto, despite having a higher sale price.

Thus, while the most expensive houses are in the most restrictive areas and neighbourhoods, the per square foot price of the property is much lower than in more affordable, less restrictive areas and neighbourhoods. This difference in the valuation of a residential property on the extensive vs. intensive margin may indicate that a regulatory supply constraint is enforcing suboptimal land values and reducing the overall welfare of the area.

#### 4. Neighbourhood character is the rule of law.

From analysis of minor variance and consent applications, it appears that the overarching test for approval is conformity with the existing physical character of the neighbourhood, as supported by the Official Plan. The prevalence of this policy direction and supporting zoning designations appear to prohibit new development other than large and luxurious detached houses in the most restrictive neighbourhoods. While intensification in the form of lot severances is prevalent in the most restrictive areas, intensification through a change in built-form typology would never gain approval or community support, as witnessed at 31 Regina Avenue. Substantiated by the Official Plan, it appears that the zoning by-law typically works to reinforce and support the single-family detached built form typology.

Unlike the phenomenon of “homevoting” discussed by Fischel (2015), homeowners do not appear to be disproportionately shaping neighbourhood development, and their motives do not appear to be mainly fiscal. If neighbourhood opposition is prevalent among a development application that conforms with existing physical character, the application is approved regardless of this opposition. Only when homeowners are able to substantiate their claims that a particular development is not in conformity with existing physical character do they find success in deterring development. Homeowners adjacent to the new development were the most likely to be in opposition, with the main complaint being the proposed large structure size as out of character and infringing on other quality of life factors.

#### 5. The missing middle likely can ease affordability concerns in Toronto’s neighbourhoods.

Based on the findings of this MRP, Toronto is on the right track by exploring increasing housing permissions in its yellow belt. Missing middle housing typologies contribute to gentle density within existing neighbourhoods that are compatible in scale with single-family detached houses, and ease affordability pressure by providing a fuller range of housing options (Webber, 2019). The Missing Middle Working Group in Toronto calls for the need to pay attention to the missing middle now, as many families are living in unsuitable housing, available rental housing is difficult to find, housing is becoming more expensive, and newer households are having difficulty accessing the ownership market. In line with provincial direction to provide a full range and mix of housing types, tenures and densities, the Working Group recommends exploring options for adding gentle density to Toronto’s neighbourhoods, with a specific focus on RD zoned areas that are well connected and amenity rich. (Evergreen & Canadian Urban Institute, 2018).

City Council is currently waiting for the staff report on options for increasing housing permissions and missing middle typologies in the yellow belt. This staff report will pilot missing middle options in Ward 19, called the Beaches-East York. This Ward is an older, more mixed-use and dense area that evolved throughout Toronto’s early years, in a more deregulated environment. The history of the Beaches-East York is strikingly different than inner- suburban neighbourhoods in both built-form and zoning designations. In much of North York’s inner suburbs, a prevailing residential suburban form exists and is protected by RD zoning and prevailing physical character. The Beaches East-York consists of a greater range of residential building typologies, likely does not have a prevailing physical character in most of its neighbourhoods and is more permissive in terms of zoning. As this MRP and the Missing Middle Working Group have highlighted the most restrictive areas (i.e., the RD zone) as the most problematic and with

the most promise, it is hopeful that the staff report will include options and a discussion about the RD zone.

## Recommendations

As the City is looking to address housing affordability by identifying opportunities in the yellow belt, it should target zoning and Official Plan policies that most stringently restrict supply, as this is where gentle density can most easily occur without drastic increases to height, massing, or lot size. By increasing residential permissions within areas that are most regulated, the market can attempt to correct itself through increasing density and potentially easing up the affordability concerns its neighbourhoods and the City as a whole.

Toronto would not be the first city to explore increasing its residential permissions in its most restricted neighbourhoods. In 2019, Minneapolis adopted a plan to upzone its single-family neighbourhoods, allowing for up to three units on one lot. The state of Oregon followed suit, banning single-family zoning and increasing density permissions to allowing fourplexes in previously single-family areas. (Kahlenberg, 2019). California, a state experiencing some of the highest housing prices in the United States, recently tabled State Bill 50 to the senate which would allow multi-unit buildings in areas zoned for single-family detached houses (Bliss, 2020). Unfortunately, the Bill was three votes short of receiving approval (Bliss, 2020).

Toronto should consider this method of regulatory reform by removing the zoning and Official Plan regulations and policies that enforce single-family only neighbourhoods. This change will in effect allow for a greater range of residential built form typologies in much of its restrictive neighbourhoods. From the research conducted in this MRP, it is recommended to gently increase residential permissions in Toronto's most restrictive neighbourhoods by abolishing residential detached zoning and policies reinforcing prevailing building and dwelling types. These recommendations are discussed below.

1. Amend the City's Official Plan.

Despite the Official Plan encouraging affordable housing and a range of housing provision, Chapter 4's Land Use designations contain restrictions for prevailing dwelling type and building type. These inclusions in the definition of existing physical character prohibit the development of increased housing units upon redevelopment, where in a strong housing market, density restrictions inflate housing prices and reduce affordability. For conformity with provincial policies and plans, it is recommended that the City of Toronto amend its Official Plan to modify the *existing physical character* term to exclude prevailing dwelling and building type from the list of performance standards that development must respect and reinforce.

In Chapter 4 of Toronto's Official Plan, Section 4.1.5 in Development Criteria for *Neighbourhoods*, change Policy 5 as follows:

5. Development in established Neighbourhoods will respect and reinforce the existing physical character of each geographic neighbourhood, including in particular:

- a) patterns of streets, blocks and lanes, parks and public building sites;
- b) prevailing size and configuration of lots;
- c) prevailing heights, massing, scale, density and ~~dwelling type~~ of nearby residential properties;
- ~~d) prevailing building type(s);~~
- e) prevailing location, design and elevations relative to the grade of driveways and garages;
- f) prevailing setbacks of buildings from the street or streets;
- g) prevailing patterns of rear and side yard setbacks and landscaped open space;
- h) continuation of special landscape or built-form features that contribute to the unique physical character of the geographic neighbourhood; and
- i) conservation of heritage buildings, structures and landscapes.

*Figure 44: Proposed Official Plan Amendment*

The proposed Official Plan Amendment should also edit out jargon and discussion around reinforcing the “prevailing building type”. By removing discriminatory restrictions to the type of dwellings contained in neighbourhoods, significant affordability measures can be achieved while conforming to neighbourhood stability and physical character. To the community, reinforcing existing physical character was relatively congruent with the directions of the Official Plan, referring to setbacks, massing, heights, density, and lot sizes, where non-conformity typically reduces the quality of life for incumbent neighbours through reduced privacy, sunlight, and greenspace.

While some anti-rental, anti-density rhetoric is apparent, most complaints focus on structure size, height, and massing that is in contradiction with the physical character of the neighbourhood. However, the lack of overwhelming anti-rental and anti-density rhetoric may be due to the restrictions in place that prohibit new development from intensifying. Thus, it is unclear how politically feasible regulatory relaxation will be, as the community may mobilize against increases in the range of dwelling types permitted. Regardless, Toronto must remove these discriminatory prohibitions

## 2. Abolish RD zoning and large lot size requirements.

In conformity with the Official Plan, the zoning by-law must be updated. Evidence agrees that those neighbourhoods with RD zoning and large minimum lot sizes are experiencing the highest house prices, the greatest house price growth, and the largest increase in housing services. They are also valued the lowest on a price per square foot basis. These restrictive areas and neighbourhoods also typically

reinforce the single-family detached house as the prevailing building and dwelling type. These protections are in contradiction with provincial policy objectives, which call for a range and mix of housing, including affordable housing. By abolishing RD zoning and large lot size requirements, City Staff can still ensure appropriate massing, height, and setbacks, while allowing for a greater variety of residential built-form and dwelling typologies.

Zone Label	RD (f15.0; <del>a550</del> ) (x5)
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*Figure 45: Proposed Change to Zoning and Minimum Lot Size Requirements.*

To represent congruency in the zoning code, City Council should direct the Planning Department's Zoning division to convert all RD zones to R zones and eliminate all explicit minimum lot size requirements above 550 square meters. A recent study found that if Toronto amended its zoning to allow for more dense missing middle building typologies in the yellow belt, enough additional housing would be provided to accommodate the entire population of Toronto (Bailey, 2020). By converting from the RD zone to the R zone, a more permissive residential zoning code, planners can more liberally allow desirable and gentle intensification that deflates the market and allow for developments that represent good planning. By removing explicit large lot size requirements, residential permissions are more flexible upon redevelopment while keeping the implicit requirements of prevailing lot size as part of the existing physical character mentioned in the Official Plan.

## Conclusion

The effects of overly restrictive land-use regulations on Toronto's housing market should not be understated. Congruent with the empirical literature investigating regulatory supply constraints in major North American cities and regions, this MRP finds preliminary evidence that overly restrictive land-use regulation in Toronto's neighbourhoods have unintended effects that work to lower housing affordability in the area. The unintended effects of restrictive land-use regulation in Toronto's neighbourhoods include accelerated house price growth, luxury housing, and truncated land values. New development in these neighbourhoods are strictly bound to existing and prevailing physical character, supported by the Official Plan, zoning by-law, and community attitudes.

In the midst of a housing crisis, Toronto must act on the problem and opportunity of the yellow belt. While the City addresses issues of affordable housing through regulatory protections on rental units and incentives such as Open Door and Housing Now, it has yet to address the supply-constraining impacts of restrictive zoning on its residential land supply. Based on evidence from this MRP and best practices from cities such as Minneapolis, Toronto should follow suit and enact regulatory reform to increase permissions in its most restrictive areas. Increasing residential permissions in Toronto's most restrictive neighbourhoods could allow for the development of missing middle housing typologies, which are able to fit in with the scale of single-family detached neighbourhoods while providing a fuller range of housing options for a greater spectrum of household incomes.

## Appendix A: Study Area Demographics and Trends

Neighbourhood	Population Growth (2011-2016)	Dependency Ratio	Household Size	Proportion with a University Degree or Higher
Toronto Average	4.5%	55.1	2.42	44.1%
Yorkdale - Glen Park	0.8%	63.8	2.62	25.5%
Englemount - Lawrence	1.3%	80	2.65	43.9%
Bedford Park - Nortown	0.2%	79.6	2.69	64.7%
Forest Hill North	2.7%	60.6	2.33	57.9%
Briar Hill - Belgravia	-0.3%	49.3	2.48	34.7%
Lawrence Park North	0.5%	71.8	2.69	75%
Lawrence Park South	0.7%	68.6	2.63	76.1%
Yonge - Eglinton	11.7%	49.4	2.08	70.6%

Figure 46: 2016 Neighbourhood Profile Statistics. (City of Toronto, 2019a)

	Median Incomes				y/y change
	1986	1986 (adj. inflation to 2016)	2016		
Bedford Park-Nortown	\$ 39,292	\$ 75,756	\$ 121,289		2.0%
North Toronto	\$ 48,762	\$ 94,016	\$ 132,914		1.4%
Forest Hill	\$ 34,648	\$ 66,803	\$ 73,269		0.3%
Englemount-Lawrence	\$ 25,122	\$ 48,437	\$ 59,596		0.8%
Yorkdale-Glen Park	\$ 30,277	\$ 58,376	\$ 64,001		0.3%
Briar Hill-Belgravia	\$ 27,431	\$ 52,887	\$ 60,858		0.5%
Toronto Average	\$ 36,890	\$ 71,125	\$ 78,373		0.3%

Figure 47: 1986-2016 Median Household Incomes. (Statistics Canada, 1986; 2016)



Average Dwelling Values and Growth, 1986-2016					
	2016	1986	adj. inflation	average annual increase	
Toronto Average	\$ 734,924	\$ 142,282	\$ 311,576	5%	
Yorkdale-Glen Park	\$ 732,579	\$ 135,010	\$ 295,650	5%	
Briar Hill-Belgravia	\$ 560,068	\$ 102,743	\$ 224,991	5%	
Forest Hill North	\$ 1,455,524	\$ 271,612	\$ 594,787	5%	
Englemount-Lawrence	\$ 746,744	\$ 155,825	\$ 341,233	4%	
Bedford Park-Nortown	\$ 1,648,465	\$ 206,974	\$ 453,242	9%	
North Toronto	\$ 1,504,007	\$ 232,342	\$ 508,793	7%	

Figure 48: 2016-1986 Average Dwelling Value by Neighbourhood (Statistics Canada, 1986; 2016), 1986 adjusted for inflation to 2016 dollars.

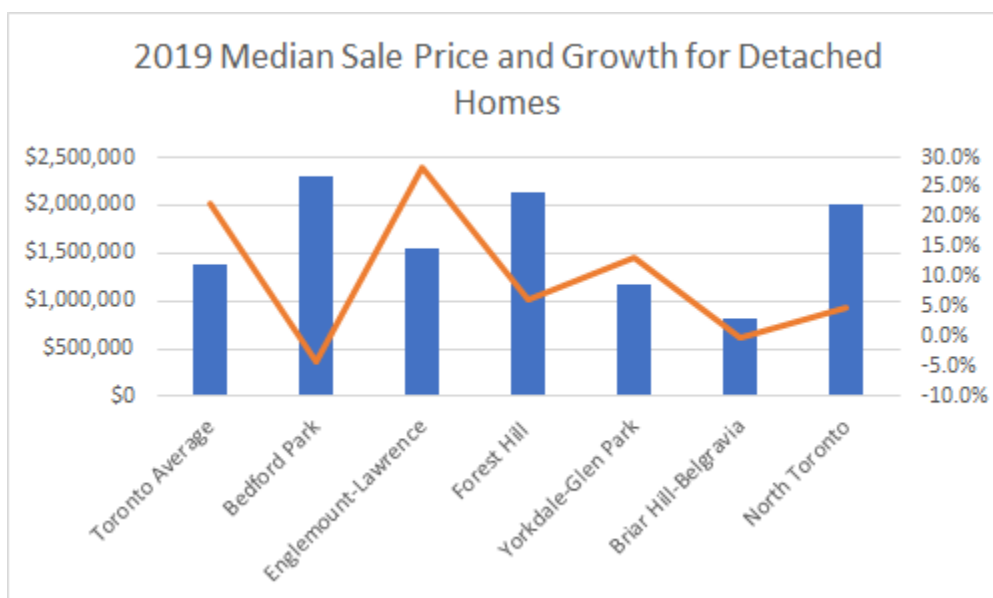


Figure 49: 2019 median sales prices (bar graph) and yearly price growth (line graph) among detached homes in Ward 8 neighbourhoods. Data from HouseSigma.

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