

PUBLIC LAND LEASING: AN INSTRUMENT OF LAND VALUE CAPTURE TO PROMOTE  
URBAN DEVELOPMENT AND HOUSING IN THE GTHA

by

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### **Abstract**

Leasing public land has become an increasingly common practice for governments wishing to retain control over significant public assets while being able to capture land values, promote urban development, as well as create opportunities to address social needs in the community. Although several instruments of land value capture currently exist, there is limited implementation of public land leasing in the GTHA. The strategic use of land is needed in order to execute important city building initiatives, and there are few regions better positioned to take advantage of this tool. As population projections continue to rise sharply, public land will be a critical resource to sustainably grow these metropolitan areas.

Urban planners and public authorities can take advantage of ground leasing models to facilitate land redevelopment, affordable housing, and transit-oriented development. However, ideal conditions must still be instituted before cities can successfully capitalize these benefits. The research presented in this paper aims to provide an understanding of the land leasing model in a local and international context in order to help cities and urban planners better comprehend its potential and avoid missed opportunities in the GTHA.

**Key words:** public land leasing, urban development, land value capture, implementation policy

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## List of Acronyms

ABC	Agencies, Boards, and Commissions
AGI	Adjusted Gross Income
AMR	Average Market Rent
AR	Air Rights
BART	Bay Area Rapid Transit
BPC	Battery Park City
BPCC	Battery Park City Authority
BRA	Boston Redevelopment Authority
CCC	Contra Costa County
CMHC	Canada Mortgage and Housing Corporation
CPR	Canadian Pacific Railway
DC	Development Charges
DCF	Discounted Cash Flow
DMNP	The Don Mouth Naturalization and Port Lands Flood Protection Project
DTK	Dream, Tricon, and Kilmer
FAR	Floor Area Ratio
FSI	Floor Space Index
GAO	Government Accountability Office
GFA	Gross Floor Area
GL	Ground Lease
GLP	Ground Lease Partnership
GO	Government of Ontario
GTHA	Greater Toronto Horseshoe Area
ha	Hectare
IO	Infrastructure Ontario
IRR	Internal Rate of Return
IZ	Inclusionary Zoning
JPA	Joint Powers Authority
LACMTA	Los Angeles County Metropolitan Transportation Authority
LVC	Land Value Capture
MARTA	Metropolitan Atlanta Rapid Transit Authority
Massport	Massachusetts Port Authority
MDTA	Metropolitan Dade Transit Authority
MIDP	Master Innovation and Development Plan
MTS	Metropolitan Transit System
MTA	Metropolitan Transportation Authority
NECB	National Energy Code of Canada for Buildings
NHCF	National Housing Co-Investment Fund
NHS	National Housing Strategy

NYCHDC	New York City Housing Development Corporation
OMB	Ontario Municipal Board
OP	Official Plan
PAHLP	Provincial Affordable Housing Lands Program
PBR	Purpose-Built Rental
PLL	Public Land Lease
PPP	Public Private Partnership
PSP	Public Sector Pension
PwC	Pricewaterhouse Coopers
RCFi	Rental Construction Financing initiative
RDA	Contra Costa County Redevelopment Agency
REIT	Real Estate Investment Trust
RFP	Request For Proposal
RGI	Rent-Geared-to-Income
RTZ	Rapid-Transit Zone
sf	Square Foot
TCHC	Toronto Community Housing Corporation
TJD	Transit-Joint Development
TLC	Toronto Lands Corporation
TTC	Toronto Transit Commission
TOD	Transit-Oriented Development
UBC	University of British Columbia
WDL	West Don Lands
WMATA	Washington Metropolitan Area Transit Authority
WT	Waterfront Toronto



## 1. Introduction

The former chairman of the Canada Mortgage and Housing Corporation (CMHC), William Teron, once said, “There is no use dreaming about planning a city unless you own the land” (Canada, 1969). In municipalities across Canada, publicly owned land is ubiquitous. Public land leasing (PLL), or ground lease (GL) models, are frequently discussed as a method by which governments may profit from future increases in land value. Through this lens of land value capture (LVC), a municipality can hold onto its own land and allow a private agency the ability to utilize, develop, transfer and ultimately profit for a specified amount of time. LVC is the idea of governments being able to capture an amount of the increase in land value in order to fund projects and infrastructure intended to benefit the public. The justification for this concept is that as public improvements cause property values to rise, part of this increase should be captured from the landowner in order to pay for the infrastructure (Ingram & Hong, 2012). Although there is precedent for leasing public lands in Canada, no examples exist where a government engages in a GL with the definite objective of future land value capture.

The land leasing model has been used strategically to retain public land value increments for investments in infrastructure, promote urban development, manage urban growth, stabilize land and housing prices and incorporating special lease purpose clauses in land contracts to incentivize affordable housing, or ecologically sensitive building (Bourassa & Hong, 2003). There has been a recent renewal in interest for public ground-leasing models as a means to provide affordable housing that also allows the public holder to claim future increases in land value (Bourguignon, 2013; Löhr, 2017; Shamsuddin & Vale, 2017). From the perspective of innovative municipal finance instrumentation, there’s immense potential for Toronto and the Greater Toronto Horseshoe Area (GTHA) to utilize public GLs to capture land value and ensure that future generations may also realize the capacity of publicly owned lands. This is especially key for a city of Toronto’s magnitude, with a projected growth of 3.4 million, (49.6%), from 6.8 million in 2018 to over 10.2 million by 2046 (Ontario Ministry of Finance, 2019).

## 2. Literature Review

### 2.1 Economics of Public Land Leasing

#### 2.1.1 Property Valuation

Many public GL systems have been inspired by the American political economist, Henry George, whose ideas on land-value taxation revolved around such programmes allowing for a fair collection of land values to the benefit of all. George ([1879], 1920) believed that rent-seeking behaviour from private land ownership was socially destructive and observed the externalities associated with land value. For instance, that the value of land ultimately originates from its spatial nature, reflected in ancillary economic activities such as public spending, environmental pollution, and local infrastructure (Dwyer, 2014). In this sense, land value is location value; and thus, there must be a differentiation between the inherent value of land, and its value with improvements (Fernandez Milan et al., 2016). Property valuation in its highest and best use is examined by appraisers as the utilization of an asset that “maximises its potential and that is possible, legally permissible and financially feasible” (IVSC, 2018).

Synergistic value, also referred to as marriage value, is a more specific idea of auxiliary value when the integration of multiple interests is worth more than the sum of the original (IVSC, 2018). The synergistic value is best described as the difference between the value at the highest and the best use and that created due to the lease conditions. For instance, land consolidation may produce added value by creating a larger building area, and hence, a more efficient land use (Shapiro et al., 2013). When the government employs GL deeds to limit property rights in the context of affordable housing provisions or the acceptable density, these are included in the synergistic property valuation (Altes, 2019). Therefore, the value of land may be deemed residual in that the market value of the leasehold plus the value of the land equals its highest and best use, minus the synergetic value (Altes, 2019). This may be used in property valuation to assess whether a GL complies with market principles.

### 2.1.2 Accruing Land Value

One of the fundamental principles of a public GL system is that it captures the unearned increment in land value that occurs between the initial and end date of the lease. This is based on the assumption that locational values fluctuate with time due to the extrinsic impacts of urban development. PLLs aim to capture this value for the benefit of the community. Therefore, instituting taxes on the unearned increment can reduce taxes on earned increments, which may consequently spur economic activity.

A public leasehold system is commonly misunderstood as complete government control over land interests or as one that must ultimately lead to a freehold system, where private bodies own and develop land as they choose within the regulatory framework. In fact, markets play a significant role in facilitating the issuances and trades of leasehold rights among private entities. In certain cases, such as with Hong Kong, even though the government owns all land titles, there are still robust private markets that drive leasehold right transactions among private partners. In these systems, the lessee may sell or transfer their land rights to another entity and take advantage of their leasehold land as collateral to acquire mortgage loans (Bourassa & Hong, 2003). Broadly defined, a leasehold system is one that allows the government and private parties to negotiate the delineation and allocation of land rights through contractual agreements (Bourassa & Hong, 2003). These arrangements are often dynamic in nature, allowing the public and private sector to renegotiate land rights in order to balance their respective interests when unforeseen events transpire.

When the government leases land for the future development of a construction project, this will produce a steady income of ground rent over time. Theoretically, when the lease is over, the land and any improvements made to it are returned to the government, unless the lease is renewed (Ingram & Hong, 2012). GLs typically have long terms (i.e. over 50 years) with multiple renewal options. In addition, they usually include clauses for the type and form of improvements that are authorized, giving the government the ability to control future opportunities by placing land use restrictions into the lease terms. Therefore, GLs can be taken advantage of as a tool to capture value if the lessee plans to change a building's volume or use.

Hong [1996] suggests that the criteria to evaluate the effectiveness of land value capture within a public leasehold system be the proportion of land value capture, and the percentage of public infrastructure investment financed by this value capture.

When adopting a leasehold regime, cities can encourage development of land without requiring developers to pay the full cost of acquisition up front. By charging a periodical ground fee, this may be used to fill a need such as affordable housing because developers are not buying or taking ownership over the land (Mattsson, 2003). Municipalities may also take an Option Value Approach in which they may benefit from heightened land values at the end of the lease with the option to resell land at an appreciated price, as well as the ability to raise the ground rents (Mattsson, 2003). As a result, it is the public interest, and not private landowners that capture the land value increments generated by municipal infrastructure investments. By instituting periodical modifications of the ground rent, land leasing can be used as a method to prevent land speculation, allowing a city to capture future predicted hikes in land value for the benefit of the community. If a surplus value to the land is created from this change, the ground fee may be modified prior to the municipality granting permission and used strategically for public investment in the region (Ploegera & Bounjouha, 2017).

### 2.1.3 Mechanics of a Leasehold System

Most land leases are structured so that the lessee is required to pay a one-time fee at the beginning of the lease; an annual land rent; a premium when the lessee modifies lease conditions to acquire additional rights for land redevelopment; and a premium for renewing the land rights when the lease expires (Hong, 1999). Three sets of rules are recognized that govern the leasing of public lands (Ostrom, 1990). Constitutional rules (1) are those seen as the principles for making legislation, which dictate property relations, land tenure choice, and the degree of protection applied to various types of property. Collective decision rules (2) are those that determine the standards for initiating and administering lease conditions. These form the basis for the legal roadmap that mandates increased security by contributing to legislation relating to mortgages, bankruptcy laws, building permits etc. in a leasehold system. Lastly, operational rules (3), permit investors and the government to make decisions on how to best

utilize and profit from the land. These may be lease conditions that state what the land can be used for, what period of time (i.e. lease term), the amount and interval of payments etc. (Ostrom, 1990). Conversely, there are two types of lease payment methods. The first is referred to as the “land premium”, which is a gross sum that the government receives from the lessee to obtain, modify or extend their land rights; and the second is called the “annual land rent”, where lessees are simply mandated to pay an annual land rent (Bourassa & Hong, 2003).

#### 2.1.4 Ground Lease Formulation

As mentioned, GLs are contracts by which the government leases land for a fixed term of “ $T$ ” years, whereby the potential option to release and redevelop at time “ $T$ ” is retained and has value. Ground leased property trades at a lower value relative to the fee simple interest, which is the result of both the redevelopment option value and the zero-residual improvement value at the lease end (Dale-Johnson, 2001). Ideally, the landowner would negotiate a GL that produces a rental stream consistent with the land’s value at its highest and best use. However, overtime there may be contradictory incentives between the government and the lessee. Most often, is the possibility of the land’s highest and best use changing throughout the lease term. If a municipality decides to lease land with a simple fixed term, they will require a fixed lease payment  $f(t) = f$  in each period “ $t$ ” for a total of “ $T$ ” years. Hence, the present discounted value of the lease payment stream is represented by the equation:

$$(1) \quad V(T) = \int_0^T f e^{-rt} dt$$

Where “ $f$ ” equals the periodic lease payment; “ $r$ ” equals the discount rate; and “ $T$ ” equals the fixed term of the lease. Solving equation (1) gives the value of the lease:

$$(2) \quad V(T) = \left( \frac{f}{r} \right) [1 - e^{-rT}]$$

Therefore, the lease value becomes the capitalized value of the annual payment stream, " $f$ ", as if it were a constant, given by the term " $f/r$ ", and scaled down by the second term in brackets, which accounts for the bounded term of the lease, " $T$ " (Ingram & Hong, 2012). A GL may also contain a fixed term without a fixed payment. In this instance, there is typically an escalating payment pinned to inflation or one that is stepped up over time based on a set of criteria. The methodology behind calculating the present value of a future cash stream may differ widely.

#### 2.1.5 Policy Instruments

The promotion of affordable housing through stipulations in the lease structure is a major benefit of adopting PLL within the land delivery system and may help achieve policy initiatives such as Inclusionary Zoning (IZ). IZ typically requires developers to set aside a proportion of units in market-rate residential developments to be made affordable in exchange for development rights or zoning variances. PLL can also provide a municipality with an alternate mechanism for raising public revenue when property taxes are not enough to satisfy the need for public services. In addition, GLs give urban planners a greater ability to control land uses more effectively in weaker areas of development law and planning (Gerber et al., 2017). Long-term land leasing may also improve land-use planning by allowing for more effective implementation of land-use plans over customary instruments such as zoning or land readjustment and do not contain the financial risk of directly taking part in development (Gerber et al., 2017). Through a land lease, a developer is not only restricted from seeking planning amendments, but the government may include additional conditions for the building or land use of interest. For example, it could control the built form, materials, design, or require the joint use of facilities such as parking. The fact that a municipality is able to retain land ownership also means that planning errors are not permanent and may be revised at the end of the lease cycle.

GLs have been shown to accumulate greater financial returns than public land sales at market values due to their yield structure and low risks, with returns notably larger than and almost as secure as governmental bonds (Löhr, 2017). In fact, a municipality is able to gather a comparable financial profit from ground leasing to public land sales, even at the highest bids.

GLs also have a higher market value than that of the full property real estate because the revenue generated can be discounted at a lower rate than the returns from the entire land share (von Oefele and Winkler, 2012). Municipalities benefit from borrowing money at lower interest rates and have lower costs of capital than the private sector. This allows them to generate a higher value when capitalizing a stream of income. Furthermore, cash flows from a land lease are a strategic hedge against inflation.

However, the most significant reason is that critical risks are pinned onto the lessee, who is obliged to pay a leasehold fee, regardless of performance. If the lessee (i.e. private company or developer) defaults on payment, the building might be reverted to the owner of the site (i.e. the municipality), and if there is a foreclosure sale, the leasehold fee is unchanged (von Oefele and Winkler, 2012). Thus, the municipality retains a sufficient level of reassurance against risk to its land assets. The financial security of the lessee can be measured using the Sharpe ratio, which is the average earned return in excess of the risk-free rate (Sharpe, 1994). If the lessee owns the entire property, the volatility of the returns is related completely to the real estate market. However, with a GL, this volatility is also measured against the value of the building. With more restrictions and fixed cost leasehold fees, the operating risk for the lessee is higher within a GL than with full real estate holding (Löhr, 2017). Therefore, sufficient compensation must be provided by the landowner in order to create revenue conditions in line with that of the market.

Since the total value of the real estate remains unchanged whether there is a GL or not, it is the value between the lessor and lessee that varies. Due to the fact that the lessor (i.e. the municipality) is in possession of a value surplus, part of this is carried over to the lessee in order to remunerate this mismatch and reduce costs to achieve a more desirable rate of return (Kleiber 2014). GLs create an inefficiency by altering the intensity of land development, with the economic model assumptions that private landowners will attempt to optimize capital applied to the land (Dale-Johnson, 2001). Hence, these value transfers are meant to increase the value of the lessee's GL rights. As a result, GL models are able to heighten land market efficiencies

and facilitate pressure to exploit land more effectively in order to reduce shortage issues on the real estate market.

#### 2.1.6 Ground Lease Partnerships

The public-private partnership model (PPP) relating to land leasing is referred to as a ground lease partnership (GLP). It is within this GLP scheme that municipalities are able to strategically use the value surplus derived from their GLs to offer “subsidies” to a lessee in order to effectively support social goals such as affordable housing. This allows cities to realize outcomes similar to direct investments, but with significantly less investment volume (Löhr, 2017). In a GLP, the private lessee might not be able to maximize their profitability, as in a traditional land development strategy, because they don’t benefit from increases in land values. Thus, a private partner engaged in a GLP must express a common commitment and motivation to the social targets intended by the development. The commitment of the public authority that owns the land is that they will not be driven solely by profit, but also by resident interests that ultimately impact political outcomes. Therefore, lease setting may be interpreted as a near form of property tax (Deng, 2005). However, instead of being concerned with obtaining the steepest feasible tax, the goal is to maximize social welfare (Mandell, 2002).

### 2.2 International Experiences

There are several examples of land leasing being used successfully in other countries at both a more localized and macro level. This gives greater context into the importance of utilizing public lands as a long-term asset and its role in enhancing urban resilience.

#### 2.2.1 Public Leaseholds in Hong Kong

On a macro scale, widespread ownership of land is well documented in the global regions of Hong Kong and Singapore, where the governments are able to subsidize certain land uses in order to capture increasing land values (Hong, 1996). As a result, 85% of Singapore’s population is able to live in public housing, and in Hong Kong, public land is leased by the government as a private commodity administered through market mechanisms (Haila, 2000). The Hong Kong



government administers land rights through contractual agreements with conditions for the amount and type of land rights the lessee possesses, which normally last between 50-75 years. The government continues to own the land, whereby private developers lease the exclusive right to use, develop, transfer, and profit from it (Hong, 1998). Most residents of Hong Kong live in buildings with multiple storeys. The individual apartment owners in these buildings are considered sub-lessees of the land leases. It is typical for buildings to have over 100 units, and thus, many sub-lessees.

Auctions for land rights are publicly held and acquired by the developers willing to pay the highest premium. Government authorities also assign land rights to special industries and non-profit organisations with private treaties used to promote certain land uses, such as social housing. These are awarded to the lessee with a premium below market value. In addition to the amount paid at the onset of the lease establishment, there is also an annual ground rent that is owed to the government. This may be altered when a property's rental value is reappraised. If a lessee wishes to redevelop a property, they are required to apply for a lease modification and pay a fee based on the estimated land value increase following the re-adjusted lease conditions (Hong, 1998). Moreover, there is a secondary premium to obtain new land rights or loosen certain lease restrictions.

Broadly, there are two types of leases in Hong Kong: renewable and non-renewable. With renewable leases, leaseholders are able to renew their land contracts for an additional 50 years with no extra premium. However, in order to remain on the land, they must pay a new annual rent of 3% of the estimated rental value of their properties (Hong, 1998). In contrast, once a non-renewable lease expires, the lessee must apply for a new contract and will be charged a fee if they desire extended land rights. This is referred to as "regranting". The government may refuse to regrant if they need the land for public purposes. If land is repossessed, the lessee is paid back the cost for the building. Officials may also levy a land premium at full market value when issuing a new lease contract (Hong, 1998).

From 1970-1991, the leasehold system in Hong Kong allowed the government to recover an average of 39% of the increased land value from sites where GLs were implemented. In turn, this provided revenue for an average of 55% of the annual infrastructure investment during this time (Hong, 1996). Residential property owners were still subjected to an annual property tax of 5% of the estimated rental value of their units, while commercial owners were required to pay 15% on income earned from their buildings. During this period, the government of Hong Kong was able to recover an average of 79% of its annual infrastructure cost by combining all land-related revenues (Hong, 1999). Reduced taxation is another benefit in cities such as Hong Kong where public leaseholds account for a large share of the public income (La Grange & Pretorius, 2016).

### 2.2.2 Public Land Leasing Framework in Amsterdam

Since 1896, Amsterdam has had a well-established public ground-lease system, with large swaths of the city developed through GLs (Gautier & Van Vuuren, 2017; Ploeger & Bounjouh, 2017). Between 1915 and 2016, lease conditions were established with an initial timeframe of 75 years, or 50 years for more current GLs. Following the initial lease period, new leasehold conditions and rents are set by the municipality. This may also be determined by an appointed committee with one member chosen by the municipality, one by the leaseholder, and a third by the first two (Altes, 2019). In order to ensure equity, the valuation process is grounded in general conditions based on political consent and approval by the municipal council.

Amsterdam eventually reformed its leasehold system due to rising land values and overall demand resulting in high lease rates being criticized as unfair (Kadi & Musterd, 2015). As a result, the city improved its compensation to less affluent households for differences in ground rent where the sale of their home would generate less revenue than the present mortgage debt level, due to the negative price effect (Gemeente Amsterdam, 2017). Nevertheless, there was still powerful objection to this system. An alternative was proposed where lease renewal would only take place if a property transfer occurred, thus preventing current residents from being forced out of their homes. In other words, the city would still generate a profit from increased land values, but this would only transpire once the land transaction occurred. An advantage of

this proposal was that ground rents would be explicit, thereby allowing future buyers to understand both the price of transferring the ground-lease right, and the ground rent owed to the city (Altes, 2019). As such, the land price would be determined by both the price of the transaction, and the dwelling size.

Following the election of a new political coalition in 2014, an agreement was reached whereby the party in possession of the GL right would have the freedom to pay off the lease in perpetuity, with added payments only for improvements extending past the current use (Frijns et al., 2014). In this perpetual GL system, lessees also have the option of paying rent in perpetuity, with proportional adjustments to the consumer-price index. In Canberra [Australia] and Israel, where public leasehold systems also exist, the lessee acquires their rights at no additional cost following the initial lease period (Benchetrit & Czamanski, 2004). With similar issues as Amsterdam, both of their original respective public leasehold systems have gradually been abolished. Public property rights were eventually abdicated to the lessees, and now resemble more of a freehold system. The disintegrating public leasehold systems in both these countries materialized in parallel with land market maturations.

### 2.2.3 The Massport Model

The City of Boston is one of the most expensive cities to afford housing in the U.S., with demand far surpassing supply and costs exceeding incomes. However, the City takes a progressive approach to land leasing and social housing through local GL models. The Massachusetts Port Authority (Massport) has become a staple in community building through its participation on numerous residential developments with the City of Boston and the Boston Redevelopment Authority (BRA). Assembled in 1959, Massport is a politically independent public authority. Massport puts out Request for Proposals (RFPs) to notify developers when a site becomes available. This typically stipulates the type of land use they intend to construct.

Massport owns a large amount of underutilized land along the water in South and East Boston that was used historically for industrial uses. In total, it owns approximately 100 parcels both on and nearby the waterfront (BRA, 1989). The appetite for development in this region stems from

greater accessibility to both the downtown core and the Logan Airport following the completion of a \$15 billion highway improvement project in 2006, referred to as the Big Dig. The lands also benefited from a new transit line called the Silverline. In order to pay for the infrastructure required to develop this 50-acre region, Massport issues bonds and then leases the land to raise the necessary revenue to repay them. The leased properties also contain planning approvals, as well as transaction rents, which provide additional revenue to Massport if the buildings are refinanced or sold, thus capturing an additional amount of the land value increase.

By making properties available to developers through competitive land leases, Massport has made significant contributions to both market-rate and affordable housing that have in turn helped generate revenue to support its maritime activities. Massport is able to negotiate a GL under which it collects less rent so that the affordable housing component does not financially hamper the developer. It has traditionally assigned the affordable housing component to the BRA, who works with developers to ensure adherence to the City's policies. Developers that lease these lands are required to complete housing obligation in three ways. This involves either the construction of on-site affordable units, off-site affordable units, or a cash-out payment made to the BRA's Inclusionary Development Program Fund (Cahalane 2013). The current municipal Executive Order requires that the payment be equal to \$200,000 per unit if it is meant to fund off-site development, or \$200,000 per unit for 15% of the market-rate units (Cahalane 2013). However, this is the least desirable alternative of the three options in producing affordable housing, and as such, the standards for paying a cash-out fee are more rigid in nature and treated as a last-ditch effort.

#### 2.2.4 New York City's Leasehold Development

In New York City, there is also a challenge to deliver adequate low-income housing. To address these issues, NY created an innovative financing strategy by using surplus revenues generated by private developments on state-owned land. Battery Park City (BPC) is a 92-acre site containing high density development. It is located in the southwest corner of Lower Manhattan, next to the World Trade Center site. Aside from its zoning plan, the government is fairly

removed from the NY real estate market. BPC is an exception because it was developed on a leasehold basis by the Battery Park City Authority (BPCA), which is a public benefit corporation that owns and manages this land. The BPCA enters into contractual agreements and GLs with developers. Although the area is zoned by the City, the state-owned BPCA has developed green guidelines and design guidelines mandated in the leases (van der Veen & Altes, 2011). It grants leases based on RFPs to the developer that offer the best value in terms of price and quality.

In 1987, the BPCA announced it would finance low-income housing in New York City using \$1 billion of surplus revenues created by the development. Approximately \$400 million was used to secure bonds issued by the New York City Housing Development Corporation (NYCHDC). NYCHDC was formed to address the inadequate supply of affordable housing to low-income residents, as well as the high number of multifamily units that required mortgages and low-interest rehabilitation loans. Proceeds from the bond sale were used for the rehabilitation and construction of housing units in Harlem and the South Bronx. 30% of the units allocated went to the homeless; 45% were reserved for families with incomes under \$19,000; and the remaining units were designated for families with incomes below \$25,000. A major benefit of this project was that it created affordable housing without using tax revenues or burdening the development with a mortgage (Evans, 1989).

### 2.3 Land Ownership Fragmentation: A Tale of Two Cities

Public land ownership is a significant player in the processes of urban development, including long-term PLLs. This may help explain why certain redevelopments are more feasible than others. Historically, the respective dissemination and concentration of land has been more impactful than the amount owned by public versus private entities (Eidelman, 2018). Especially with regards to waterfront redevelopment, the assemblage or fragmentation of land ownership can foster positions that either enable or impede successful project implementation. An analysis of waterfront redevelopment between Vancouver and Toronto offers insight into the value of consolidating lands in a leasehold scenario. Vancouver's waterfront is commonly praised as one of the most successful large-scale redevelopment projects in North America

(Punter, 2003). Whereas in Toronto, waterfront redevelopment has seen repeated failures with plans that were never executed (Lilley, 2003).

### 2.3.1 Vancouver Waterfront Redevelopment

Vancouver's waterfront includes three downtown districts covering approximately 600 acres referred to as Coal Harbour, False Creek North, and False Creek South. Coal Harbour's redevelopment was a private-sector real estate initiative with almost all of the land owned by the privately held Canadian Pacific Railway (CPR) Company (City of Vancouver, 1973). In contrast, the redevelopment in False Creek was made possible due to a critical series of land exchanges finalized in 1968 between the City of Vancouver, the Province of British Columbia, the CPR company, and a Hong Kong-based developer called Li Ka-shing. Despite roadblocks related to land remediation costs, unpredictable real estate markets, and reduced subsidies from the government for social housing, this land assembly was what initially prompted large-scale redevelopment of the areas (Smith, 1977). In False Creek North, contiguous private land ownership uncharacteristically reinforced municipal control over the project by guaranteeing more substantial public benefits (Eidelman, 2018). This occurred due to commitment from City staff to implement the required regulatory instruments, and to facilitate a high degree of cooperation throughout the planning process (Harcourt & Cameron, 2007). In False Creek South, the City was able to take advantage of ownership by introducing methods of building residential communities via long-term PLLs.

### 2.3.2 Toronto Waterfront Redevelopment

Unlike Vancouver, Toronto's failure to consolidate land ownership has created jurisdictional gridlock related to tangled bureaucracy that has hindered its redevelopment endeavors (Eidelman, 2018). In addition, Sanderson and Filion [2013] have pointed out that repeated economic downturns, community resistance, and budget limitations all played their part as well. Toronto's waterfront also presents hydrogeological challenges in the early stages of resolution with extensive and costly flood proofing. This is needed due to the marshland conversion of over 1,300 acres, beginning in 1911 (Desfor, 1993). By 1969, public authorities

had completely altered the Toronto's original shoreline by filling in almost half of its Bay with man-made materials (Desfor, 1993). Eidelman [2018] illustrates how long-term comparative evidence points to the fractured nature of the area's public land ownership as the primary reason behind its redevelopment struggles. Land titles in the waterfront are dispersed across an assortment of agencies, boards, and commissions (ABCs) at various government tiers (Figure 1, Appendix A) with lackadaisical ambitions to redevelop the waterfront aside from the promise of heightened land values.

Scharf [2006] wrote about what he termed a "joint decision trap" to describe the diversity of interests capable of overruling a proposed project. Whereby, the absence of a legal structure to unite land titles and establish partnerships between the parties involved, creates a situation where few can accomplish anything, but almost all can prevent something from being accomplished. This situation has repeated itself many times over in the case of Toronto's waterfront redevelopment efforts. The City's first comprehensive waterfront redevelopment plan titled "The Harbour City project", was approved in the 1960s. However, with so many political self-interests, it became impossible to direct development without encountering the veto power of multiple landowners (Eidelman, 2018). Although a Harbourfront district was eventually completed, it was far from what the 1984 Central Waterfront Plan envisioned. Rather than the production of a medium-density neighborhood, the result was a network of high-rise buildings with disparaged public amenities and open space. The disconnection between federal land use, and Toronto's financial interests were too great to overcome. In 1994, the Metropolitan Waterfront Plan to remediate 600 acres in the East Bayfront and Port Lands districts was dropped yet again following innumerable legal battles over land holdings between the City and the Harbour Commission.

### 2.3.3 Legal Basis in Ontario Municipalities

The legislation exists to begin structuring public GLs once Toronto begins to overcome the fragmentation issues associated with its waterfront. Although there are a few scattered examples of ground land lease applications in Toronto, no strong program or policy exists. Despite this reality, there are still several means by which Ontario municipalities may enact

public land leasing schemes. In the *City of Toronto Act* (2006), Section 83 gives permission to Council to enter into lease agreements, and Sections 295 – 296 outline the permissions for leasing land. In addition, the *Planning Act* (1990), Section 25 outlines how to acquire and dispose of land in the OP, and Section 28 pertains to the permissions to lease land. Moreover, in The *Ontario Public Lands Act* (1990), Section 15 states that the Lieutenant Governor can control PLLs for anything but agriculture, and Section 24 (4) expresses that the Crown takes ownership of land or anything on it like buildings after the end of the term.

#### 2.4 U.S. Land Leasing Applications in Transit Oriented Development

Although seldom used in Canada, PLLs associated with transit-joint development (TJD) for transit-oriented development (TOD), have been used widely in the United States. A U.S. Government Accountability Office (GAO) study [2010] reported 166 TJD projects, of which just three agencies (Metropolitan Atlanta Rapid Transit Authority (MARTA), the Los Angeles County Metropolitan Transportation Authority (LACMTA), the Washington Metropolitan Area Transit Authority (WMATA)) were responsible for 58 (GAO, 2010).

TJD projects involve the partnership between a transit agency/local government and a private real estate developer. A voluntary, legally binding agreement between the two parties is reached, whereby the private entity compensates the public body through payments or cost-sharing arrangements (Mathur & Smith, 2013). Long-term GLs are used frequently to promote development projects on transit agency properties (Cervero et al., 2002). Stimulating development opportunities through the lease of underutilized transit agency land is a valuable precursor to TOD.

The transit agency is able to benefit with compensation for either the right to develop on its land (ground-lease payments), over the land (air-rights lease), or for the physical connection between their property and the transit station (station-connections fee) (Mathur & Smith, 2013). There may also be cost sharing involved in the construction and/or maintenance of the transit stations and surrounding facilities (Cervero, 2004). Developers are inclined to share project revenues and costs due to the high value associated with transit accessibility. There is



also immense value from increased transit ridership by raising station-area density and/or by placing additional destinations on transit lines. In a 1983 study of nine TJD projects in the U.S., it was discovered that every 1,000 square feet (sf) of new commercial floorspace near a rail station generated an additional six transit trips per day. This yielded an additional \$11.4 million (in 1982 dollars) in annual farebox receipts (Keefer, 1983).

Aside from strengthening the transit agency's farebox revenue, there is also the potential to promote economic development, job growth, and the facilitation of affordable housing (Cervero, 2004). Certain regional transportation agencies (e.g. New York City's Metropolitan Transportation Authority (MTA)) work with local planning departments to provide incentives, such as Floor Area-Ratio (FAR) bonuses, and the stipulation that property owners improve subway facilities adjacent to their buildings (Landis et al., 1991). Moreover, TJD may be incentivized by negotiating transit improvements through the creation of special districts with station-area zoning flexibility (Landis et al., 1991).

In terms of fiscal LVC approaches, an essential component to the success of TJD is robust land asset management with the fundamental ability to monetize accessibility as a new asset class (Medda, 2012). Leasing, as opposed to selling land, gives public authorities the flexibility that is often required in the operation and planning of transport systems, in addition to providing an annual revenue stream to ensure the financial feasibility of the transport investment.

#### 2.4.1 Washington Metropolitan Area Transit Authority Public Ground Leases

In Washington, D.C., the City has assertively pushed TOD to create markets around transit stations through negotiations with private developers. The WMATA collects the majority of its revenue through public GLs. The success of the WMATA came from the early formation of an in-house real estate division, with financial and institutional support delivered by its board members. WMATA's real estate office has purchased a large assembly of land that it has used to engage private developers in long-term, unsubordinated GLs, as well as some fee simple sales. It has also used tools such as leasing air rights (AR), service-connection fees, and cost-

sharing agreements. This provides revenue that allows the agency to participate successfully in other TJD projects (McNeal & Doggett, 1999).

Rather than sit back and be reactive to developer proposals, WMATA's real estate office assertively pursues opportunistic projects. To help ensure project success, it created development guidelines, as well as a rating system to examine the potential of new sites. Its guidelines aim to maximize transit use, as well as link it to land use, mix housing types and uses, and enhance the overall vitality of urban spaces (Cervero, 2004). A report on WMATA's program found it to contain a highly lucrative benefit-cost ratio (based on value capture to agency expenditures) of 8 to 1 (Keefer, 1984). As of 2000, WMATA had undertaken 27 development projects valued at over \$2 billion on land it controls. (Parsons, Brinckerhoff, Quade and Douglas, 2001). WMATA's joint development projects generated approximately \$150 million for its operating budget by 2003 (Bernick & Cervero, 1997).

The WMATA also proactively purchases land in anticipation of planned infrastructure projects. By "banking" the land, it is able to sell or lease it at a profit during a later date once the land appreciates in value, in order to fund additional transportation projects. Another major advantage of this strategy is that essential parcels may be assembled more effortlessly, and the government has greater control over the timing, pace and character of future development surrounding the transportation infrastructure (Cervero et al., 2002).

#### 2.4.2 Metropolitan Dade Transit Authority Public Ground Leases

Miami's Metropolitan Dade Transit Authority (MDTA), MARTA, LACMTA, and San Francisco's Bay Area Rapid Transit (BART), and San Diego's Metropolitan Transit System (MTS) also have internal joint development and real estate offices that function to advance TJD projects and are crucial to their success (White & McDaniel, 1999). Miami's local government controls most operations and land uses along its transit corridors. The MDTA shapes its land lease agreements in order to prevent lost income and ensure that leverage is not lost with the developers involved. Miami initially created an Office of Leasing with five staff positions to manage and market TJD projects (Price Waterhouse LLP, 1998). Although, due to financial constraints,

staffing was reduced in recent years (Mathur, 2016). Miami has used a cost-sharing tool, known as a Rapid-Transit Zone (RTZ), to encourage joint development. A RTZ diminishes the level of risk for private developers by standardizing the zoning ordinances among all municipalities within the zone (Cervero, 2004).

#### 2.4.3. Contra Costa County Transit Village

The Contra Costa County (CCC) Transit Village is located in the Pleasant Hill BART station and is the product of a joint partnership between the Contra Costa County, the Contra Costa County Redevelopment Agency (RDA), BART, Avalon Bay Communities, Inc., and Millennium Partners (Kennedy & Litten, 2010). All of the property is owned by BART, who leases the land to developers, aside from the for-sale condominiums. The county issued \$135 million in bonds to finance the residential portion, while the RDA contributed \$59.5 million toward the parking garage, station infrastructure, as well as several other improvements. The developers contributed \$3.9 million toward the parking garage, \$11.9 million toward the residential development, and \$131 million toward the office space (Kennedy & Litten, 2010).

A Joint Powers Authority (JPA) called the Pleasant Hill BART Leasing Authority was created to manage the property, with a board of directors consisting of representatives from CCC, the RDA and BART. BART leases the station area property to the JPA, which then subleases it to the developers (Millennium Partners and Avalon Bay Communities) for 100 years. The ground-lease payments made to the JPA are shared by BART (25%), and the county (75%) (Kennedy & Litten, 2010). From 2008-2011, CCC received approximately \$1.8 million in lease revenue. Throughout the duration of the 100-year lease period, lease revenues are expected to range from \$700 million to \$1 billion. These revenues include a fixed annual rent, and a percentage rent, which is a proportion of the adjusted gross income (AGI). Additionally, these lease revenues include a bonus rent, which is a percentage of the AGI once it reaches a minimum threshold, and a participation rent (a portion of the net proceeds from the sale of the condominiums) (Kennedy & Litten, 2010).

### 3. Discussion

There are several conditions required to initiate an environment whereby public land leasing can prosper and create meaningful public benefits in Toronto and the GTHA. In the case of Toronto's waterfront authority, all three levels of Canadian government came together in 2001 to create an organization called the Toronto Waterfront Revitalization Corporation, later renamed Waterfront Toronto (WT). The goal of WT is to oversee all aspects of revitalization by managing waterfront land owned by the federal, provincial and Toronto municipal governments. Currently, WT has the ability to create precinct plans, phasing strategies, coordinate environmental remediation, and assign construction efforts (Eidelman, 2018). However, WT has very little control of the land owned by its public shareholders and has been restrained from amalgamating land assets to more effectively implement its vision. With regards to property, it is required to gain approval from each government tier, who have each shown disinterest in sacrificing jurisdiction over land ownership in the area (Eidelman, 2011). In contrast, NYC's BPCA was granted complete ownership of city lands targeted for redevelopment.

In total, WT owns under 0.5% of the property within its planning control. In comparison, the federal, provincial, and municipal governments, respectively, own around 28%, 26%, and 33% of all waterfront lands (Eidelman 2013) (Figure 2, Appendix A). WT is granted "effective" control of waterfront lands in various districts, but not legal title. Therefore, one public landowner may still veto the jurisdictional authority of another. Considering all of these obstacles, it comes as no surprise why the area has not progressed as intended. Despite a few successful small-scale redevelopment achievements in the East Bayfront and West Don Lands (WDL) districts, a 2013 independent review concluded, "Judged against its public commitments, the corporation has produced real, but modest, results amid significant constraints ... But many of its projects remain well behind schedule—some abandoned altogether" (Eidelman, 2013).

### 3.1 Leasing Public Waterfront Lands

#### 3.1.1 Vancouver's Innovative Approach to Public Land Leasing

The City of Vancouver is a model by which Toronto may learn from when it comes to pursuing the benefits of public ground leasing strategies. Almost identical to Toronto, Vancouver owns approximately 4,600 land holdings, valued at \$15.8 billion (City of Vancouver, 2014). Vancouver has realized the ability of land leases to extract longstanding returns while keeping land under public control to the benefit of its communities. It has maintained ownership over a large portion of publicly owned land through leasing strategies used in both False Creek South and in the Fraser River lowlands. Social housing was a significant goal in the False Creek South projects. Of almost 3,000 housing units in False Creek South, approximately 60% are located on leased land owned by the City. One-third of these units are in housing co-ops, one-third non-market rental units, and another third are leasehold strata title units. The strata lot lease model is one where a developer leases vacant land, constructs a multi-unit residential building and files a strata plan. This breaks the land lease into separate leases of each strata lot. The leasehold strata concept was initially intended to be used for affordable housing projects, since the landlord was required to be a government entity.

#### 3.1.2 Public Land Leasing Potential along Toronto's Waterfront

Most properties in Toronto's Port Lands are contaminated brownfield sites in former industrialized areas. The land regime and history is very similar to Massport's holdings in Boston. However, unlike Massport, Waterfront Toronto has shied away from pursuing methods of LVC. The area has increased significantly in value due to a \$1.25 billion flood protection project including the re-naturalization of the Don River and the restoration of the historic Keating Channel. This will unlock approximately 290 hectares (ha) (715 acres) of land for revitalization and lead to billions of dollars in private investment (Waterfront Toronto, 2016). IT is the second phase of a flood protection plan with previous construction in the WDL having secured 210 ha (519 acres) of eastern downtown Toronto land, enabling the establishment of the Pan/Parapan Am Games Athletes' Village mixed-use community.

Privately owned land along the waterfront is growing, as the primary funding model for WT remains from land sale revenue. This will undoubtedly provide much needed capital for municipal revitalization projects; however, Toronto will lose control over strategic parcels of land that would otherwise provide even greater benefits over a larger time frame. Land fragmentation presents a challenge for WT, but jurisdictional fragmentation is much more of an obstacle moving forward if land leasing is to be instituted. Historically, it was not that the area could not be redeveloped, it was that it could not be redeveloped according to plan. WT gets bogged down because it must report to all three levels of government.

The largest landowner in the region is the City of Toronto, through the Toronto Port Lands Company, which was rolled into CreateTO (Figure 3, Appendix A). The City's municipally owned land makes up 4,800 real estate holdings, worth around \$15.8 billion. About 50% of this portfolio stands as vacant land ready for redevelopment, and is valued at \$2.6 billion (City of Toronto, 2011). The waterfront has approximately 200 ha (500 acres) of total developable municipally owned land, excluding parks and open spaces (City of Toronto, 2017). Some of the City owned lands in Polson Quay, the Film Studio District, Warehouse District and East Port area are currently under public leaseholds. A long-term GL of 100 years already exists for the Film Studio, with adjustments every 5 years. The region's Concrete Campus is on medium-term GL of 25 years. This is long enough for investments in infrastructure, with the potential for 2 five-year extensions. Short-term leases of 10 years or less are also present with annual increases in place. There are even instances of GLs for several months with rates prorated annually. The second largest landowner in the region is the Province of Ontario (29.3 ha) and the Federal Government (25.5 ha). There are about 21.8 total hectares of privately-owned lots dispersed throughout the area (City of Toronto, 2017).

### *3.1.3 West Don Lands Ground Lease*

A recent GLP on Block 3,4,7,8, and 20 (totaling 8 acres) in the WDL may serve as a future model on publicly leased land in the area that also promotes affordable housing (Figure 1, Appendix B). Development groups at Dream, Tricon, and Kilmer (DTK) were chosen to take part in 99-year land lease agreements with Infrastructure Ontario (IO). The goal being to create mixed-income

rentals for approximately 1,450 people, with about 30% of the development slated to contain affordable housing rental units. In this case, affordability is set at 100%, 80%, and 40% of Toronto's Average-Market-Rent (AMR). The first phase consists of three towers set at 16, 16, and 26 storeys, comprising a total of 761 rental units (229 are affordable and 532 are market). Along with government subsidies, one of the ways that allows for the feasibility of these affordable housing units is by reducing the overall lease payment. The lease payment is made for the land, rather than for each individual unit. Therefore, the amount paid reflects both the market and affordable units in the development. A longer lease term (i.e. 99-years) provides greater stability but also creates more opportunities to build resilience into the development. In fact, this project is designed to achieve a reduction of 17.6% in annual energy use and 19.1% in annual greenhouse gas emissions compared to the National Energy Code of Canada for Buildings (NECB) (White, 2019).

The involvement of multiple partners (i.e. Dream, Tricon, and Kilmer) increases confidence and risk-sharing, as this type of project contains no precedence in the region. The initial due diligence was also a lengthier process than a typical affordable housing development because this was a new model, and thus put under closer scrutiny by the CMHC, who invested \$357 million into the project. Contribution agreements were needed, and these outlined City obligations for the developers to construct affordable housing units. The process for these private companies to lease the land was not as onerous as it could have been because there was a high degree of coordination and cooperation between all levels of government and the development teams. Because it is still relatively early in the project timeline, it is not yet apparent what could have been more beneficial to ensure project success. However, one adjustment could have been greater flexibility in building and suite guidelines, as some were overly restrictive to what the developers intended to include.

On the financing side, these companies used a lot more leverage since they did not need to acquire the land. Therefore, it would not have been representative to simply look at the internal rate of return (IRR) when analyzing project success from a developer standpoint. With a highly financed project, it is more accurate to look at the margins (i.e. difference between

cost and value) when determining if the level of risk is acceptable. This is because, with a highly leveraged project (e.g. a large amount of public financing), the IRR becomes unreasonably high. Normally, a 10-12% margin is acceptable, however with more leverage, developers will aim for a larger margin percentage because there is heightened sensitivity to increases in project costs and revenue inputs. With a Purpose-Built Rental (PBR) project, there is not the same degree of revenue stream as with a normal condominium. The City's Open Door financial incentive provided a key component to the project's success by waiving development charges (DCs) and realty taxes on development units, as well as expediting the development approval and site planning process. With a more recent uptake of the Open Door's policy, there are different tranches of availability. This has created the need for increased government measurement before committing to a project, and thus may be more problematic moving forward.

The Federal government also made this project feasible by providing funding through the National Housing Strategy's Rental Construction Financing initiative (RCFi). This is a low-cost loan available to borrowers who want to build affordable rental housing in Canada. It is less costly to borrow money from the Bank of Canada than from the Government of Canada. Hence, the interest rate on the loan was below 2%, whereas normally it would be closer to 3.5%. The lower interest rate enhances the subsidy, producing a 95% loan to cost ratio. Typically, a construction loan and financing loan are for 10 years. However, DTK also took on less equity overall because there was no need to finance the land with a loan. This allowed them to pay more of a premium for an even lower interest rate. Further financial incentives were not needed because this development was located on a high-quality site.

Without government initiative, developers would be less likely to enter in a public GL project because they would always prefer a fee simple model (i.e. purchase and own the land).

However, with the DTK development, there was no other choice. On a 99-year land lease, it is questionable what type of discount rate applies compared to fee simple. The discounted cash flow (DCF) on something with the length of 99-years is difficult to estimate. DCF attempts to predict the value of an asset today, based on projections of the amount of capital it will generate in the future. At some point, there will be a divergence on the cap rate near the end



of the GL, so the developers are hoping for it to ultimately get renewed. However, at the end of the day, all the policies currently align with the delivery of affordable housing, therefore it is simply a matter of determining the most efficient and affordable method of delivery.

#### *3.1.4 The Waterfront Innovation Centre*

Another significant waterfront project under a long-term GL on City-owned land in the East Bayfront, began construction in 2018. The subject site is located on both sides of Dockside Drive, south of Queens Quay, and adjacent to Sugar Beach. The GL provides a 3-year construction period followed by a 99-year term. The intended purpose of the 0.46 ha (1.14 acre) site is a Waterfront Innovation Centre of 32,516 square metres (350,000 square feet) (Figure 2, Appendix B). This will essentially be an office development with tenants fostering innovation in the areas of digital media, advanced visualization, healthcare and clean technology. A land lease gave control over the conditions placed on the project, including the instruction that 60% gross floor area (GFA) contain these types of “innovative” tenants, by meeting a number of different characteristics.

Menkes was selected to develop the project following a competitive process managed by Waterfront Toronto. Menkes paid upfront for the lease value upon closing. Due to the time value of money, it was more favourable for WT to collect this revenue in a lump sum at the beginning. However, with the possibility of the lease rate increasing in the future, this agreement was also in Menkes’ best interest.

The implementation of a land lease was fostered out of a long-standing City policy to maintain City land in public ownership. In December 2004, a Council report was approved titled "Governance Structure for Toronto Waterfront Revitalization". This directed that non-residential waterfront sites be developed by way of long-term GL "where market conditions permit". However, it also stated that residential projects be developed on the basis of freehold conveyances. The 2006 "Toronto Waterfront Revitalization Initiative – East Bayfront Business and Implementation Plan" also stated that revenues derived from land transactions (i.e. sale/lease) involving City lands in the East Bayfront were required to be reinvested by

Waterfront Toronto in the revitalization of the waterfront. Therefore, revenues generated from the Water Innovation Centre lands, as well as many other projects on the waterfront, will not result in a direct financial impact to the City.

There may be several reasons why Council did not include residential properties in this directive, as well as if land development would have included different mandates if the City was more of a direct beneficiary. One possibility is that Waterfront Toronto's funding uncertainty may dictate policy in cases where it would preferably choose to sell waterfront land over implementing land leasing practices for further residential developments. Theoretically, this uncertainty may place a higher importance on revenue up front to help recuperate their own costs and ensure the longevity of their organization. With affordable units on publicly leased land, not a whole lot of upfront capital is being generated. Both the government, and Waterfront Toronto, must determine what role they are going to play in the creation of more housing. In other words, are they simply interested in an upfront revenue stream, or will they be comfortable playing the long game with public land leasing, as many cities and countries in similar situation have successfully implemented?

A natural question that arises is why the Province chose to lease land for the WDL development, when it was in fact, a residential waterfront site. In this case, IO had made promises to the community that these lands would remain under public control. At the time, the provincial government was responding to criticism that their actions on rent control had negatively impacted the housing industry. Hence, this was a way for them to both promote rental housing and also keep land in public hands for future use. When the province sells land, it must indicate gains and losses on a balance sheet. If the government possessed losses it did not wish to display, it is possible this may have also encouraged a land lease. In such a case, properties deemed a capital loss may offer lease arrangements in the future as well.

### *3.1.5 Sidewalk Labs Quayside Project*

Sidewalk Labs' recent proposal for Toronto's Quayside involves components related to green energy, wooden high rises, and affordable housing. However, in order to execute this ambitious

plan, they are requesting the government subsidize the project in real estate value. The 12-acre site where development is slated to occur is mostly in public ownership on some of the most sought-after waterfront real estate in the City.

WT usually only sells land at a discount in return for the provision of public goods (e.g. affordable housing), that would otherwise reduce the profitability of a project. On all its developments, WT is mandating 20% of residential units be made into affordable housing. In January 2020, MacKenzie Ray Heron & Edwardh assessed the value of the Quayside site, giving it an appraisal of \$570 million (Bozиковic, 2019). This price tag takes the affordable housing requirement and sustainability component into consideration. In the Sidewalk Labs 1,500-page Master Innovation and Development Plan (MIDP), there are also pieces of information relating to the request of additional public capital referred to as "performance payments", when specific project goals are attained (Sidewalk Labs, 2019). It suggests that some of the money typically paid as DCs be re-directed to features of its public space and "digital infrastructure".

Although the financing for this land has still not been publicly stated and will not be known until after May 20, 2020 when the Board approves it, there would be several huge benefits for WT to engage in PLLs. When negotiating with a tech giant like Google, a land lease would allow Toronto to maintain leverage if any future issues unfolded. It would also allow them to remain in control over the zoning and land use in the area. For instance, Sidewalk Labs' proposed buildings are smaller than what the zoning currently allows. Their plan uses 2.7 million sf of the allotted density, which leaves 400,000 sf unutilized (Sidewalk Labs, 2019). This is density which could be used to provide more affordable housing or employment space, which the City is forfeiting control over.

### 3.2 Affordable Housing Initiatives

#### 3.2.1 Housing Now

Toronto's recent "Housing Now" initiative is a promising step forward for the City to begin incorporating long-term (i.e. 99-year) land leases that mandate affordable (below-market) housing in their development agreements. The goal of this program is to develop 40,000

affordable housing units over 12 years. The first step includes the development of 10,000 units on 11 municipally owned properties through a leasehold basis in partnership with the private sector (Figure 1, Appendix C). 30% of these units will be made into affordable housing in order to qualify for the program. Another advantage of Housing Now is that it expedites the development process with quicker approval timelines and exempt fees intended to increase the feasibility of the projects, which include both DCs and building permit fees (Gaden, 2018). The City has authorized the use of “Open Door” incentives for the affordable rental housing components of approximately \$280 million for up to 3,700 homes over the 99-year term (Murray, 2019).

Despite these benefits, Housing Now still lags behind its counterparts in the delivery of below-market housing. Although promising in nature, it is limited in the degree of social housing it actually offers. Housing Now considers “affordable” to be 80% of Toronto’s AMR. As such, these properties are only dealing with the issue on a very superficial level. It will do little to serve the 181,000 people on Toronto’s waiting list for Rent-Geared-to-Income (RGI) social housing, as is currently offered by the Toronto Community Housing Corporation (TCHC) (Steger et al., 2018). With RGI, rent for a unit is set at 30% of a household’s total monthly income before taxes and adjustments. Also, this does not take into account those living in the City’s overloaded shelter system or new winter respite sites. For those living on social assistance, an 80% market rent is also quite an unrealistic amount. Although the program requires that 10% of the new affordable units be offered at below 40% of the AMR, this is significantly less than what is needed.

### 3.2.2 Open Door Affordable Program

A key success to the WDL project was the Open Door Affordable Program, adopted by Toronto City Council in December 2015. The program’s goal is to create 1,000 affordable rental units and 400 affordable for-purchase units, each year. It offers a number of incentives and fee deferrals for developers interested in building affordable rental and for-purchase units. These include: waiving municipal and education DCs; building permit fee waivers; planning application

fee waivers; residential property tax waivers; capital funding; use of public lands; and streamlined planning application review.

Both Housing Now and the Open Door program came out of City of Toronto Official Plan Policy 3.2.1.4, which authorizes Toronto the ability to provide municipal assistance through “loans and grants, land at or below market rates, fees and property tax exemptions, rent supplement and other appropriate assistance”. These programs are a good example of the City enacting on its word to help deliver affordable units and promoting its policy priorities. In exchange for the City’s assistance, developments are required to: maintain units as affordable rental, ownership, or co-op for a minimum 25 years; dedicate a minimum 20% of total buildable GFA to affordable units; and guarantee prospective tenant incomes match the eligibility standard (household income cannot be more than four-times the annual rent) when the tenants are first selected. In Open Door’s first two years, the City has spent \$145 million to stimulate the construction of 2,289 affordable homes. Affordable units receiving assistance under the program received \$224,718,000 worth of investment from all three levels government sources. Approximately \$109,471 was used or deferred per rental unit, and \$57,117 was used to create each for-purchase unit.

### 3.2.3 Provincial and Federal Incentives for Affordable Housing

The Federal government, and the Province of Ontario also play an important role in affordable housing through several programs. Funding for capital and operational expenses has been allocated to a broad range of affordable housing programs for rental housing, home ownership, and home renovation/multi-unit rehabilitation. In 2017, the Provincial Affordable Housing Lands Program (PAHLP) was developed out of a collaboration between IO, the Ministry of Finance, the Ministry of Housing, and the Ministry of Infrastructure. The PAHLP was one of the measures included in the Fair Housing Plan, which leverages the value of surplus provincial land assets across the province to deliver a mix of market housing, and new, permanent, sustainable, and affordable housing. This is being rolled out in a multi-phased approach.

Also announced in 2017 was a 10-year, \$40-billion National Housing Strategy (NHS) put forth by the federal government. The program's principal administrator is the Canada Mortgage and Housing Corporation. The National Housing Co-Investment Fund (NHCF) (\$15.9 billion) contains \$4.7 billion in the form of direct financial contributions, and \$11.2 billion offered as low-interest loans. It aims to ensure that current rental housing is not lost to disrepair, and to develop new affordable housing in combination with social support services. This will be accomplished through PPPs. Contributions from other levels of government must be supplemented in addition to the Federal funding under this program. As this may include municipal lands, the eleven sites through Toronto's Housing Now initiative are thus eligible for this federal investment. Under the aforementioned NHCF, lies the RCFi. Since launching in April 2017, the RCFi has generated considerable interest. Hence, the government increased its size from \$2.5 billion to \$3.75 billion in 2018, and then further increased to \$13.75 billion with its 2019 budget. In total, the RCFi will encourage the construction of 42,500 new rental housing units across Canada. This is a four-year program that provides low-interest loans to incentivize the construction of rental housing across Canada. The loan contains a ten-year term at a fixed interest rate with a maximum fifty-year amortization period. It may cover up to 100% of the cost of residential space and 75% of non-residential space, so long as this does not surpass 30% of total gross floor area or 30% of total cost.

These provincial and federal incentives are a promising way to stimulate the construction of affordable housing, but risk being defunded, or cancelled if a new government is elected. Without this funding, future projects scheduled for market offering may no longer be feasible. Similarly, while there currently exists strong political support for Housing Now, this may change with a new Council term.

### 3.2.3 CreateTO's Missed Opportunity

Toronto is scheduled to add one million people in the next 25 years, but its Official Plan, which dictates new growth, only plans for around half as many. The City needs new methods of delivering affordable housing and must be more aware that engaging in GLPs will help further its goals. Taking advantage of existing publicly owned lands to mandate some sort of

affordability component through ground leasing has been proven in many jurisdictions, especially those with quality sites in areas of high demand.

Toronto's planning policies commonly present obstacles in the delivery of more aggressive housing projects, as they stand at odds with the intensification actually needed. This issue is normally solved with negotiations between the public and private sector to allow for a more reasonable project. However, in the case of Housing Now, the private sector push for more density is not as strong, because city planners appear on both sides of the table. In other words, Toronto is attempting to play the part of a land developer, but without making enemies a developer normally would by pushing back on inconsistent building policies.

This may partially explain the poor planning of the Housing Now site at 50 Wilson Heights Blvd., which currently stands as a parking lot in Downsview near the Wilson subway station. The project is a large undertaking that will see the construction of 1,464 units. However, this is only around two-thirds of the density that could be built, based on a similar private development close to approval at Bloor and Dufferin. The current planning framework only allows for 16 floors because of the nearby Downsview airport, which limits tall structures in order to protect flight paths (Bozikovic, 2019). However, Bombardier sold the 1.5-square-kilometre airport to the Public Sector Pension (PSP) Investment Board for US\$635million. It subsequently signed a long-term lease for a site at Toronto's Pearson International Airport, which formalizes the relocation of its aerospace division once the new site is complete in 2023 (Shufelt, 2019). PSP's planned development will make 50 Wilson Heights Blvd more valuable and allow for far greater density on the site with no more flight paths to contend with.

In defense of CreateTO, the organization tasked with procuring the City's real estate assets, they also have the challenge of producing Mayor John Tory's vision of "housing now", and not in a few years. Therefore, they don't have the luxury of waiting to produce the most efficient means of development. However, according to Amborski & Petramala [2019], CreateTO is estimated to have approximately 210 acres of land for sale or lease, of which 124 acres are already zoned for mixed-use or residential. Even though these initial 11 Housing Now sites were

all intended to be transit-oriented developments, it would have been possible to forego the development of 50 Wilson Heights Blvd in favour of another location slightly further away from a transit station if this would have meant an approximate 33% increase in density at the site a few years from now. CreateTO has traditionally included a density between 100 and 200 units per acre in their projects. This suggests the potential to construct an additional 12,400 to 24,800 housing units on its available land for sale. Land leasing has not been discussed for many of these sites, as the majority are being sold at market value, with no provision for affordable housing (Amborski & Petramala, 2019).

The proposed Housing Now developments at Warden and Victoria Park subway stations are also problematic from a density standpoint, even while being considerate to the creation of livable communities and surrounding built form. At 705 Warden, there are serious questions about how the city is best using its land. The property has a size (7.1 acres) similar to a comparable site near the Dufferin subway station (7.3 acres). However, the density pales in comparison, with a Floor Space Index (FSI) of 1.5 versus 5.6 (Figure 2, Appendix C).

If City Council decided to act with greater force and innovation to solve Toronto's housing crisis, it would mandate that more of these lands be leased, rather than sold. It would also allow CreateTO to bypass antiquated planning regulations and propose more units on each of these sites to adequately serve its more vulnerable residents. Reduced parking requirements is one strategy that has been used to build below-market units, as underground parking spots can add incredible costs to developers and end-users. In Vancouver, the Squamish Nation is implementing this vision since the City's restrictive planning policies do not require adherence on Reserve land. Here, a collaboration with Westbank Corps., will produce housing density greater than anywhere in Toronto, with the construction of 11 towers, totaling 6,000 homes, yet only room for 600 parking spaces (Bula, 2019).

### 3.3 Provincial Land Leasing

Amborski & Petramala [2019] suggest there are 6,000 surplus government sites that have the potential to be redeveloped for housing in Ontario's Greater Golden Horseshoe. These include



sites ranging from parking lots, LCBO stores, and underutilized school sites. However, the government continues to sell off these lands, rather than using more innovative methods of municipal finance relating to LVC. The Province recently sold land just west of Yonge St. at 26 Grenville St. and 27 Grosvenor St. to Greenwin Incorporated and Choice Properties Real Estate Investment Trust (REIT) for \$36 million (Kalinowski, 2019). This was the former Ontario Chief Coroner's office and parking deck. Even though this will lead to the construction of around 200 affordable housing units, it is a squandered opportunity to maintain control over a key piece of real estate in Toronto's urban core. This is just one parcel in a sell-off of 243 surplus public properties that was announced in December of 2019 (Kalinowski, 2019). It will generate an immense amount of revenue for the province, estimated to be between \$105 million and \$135 million over four years, while also saving \$9.6 million in operating costs. However, the Province could have taken a step back to address the future needs of its residents by holding onto this land through a PLL, rather than being concerned with short-term capital gains.

Toronto public lands are also controlled by local ABCs such as Toronto District School Board, which owns hundreds of properties around the city. The Toronto Lands Corporation (TLC) is another subsidiary that manages 97 of these, with the goal of optimizing the Board's real estate revenues (Toronto Lands Corporation, 2013). However, the local school board has started to sell off portions of school playgrounds to pay for building renovations and repairs, rather than looking towards leasing the land for future use (Shen, 2014). York University, as well as the Toronto Transit Commission (TTC), have also recently sold off a portion of their lands to private interests. York is a multi-generational institution that will likely regret this decision when it comes to future expansion. There are lessons to be learned here from the University of British Columbia (UBC), who used a portion of their 1,000-acre campus to build a mix of rental, faculty and market housing that was conveyed by way of 99-year prepaid leases. The returns from sales and rentals have so far generated \$1.6 billion for the university's endowment fund (UBC, 2019). At the end of the lease, UBC will be able to renegotiate for greater density, providing an even higher revenue stream, and also provides flexibility to expand.

### 3.3.1 Whitby GO Station Site and the Port Whitby Community Secondary Plan

The Whitby GO Station is located in at the south-western corner of Highway 401 and Brock Street South (Figure 1, Appendix D) in Whitby, Ontario. In 2018, the Ontario Municipal Board (OMB) approved its Port Whitby Community Secondary Plan for the lands surrounding the Whitby GO Station. This includes policies to support a medium- to high-density residential development, with mixed-use and commercial/open space components that is public transit and active transportation oriented. Currently, Port Whitby has a population of 2,000 people, contains 500 jobs, and covers approximately 183 ha. The Secondary Plan Area aims to accommodate 12,500 people, and 3,790 jobs by 2031. Town Council envisions “commercial” lands north of the CN Rail tracks (approximately 14.5 acres), with “mixed-use residential” lands south of the tracks (approximately 6.5 acres). The development densities here are projected to range up to 18-storeys and 300 dwelling units/ha.

Whitby’s sustained population growth has resulted in high levels of residential development activity, however, the majority of new development remains traditional single detached homes, as opposed to multi-storey apartment buildings (i.e. PBR and condominiums) which have become the presiding housing type in other GTHA markets. With projected densities of 300 dwelling units/ha south of the tracks, it would create a shift towards these multi-storey buildings. This would create a healthier housing stock in addition to the prospect of being able to construct these units on publicly leased land.

Surface parking currently occupies around 60% of the 17-ha aggregated GO Station area. Whitby leases a large portion of this land to Metrolinx for parking purposes (i.e. the northeast corner of Victoria Street West and Henry Street). Because the Town does not want its leased property to be used as a parking lot indefinitely, it has begun to investigate the viability of its real estate market to support TOD. In October 2019, Pricewaterhouse Coopers (PwC) conducted an investigation into the feasibility of redeveloping this land into a dense mixed-use vision called “Transit Village” (Figure 2, Appendix D). However, the report does not consider LVC tools that would benefit the Town in the future, such as public land leasing and transit joint

development. PwC estimates that market conditions will be ideal to purchase and develop the land in 3-5 years.

### 3.3.2 Leasehold Potential of Whitby's Transit Village

With Durham Region's aim to promote TOD around its major transit station areas, the Town of Whitby is considering selling land around its GO Station to support this intensification.

However, as GTHA growth projections continue to rise, this move would arguably be short-sighted, as the Town may be able to reap much greater rewards from the area by retaining public land through GL developments. If the site is intended to function as a sustainable community that contributes to the Province's goals of addressing climate change, and density targets, it might be more desirable to lease this land by engaging a private development partner. The exact planning and zoning requirements have yet to be determined, but one of the major benefits of public land leasing is that once these are set, future amendments are completely up to the discretion of the municipality.

Public officials with the Town have stated that the goal of this development is not revenue-based, but to achieve Transit Village's sustainable community goal. If this is the case, there is all the more reason to be proactive about the future of the Site. The location is highly desirable due to its proximity to Whitby's largest recreation centre, the Iroquois Park Sports Centre, and is also a 30 minutes ride to downtown Toronto, of interest to those making the commute for the purpose of work and entertainment. In fact, Whitby GO already has the second-highest daily ridership of any of Metrolinx's 64 train stations, behind only Oakville.

One important complexity to note is that land ownership around the station is not straightforward. Whitby owns approximately 2.63 ha of land, and Metrolinx owns another 5.86 ha. There are also private landowners in the region, in addition to Durham Region, Ontario's Ministry of Transportation, Ministry of Infrastructure, and the Canadian Mental Health Association. This would require landowner negotiations at the cost of municipal resources to either lease or sell these lands. An analysis of the cost-benefit of acquiring the land for leasing purposes would be required; although, the land value capture gained from a long-term PLL

would presumably be more than enough to cover any additional fees accumulated through the costs of administration and land acquisition.

Furthermore, Whitby's project falls in line with Durham Region's initiative to promote TOD throughout the region. The region is considering a proposed extension of the Lakeshore East GO line, which would entail adding new stations at Thornton's Corners, Central Oshawa, Courtice, and Central Bowmanville. An Official Plan review is expected to highlight TOD and intensification at these new locations and around current station areas. This alignment makes strategically developing these locations all the more important. The GTHA has a major opportunity to not only optimize transit investment, but also to build more resilient urban regions from the perspective of placemaking, sustainability, economic development, job creation, and housing densities inclusive to all. Although market conditions might not be ideal to engage the private sector at the moment, it might be worth it for the Town to sit longer on their most valuable asset until the precise moment arrives.

If Whitby has plans to wait 3-5 years before selling this land, there is still time to consider public land leasing as a long-term revenue stream and conduct an analysis into why this might be a more preferable option to selling. There is a strong chance that by 2023-2025, market conditions will support this type of development, as land values rise with heightened demand from a rising population and job base in Toronto and the GTHA. Per the Town of Whitby, its population is forecasted to hit 147,500 people in 2021 and reach 192,900 people by 2031. Although PwC's study was limited in scope, Town Officials have said that Whitby plans to conduct greater due diligence in the near future to compile information and perspectives on the development potential of these lands.

## 4. Challenges to Leasing Public Land

### 4.1 Partnership Issues

The potential for the development of PPPs is a major benefit of leasing municipally owned lands, with existing opportunities to mandate affordable housing in the terms stated in the

lease agreement. However, there are also concerns over partnership timelines and the genuine commitment to affordable housing if costs exceed funding and revenues. Conflicting interests is where most PPPs fail, making a familiar objective the foundation for a successful GLP. Financing details in social housing developments also present several complexities, as government budgets do not always have the capital reserves to offer the necessary tax breaks and subsidies intended to incentivize participation in affordable housing projects (Shamsuddin & Vale, 2017). Moreover, heightened financing complications involved in a land lease agreement tend to result in heightened transaction costs, which may be an obstacle to private sector players engaging in these types of projects, especially for potential lenders. Therefore, fee-simple sales are usually still preferred, and provide a more viable option for non-rental commercial and residential development projects (Bernick & Freilich 1998).

Land leasing is also subjected to negotiation costs where a successful deal between the public and private sector is difficult to reach. Each player must believe that the other is dedicated to achieving a mutually beneficial contract. This works well in Hong Kong, where the government exerts neutral influence over private investments in land markets. Here, developers also respect the mandates of public officials to establish conditions that lead to more livable cities with improved infrastructure and social services (Hong, 1988). A mutual understanding between these players facilitates strong negotiations and cooperation at the bargaining table.

Administering and enforcing lease agreements demand time and resources but are a necessary cost to meet compliance. The government must hold detailed records of land contracts and boundaries, as well as frequently reassess land and property values, which may be expensive. Each of these actions require commanding knowledge of the land market, and officials with these skills are paid accordingly (Hong, 1988).

#### 4.2. Political Barriers

One issue with revenue generated over the course of time from a public GL, is that it may not be readily visible in public financial statements. Although a higher income stream might appear on a budget statement, it may be difficult to display as an ongoing revenue source. Reversely,

revenue generated from a property that is sold will have returns that are directly displayed. Therefore, a municipality may be primed to sell a site upfront at market value, regardless if the profits are higher from the GL (including the discounted land value following the lease period) (Löhr, 2017). In this regard, politicians may superficially point to the balancing of budgets and reduction of short-term debts as an accomplishment from their time in office come the next election cycle. By leveraging the profits gained from selling public sites, it's an effortless attempt to gain praise and appears substantial from an optics standpoint. Although, from an outward vantage point, this decision is economically and strategically flawed in comparison with maintaining the sites under public control and accommodating GLs.

The implementation of public land leasing may also introduce third-party problems. With conventional private developments, there are legalities that dictate the process, as well as a third-party (i.e. the public sector) to ensure that these rules are being followed. Third-party problems arise when the government plays both the contractor and the enforcer (or lack thereof). Although checks and balances exist in most circumstances, there are still issues, as in the case of Toronto's Housing Now initiative, where a PLL does not always achieve the highest and best value for the City. Government actions that are not as influenced by private markets may lead to resource misallocation (Coase, 1988). Officials may also simply not have the best information or expertise to allocate these resources most effectively.

Another commonly cited limitation of long-term GLs is related to the fact that land use control is produced from a fusion of land use regulations and lease restrictions. These may be incompatible at certain points in time, as land use laws may change more repeatedly than lease terms in an active land market (Ingram & Hong, 2012). Furthermore, municipalities may be presented with conflicting policy objectives. For example, choosing to maximize lease revenue makes it more complicated to issue affordable housing, and deciding to provide below-market-rate leases in order to promote affordable housing stocks, makes it difficult to boost lease revenue (Anderson, 1986).

#### 4.3 Timeline Issues

There is still more research needed to evaluate ground-lease revaluation practices (Altes, 2019). Resetting GL rents may have significant adverse consequences on lessees and their lender, with rent-reset clauses being described as “land mines” (Stein, 2014). It has also been demonstrably challenging to draft clauses that forecast all contingencies in rent adjustment (Stein, 2014). Future lease adjustments may also lead to unpredictable circumstances for buyers and lenders of ground-leased properties, thereby eliciting reduced market values (Tyvimaa et al., 2015). The existence of synergistic values may also result in hold outs and poor initiative on the part of the lessee, since a large proportion of the land value will be unlocked later into process (Miceli & Sirmans, 2007). Capturing land values following a mature lease generates lucrative assets and revenue by selling the subsequent renewed rights, but this may also displace inhabitants if they cannot afford the escalated property prices in the neighbourhood (La Grange & Pretorius, 2016). Authorities have the power to refrain from setting new rents at unaffordable levels if the right conditions are put in place.

Property maintenance towards the end of the GL expiration period is also a concern. If the leaseholder is unsure about renewal, they will not have as much incentive to upkeep the property. Residents lacking certainty over the future of their unit may also relocate proactively, causing high levels of vacancy towards the end of the lease contract. Officials may outline these terms in the initial lease to avoid such issues, as well as begin negotiations well in advance of a potential lease renewal.

#### 4.4 Outdated Views on Land Ownership

Finally, there is the rhetoric of development as part of a broader narrative of public land-owner behaviour in relation to private sector interests (Eidelman, 2016). In the United States, there is an assumption within its psyche that private landowners comprise “the main progenitor” of urban development (Fainstein, 2001). This is the idea that private land ownership is one of the building blocks of American social and political institutions that helps establish liberty and democracy by providing residents with a connection for which they can act as productive members of the community and facilitate future city building.

The U.S. Constitution even possesses a legal foundation for private property as a cornerstone of its political ideology. Its Fifth Amendment states that “No person shall be ... deprived of life, liberty, or property, without due process of law ...”. Strong [1979] noted that in the U.S., “there is an antipathy to public landownership ... a conviction that the increment in land value accruing from increased development potential should go to the successful speculator rather than to the public at large”. In order to remediate these outdated views on land ownership, there must be an underlying shift in the way that land leasing is presented to the public, with benefits communicated more transparently from the top-down. Canada has a different legal basis regarding private property because land rights do not appear directly in its charter. However, despite the fact that almost all land titles lie with the crown, the sentiment of private land ownership enabling economic prosperity seems to have percolated into its development landscape.

## 5. Conclusion

Toronto has made a small step towards taking advantage of public ground leasing models but must persistently push forward with programs and partnerships if it plans to keep pace with other global city regions in delivering social goals such as transit and affordable housing. Land leasing will be able to provide the City with greater capital returns over a longer period of time, with less financial risk, and the ability to develop sustainable PPPs. From a planning perspective, it will also allow the City to maintain control over its land for future uses and allow for the completion of more resilient land-use plans by filling gaps in areas such as IZ.

In Canada, all levels of government have engaged in public land leasing at some point, despite its limited use. Its purpose in promoting economic development or for the provision of affordable housing may be considered a slighter form of LVC, but greater potential exists to benefit from the uplift that occurs once a community is more built out. There is still untapped opportunity in Toronto’s WDL, as well as other provincially owned surplus lands in close proximity of transit stations. The Port Lands has undertaken leasing arrangements on a number



of its properties for commercial or industrial uses, but now has the opportunity to dictate residential development and strategically use its assets for public benefit.

By utilizing strategies in comparable urban regions, such as Boston, New York, and Vancouver, Toronto and the GTHA will be able to adopt policies to facilitate public leasehold systems on its lands. The public sector has an important decision to make regarding the future landscape of Toronto's waterfront land ownership. PLLs will result in LVC for alternative housing uses and municipal infrastructure improvements, but future city building visions will also need planning to drive and deliver meaningful impacts for generations hereafter in surrounding regions. Although positive strides have been made, there still lacks sufficient force behind Ontario's land leasing regime. An inflection point is on the horizon as the region's population continues to climb, and Ontario has the opportunity to generate real momentum, and not simply inertia.

## 6. Recommendations

### 1. Explore Additional Methods of Land Value Capture to promote Affordable Housing

There are a few other notable methods of LVC to note that may be used interchangeably with public land leasing. Land banking is one strategy whereby public agencies with enough foresight and capital may purchase land to "bank" until prices rise following government investment in infrastructure or increased urban development. These reserves may be sold later at a profit to capture the value-added for land-price increases. However, they may also be sold with contractual agreements specifying the nature of future development on the site, including residential development through a land lease. This also offers the benefit of public agencies gaining control over the timing, speed, and character of construction in the case of TOD (Howard et al. 1985).

Several jurisdictions also participate in the leasing of Air Rights for commercial and residential development, especially around transit infrastructure. Developing AR refer to the creation of air space parcels above a horizontal plane. For example, New York's MTA leased AR over its rail yards to facilitate the Hudson Yards development. The Toronto Region Board of Trade [2016]

looked at the potential to use air rights to develop 180 parking lots within Toronto and found that the City could generate over 10-times the amount of property tax revenue through this development as opposed to holding them for their current use. Incorporating affordable housing initiatives in the RFP for leasing these AR may be stipulated in a similar manner to those for leasing ground rights.

Establishing community land trusts is another method of LVC whereby the government owns the land but agrees to place it in a public trust. This typically has the objective of holding the land to support affordable housing, or environmental targets, rather than capturing land value increases with a future sale. The concept stems from the idea that constructing housing on public land will remove land acquisition costs when paying for housing.

## 2. Make Structural Changes to the Waterfront Toronto Model

To make Toronto's waterfront development a more innovative and efficient process, it is evident that there needs to be a new model for WT moving forward. One solution may be to turn the agency into a public trust. This would make it easier to consolidate public land ownership and take control of property rights under its authority, as well as raising the level of difficulty for existing landowners to circumvent the planning process. All of these conditions may lead to a climate whereby more forward-thinking development and LVC tools such as public land leasing may be considered. WT's formal requests to government for new powers and increased authority have been denied repeatedly. A more divided ownership base creates difficulties in the coordination and implementation of waterfront planning. This lack of land asset ownership differentiates it from other waterfront development agencies around the world, with almost every other example being able to amalgamate public land ownership under a single authority.

Several independent audits have also concluded that WT's tri-level funding framework diminishes its capacity to complete projects on time and on budget. Greater financial command to borrow money, raise its own revenue (through DCs, land sales, or leasing activities), issue debt, mortgage assets, and create independent subsidiaries, may realistically facilitate more

innovative development frameworks by giving WT increased ability to resist budget related constraints. Without direct revenue sources, it becomes harder for the corporation to budget for the next decade. This may ultimately bias it towards making certain decisions, such as an inclination towards fee simple land sales, in order to secure a future revenue stream.

Waterfront Toronto's overarching mandate explicitly promotes waterfront "revitalization," and not simply redevelopment. This highlights an obligation towards the economic, social, and environmental benefits aside from general real estate development, as well as implying a conscious effort to develop the region in a sustainable manner that considers the needs of future residents and public interests. As such, holding onto public land while delivering development and affordable housing should continue to be explored through the leasing of public land. Through a land trust, WT would become both a steward of the land and maintain ownership for the government in its own interest. The City would be able to feel secure knowing that the land would remain under public control, to protect public interest, and at the same time, would not have to worry about transactional real estate deals that it is now consumed with. This would require some sort of amendment to the provincial legislation, but through this model, a leasehold regime may be initiated.

### 3. Amend the Waterfront Governance Report

Toronto City Council's report on the Governance Structure for Waterfront Revitalization directed that non-residential waterfront sites be developed by way of long-term GLs where market conditions permit. Moreover, it stated that residential projects be developed on the basis of freehold conveyances. In order to institute a greater leasehold regime along the waterfront, there needs to be an amendment to this governance structure to encourage the implementation of ground leasing schemes. It is evident that developers are willing to engage in PLLs in this region due to the high value of land and desirable location for residents to live. Therefore, the onus is on the public sector to facilitate an environment where leases for residential properties are more common, or even required in certain areas.

When WT was first formed, there was not a strong case to create PBR with affordable housing because the market in this region would not have supported it. However, Toronto's waterfront land has increased in value significantly, with developers and REITs being far more willing to develop publicly leased land for housing. Moreover, waterfront sites are being laid out with progressively higher degrees of master planning and consultation, which help clarify what developers are specifically bidding on. This creates a more calculated and manageable level of risk when engaging in projects on leased land. Hence, the fiscal opportunity for the private sector to build housing on leased waterfront land is quickly growing.

With a PBR development, a corporation owns the assets, and renters forego land ownership. However, a traditional condominium building would be more complicated to develop on a leasehold basis because individuals would simply be purchasing a unit for the length of the lease, or until the government chose not to renew the land contract. Traditional lenders might also be reluctant to provide mortgages for condos on ground leases. Therefore, it is also important to examine methods whereby typical housing developments could exist viably on publicly leased land, such as those in Hong Kong and Singapore.

#### 4. Take Advantage of Newly Available Waterfront Land

Currently, housing is not a big component in the Port Lands because of environmental contamination, the threat of flooding, and lack of public infrastructure. However, recent public investments have begun to change this narrative, with large potential for the area to become one of Toronto's next big neighbourhoods. Currently, PLLs exist for industrial purposes (i.e. concrete batching facilities, road salt storage, film studios, soil management facilities), which reflects the previous identity of the region. With a completion date set for 2024, The Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP) will lead to new roads, parks, and infrastructure for the City to use strategically to facilitate new land uses, including residential.

In 2017, The Villiers Island Precinct Plan was created. This provides a comprehensive vision and planning framework to guide the development of the region's Villiers Island, intended to

transform an industrial port into a mixed-use community. The goal will be to subsequently stimulate revitalization and contribute to the creation of a series of future districts. As this will be a high demand area to take up residence, WT is presented with an incredible opportunity to engage developers in PLLs and avoid missed opportunities throughout much of the other sections of the waterfront. The implementation of GLs would also be a chance to stipulate the construction of affordable housing units; however, instruments of LVC such as this are not mentioned in the Plan's Affordable Housing Strategy.

#### 5. Consolidate Land Ownership Along Toronto's Waterfront

Toronto's inconsistency in land ownership along its waterfront has created jurisdictional fragmentation with each level of government having separate interests and priorities that may interfere with one another. In order to institute city building objectives such as the construction of affordable housing on publicly leased land, Toronto will need to follow Vancouver's example and consolidate land ownership by giving one public tier greater legal authority over how these lands are to be used. This would prevent one public landowner from vetoing the jurisdictional authority of another following the direction to lease public land. A lack of political interference from other government tiers would likely facilitate more innovative methods of LVC, such as what occurred along Vancouver's waterfront. If nothing else, this would result in greater general coordination and communication with regards to redevelopment efforts.

#### 6. Establish an Administrative Arm of the Province

By creating an administrative body or office for the Province that studies the feasibility of using LVC tools on public lands, it alleviates the pressure on cities to use resources towards conducting costly and extensive due diligence before deciding what to do with surplus lands. This might be similar to how Miami's MDTA created an Office of Leasing to manage and market joint development projects along its transit corridors. Vancouver's local transit authority, TransLink, also launched its own real estate division to purchase and intensify land use along new rapid transit routes in order to subsequently sell and lease to private developers at a higher price. If the Town of Whitby had this type of resource at its disposal, it is likely that its

first instinct would not have been to seek feasibility of selling the land around the Whitby GO Station. Currently, there exists provincial administrative support for the implementation of PPPs. Therefore, the precedence is at hand, and a similar framework could be coordinated for instruments of LVC, including public land leasing.

## 7. Appendices

### Appendix A – Land Ownership in Toronto's Waterfront

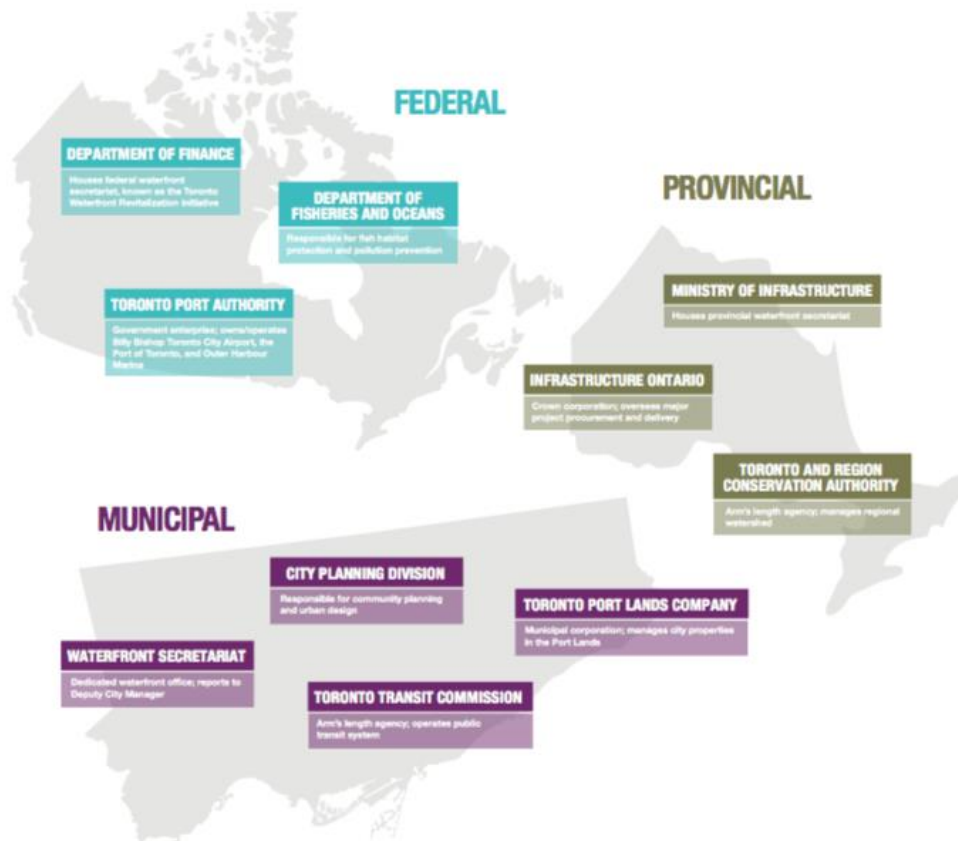


Figure 2: Federal, Provincial, and Municipal entities owning land in Toronto's waterfront (Eidelman, 2013)

	AREA (HECTARES)	AREA (ACRES)	DISTRIBUTION
WATERFRONT TORONTO	6.61	16.33	0.44%
FEDERAL	413.71	1022.30	27.50%
PROVINCIAL	393.23	971.69	26.14%
MUNICIPAL	497.52	1229.39	33.07%
PRIVATE	157.48	389.13	10.47%
UNKNOWN/RESIDENTIAL	35.77	88.39	2.38%
TOTAL	1504.31	3717.23	100.00%

Figure 1: Land ownership limited to the "Designated Waterfront Area" defined by Provincial Regulation (Waterfront Toronto, 2013)





Appendix B – Future Waterfront Developments on 99-Year Public Land Leases



*Figure 4: Rendering of the West Don Lands Purpose-Built Rental development by Dream, Tricon, and Kilmer (Dream Unlimited, 2019)*



*Figure 5: Rendering of the Waterfront Innovation Centre developed by Menkes (Menkes Development Submission 2017)*

## Appendix C – Toronto's Housing Now Sites

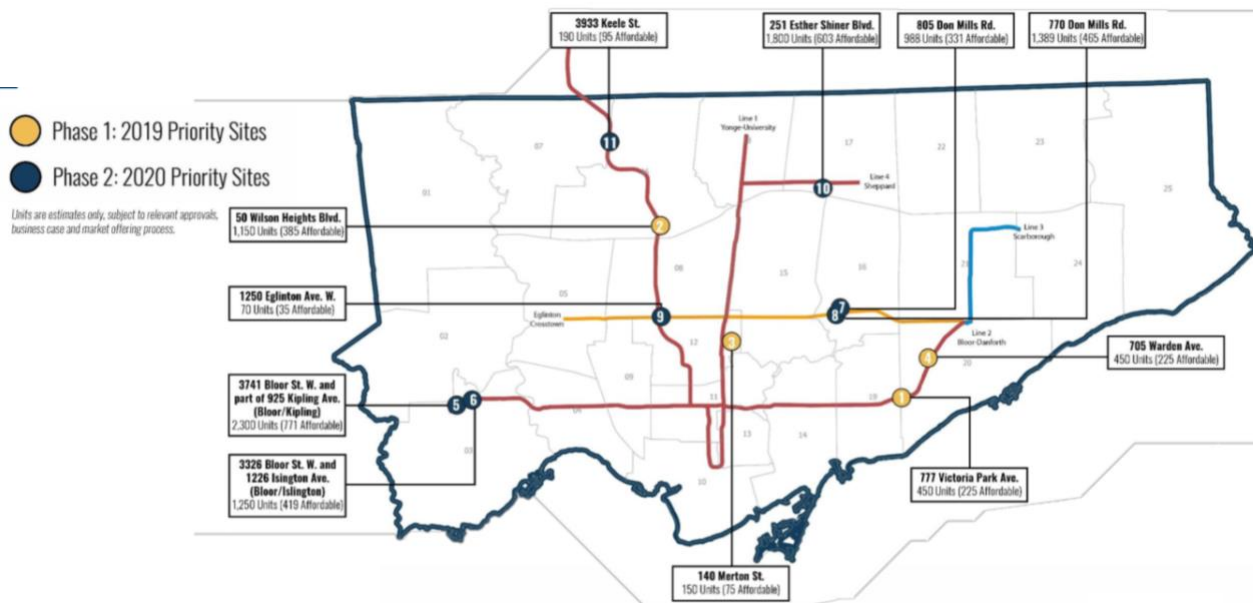


Figure 6: Locations of the first 11 Housing Now sites

## 705 Warden (Housing NOW)

Subway: Warden Station  
 Site: 7.1 Acres  
 GFA: 473,000 SF  
 FSI: 1.5



## Bloor-Dufferin

Subway: Dufferin Station  
 Site: 7.3 Acres  
 GFA: 1,780,000 SF  
 FSI: 5.6

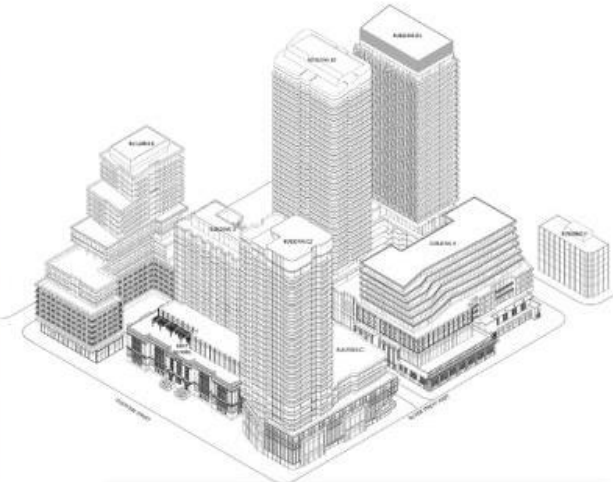


Figure 7: The 705 Warden Housing Now site in comparison to development near the Dufferin Subway Station (Smart Density, 2020)



## Appendix D – Whitby GO Station Land Information

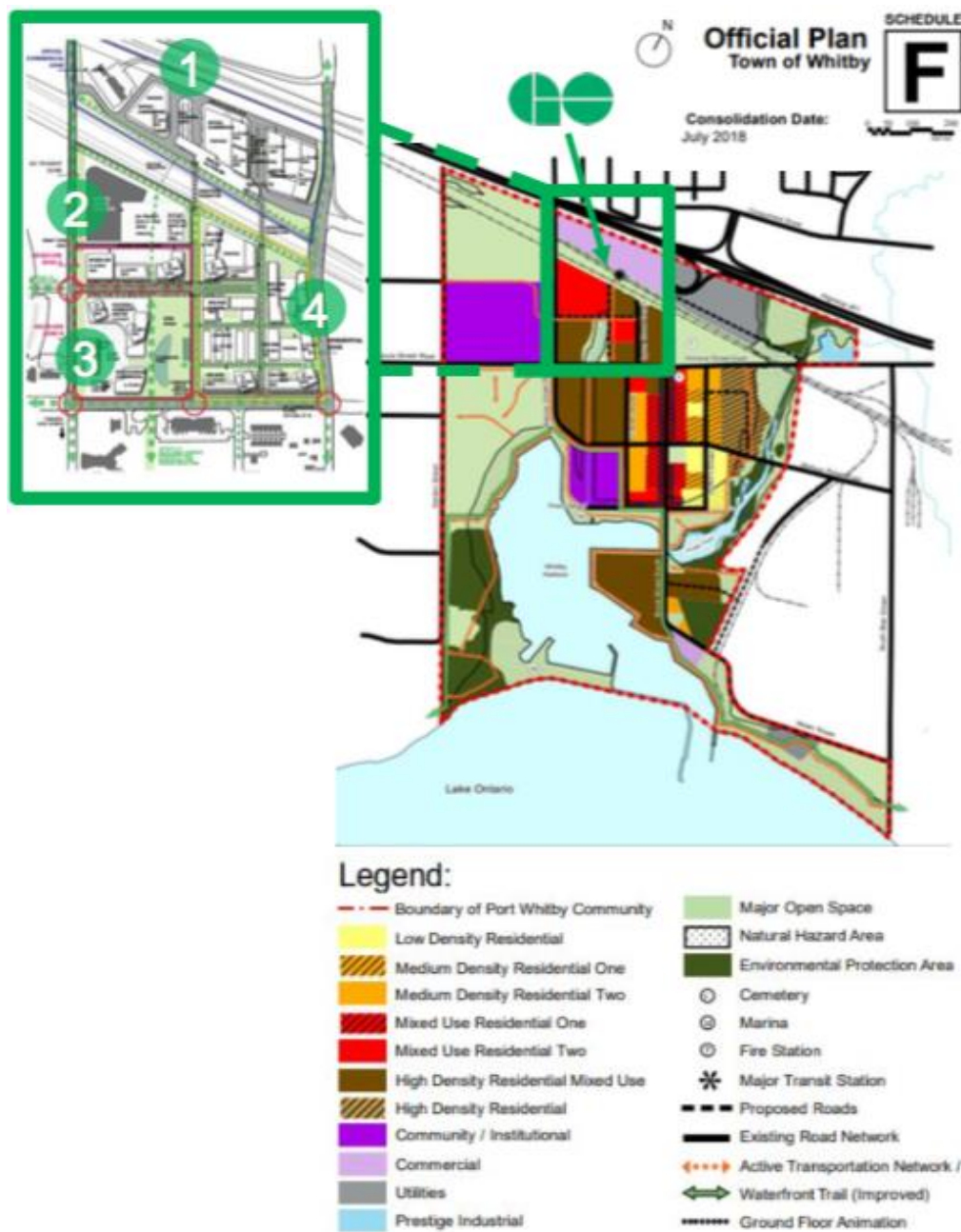


Figure 8: Land use around the Whitby GO station (Town of Whitby, 2019)



Figure 9: Land ownership around the Whitby GO Station

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