

UNDERSTANDING THE TOWER LANDSCAPE



THE TOWER RENEWAL PARTNERSHIP

Tower Renewal is a model to transform Canada's remarkable stock of mid-century apartment towers and their surrounding neighbourhoods into more complete communities, resilient housing stock and healthy places, fully integrated into their growing cities. Tower Renewal Partnership is a collaborative initiative working to preserve and enhance this key affordable housing through research, advocacy and demonstration

projects. TRP's goal is to enable reinvestment into these dynamic neighbourhoods, working toward their transformation into low-carbon, healthy and complete communities.

Partners and Supporters



Cover Photo courtesy of Jesse Colin Jackson

THIS REPORT

Despite an appearance of homogeneity, the Toronto region's tower sites present a host of differences related to site geography, ownership, and location within the region's key infrastructures. The different types of sites identified here indicate that different actors and interventions will be required to broadly facilitate Tower Renewal, with more public support required for the revitalization of housing assets in isolated areas.

OVERVIEW

Context	1
What is Tower Renewal?	2
Primary Strategies	
Methodology	4
Regional Tower Stock	5
Geography and Ownership	
Clustered Towers in the Park	
Fragmented Sites	
Isolated sites	
Infrastructure and Growth Policy	
Market Zones	
Conclusion	14

CONTEXT

Nearly one million people in the Greater Toronto Area live in several thousand concrete residential tower blocks which were built between 1945 and 1984.¹ These post-war apartment towers are representative of Modernist principles of site planning, building layout and suite design, built during a period when such principles had been fully integrated into the public policy regime. Supported through both public land use planning and financial instruments, and built by the private sector, these tower proliferated en masse throughout Canadian cities during this period, particularly in the Southern Ontario and the broader Toronto regions. They were also produced by a set of residential high-rise construction techniques that were standardized region-wide by the 1960s: flying form concrete construction and brick veneer atop concrete block and exposed floor slabs. The resultant built forms of tower and landscape are in many ways uniform. The relative ubiquity of this tower typology, however, disguises a range of significant differences: site geography and ownership structures, market conditions, and relationships to municipal infrastructures and policy all create layers of 'invisible' variation. These variations, and the opportunities and challenges to renewal that they create, are the subject of this research brief.

1 Tower Neighbourhood Renewal in the Greater Golden Horseshoe: An Analysis of High-Rise Apartment Tower Neighbourhoods Developed in the Post-War Boom (1945-1984), prepared by ERA Architects, planningAlliance, and the Cities Centre at the University of Toronto for the Ontario Growth Secretariat, Ministry of Infrastructure, 2010.

WHAT IS TOWER RENEWAL?

Tower Renewal is a model to transform Canada's remarkable stock of mid-century apartment towers and their surrounding neighbourhoods into more complete communities, resilient housing stock and healthy places, fully integrated into their growing cities.

Together, these strategies leverage existing assets to build more complete communities while preserving and improving the mid-century towers as an essential component of our affordable housing supply.

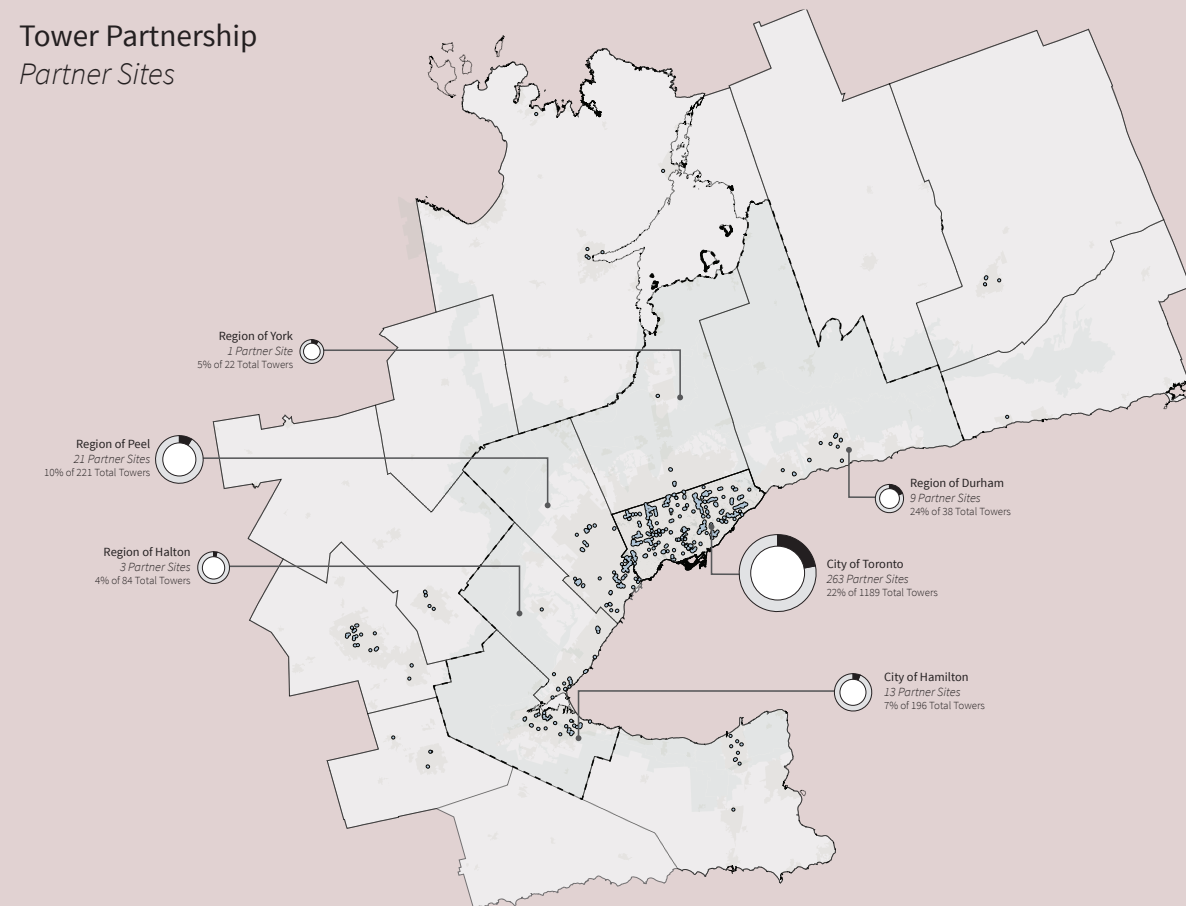
The Tower Renewal model consists of three primary strategies:

- 1.** the retrofit and rehabilitation of the apartment tower housing stock to improve tenant comfort and energy performance;
- 2.** investment in community amenities, services and infrastructures toward thriving and connected local economies; and
- 3.** integration of high-quality infill to support appropriate mixed-use growth.



Figure 1: Tower Site Study Area

**Tower Partnership
Partner Sites**



Legend

- Tower Neighbourhoods with High Social Need
- All Tower Clusters (points not-to-scale)
- Existing Rapid Transit
- Funded Rapid Transit

METHODOLOGY

In 2016, the Tower Renewal Partnership studied a sample of towers to better understand their characteristics. This sample set, made up of 286 tower sites, was selected in partnership with a range of public, institutional and private owners.

While the majority of these sites were located in the city of Toronto (representing more than 10% of its tower stock), others were distributed across the Peel, Halton, York, and Durham regions, as well as in the city of Hamilton. This geographic distribution allowed for a variety of local governance, ownership, and geographic conditions to be considered. The study of this representative sample allowed a range of specific opportunities and challenges associated with Tower Renewal across a variety of geographic, market and social conditions to be determined.

Figure 2: Type of Ownership

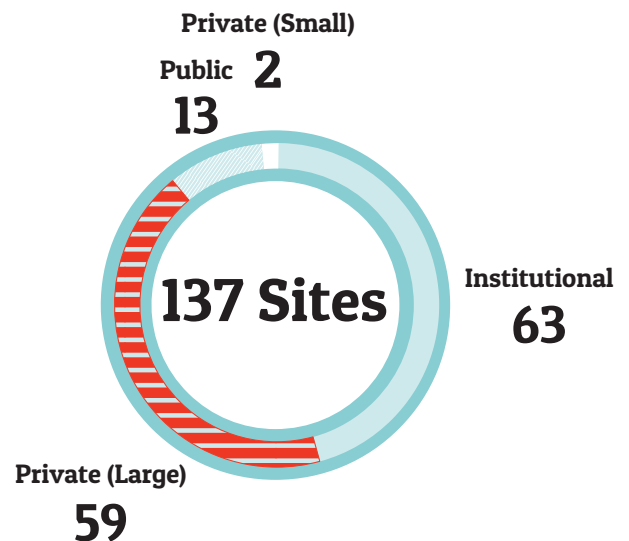
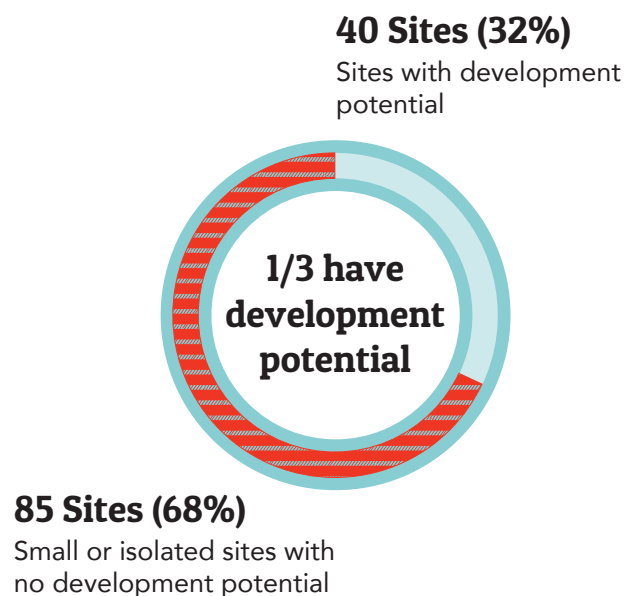


Figure 2: Type of Ownership



REGIONAL TOWER STOCK

The region's tower stock was studied through three lenses: site geography and ownership structures, market conditions, and municipal infrastructures and policy.

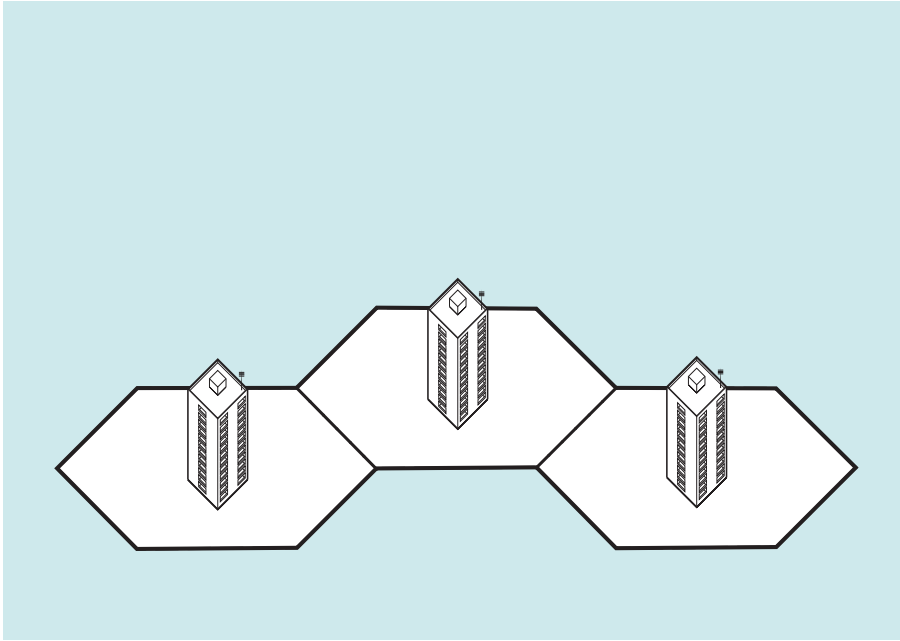
Geography and Ownership

The region's apartment towers generally follow the 'tower in the park' model, yet this ubiquitous conditions contains several variations that impact potential strategies for Renewal. While the significant open space associated with the 'tower in park' suggests an opportunity for the addition of new uses and site reordering in line with the goals of Tower Renewal, characteristics of site geography, lot size and ownership impact this potential. The assessment of the sample tower stock, examining these various factors identified three primary sites types.

1. Towers In Clusters in the Landscape, 905 East



1



1



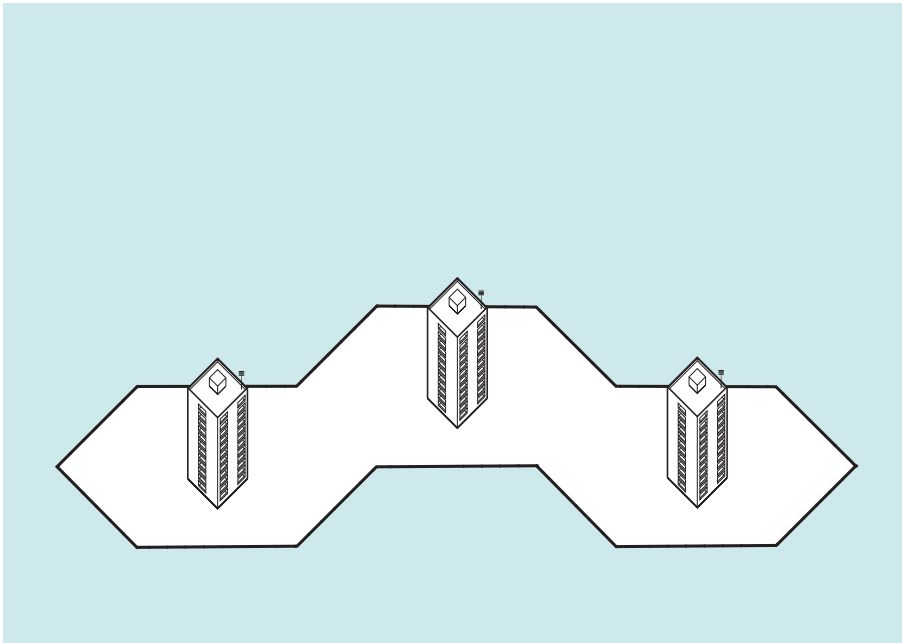
2

1. Towers In Fragmented Clusters: Adjacent towers have different owners

2. Towers In Fragmented Clusters: Adjacent towers have different owners

Clustered Towers in the Park:

Towers surrounded by significant open space are most conducive to comprehensive Renewal. On these sites, the optimization of underutilized land assets can be harnessed to meet local community needs and broader regional objectives. A Renewal program on a large site might adaptively reuse this open landscape for community uses, local economic development, and even city-wide priorities, such as active transportation networks. Of the sample sites, 28% were found to have large areas of adaptable open space. These sites tend to be large enough to accommodate mixed-use infill, which might include community amenities, affordable housing and crucial services. Surplus revenue from this development could be used to cross-subsidize physical and community improvements and catalyse further public, private and non-profit neighbourhood investment.³



1



2

1. Multiple Towers Under a Single Owner

2. Multiple Towers Under a Single Owner, 905 East

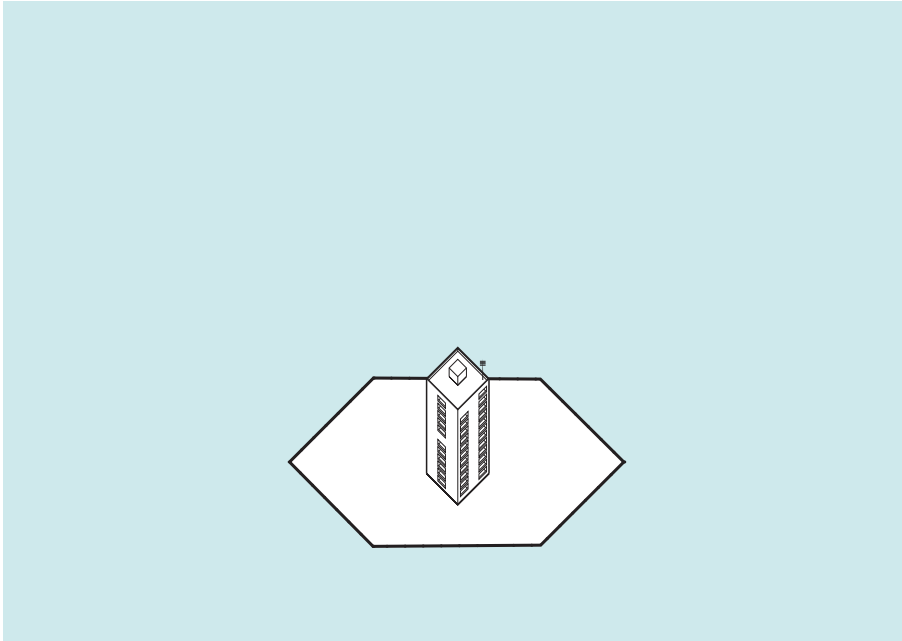
Fragmented Sites:

As a result of planning strategies in the post-war construction period, tower sites tend to be clustered together in groups of five or more. Across the Greater Golden Horseshoe, 63% of tower sites are found in clusters of five or more, and of these, 50% contain contiguous open space with one or more other sites.² However, since their original construction, many of these tower clusters have been fragmented into parcels, controlled by diverse and often competing owners. Of the 286 partner sites studied, 59% of those located within clusters existed in a fragmented condition. This fragmentation can pose a significant challenge to neighbourhood-scale renewal strategies. Property aggregation provides a good opportunity for the creation of large development parcels: when adjacent properties are reconnected on the ground plane, opportunities for new connectivity, joint programming, and neighbourhood-scale services are created. However, sites with fragmented

ownership will require innovative policy and legal frameworks to create models for joint ownership, or to structure complementary renewal programs.

² Ibid.

³ A future research brief will discuss Tower Renewal development models in further detail.



1



2

1. There are no adjacent towers
2. There are no adjacent towers, 205 West

Isolated sites:

A small percentage of the regional stock is located outside of tower neighbourhoods, often surrounded by low-rise residential properties. These towers are often also located on smaller plots of land. This geographic condition can severely limit the capacity for extensive renewal strategies on these sites. Throughout the sample set, 25% of the towers were physically constrained (through isolation or lot size), precluding Renewal strategies which depend on the addition of mixed-use infill. In these cases, strategies to achieve social and energy retrofits will not have the benefit of development capital.

Infrastructure and Growth Policy

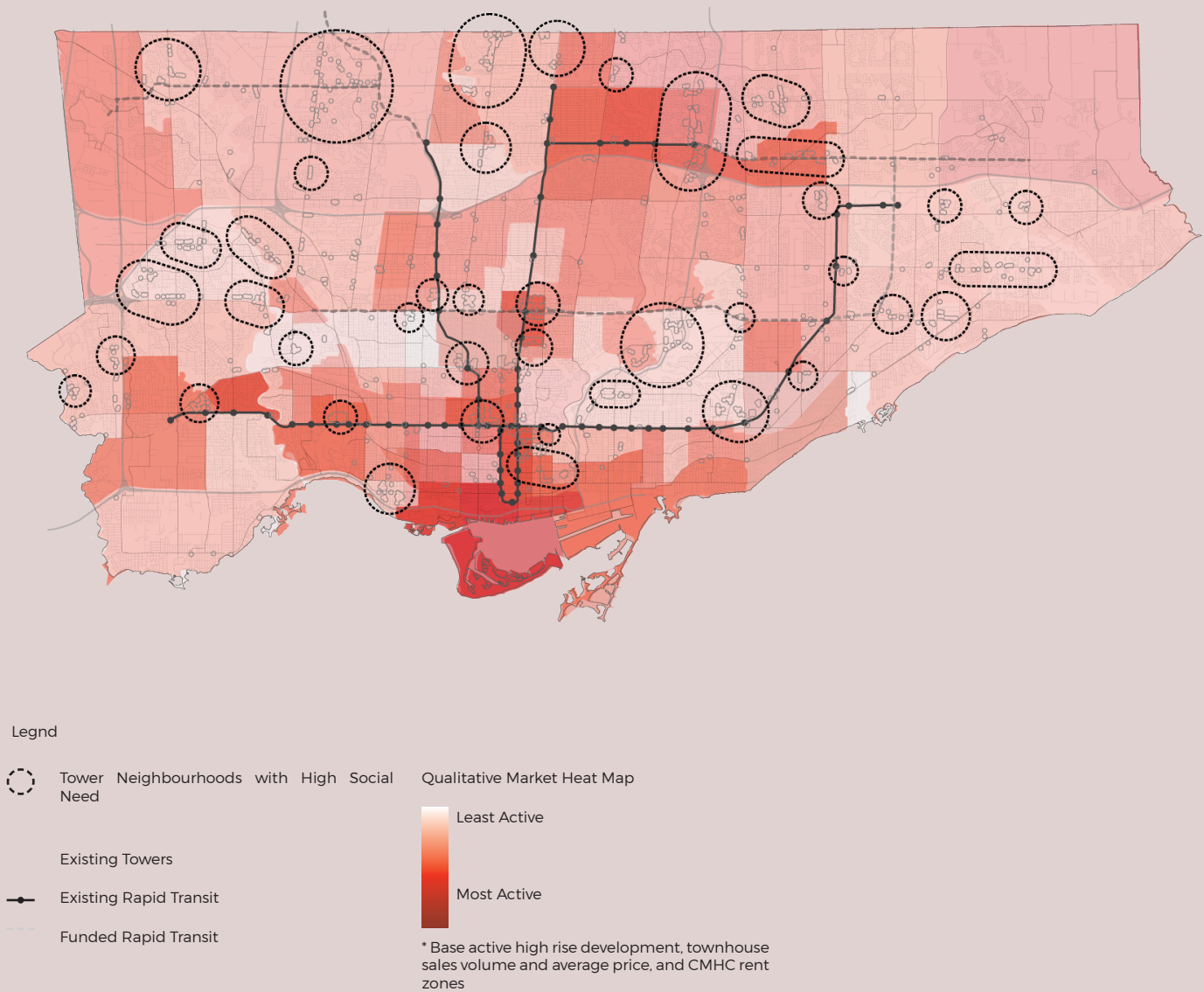
Growth management within the City of Toronto and other municipalities within the Greater Golden Horseshoe is largely aligned with the Green Belt Act (2005) and the Growth Plan Act (2006). The Green Belt Act identifies vast areas of the region where growth is limited and the Growth Plan Act outlines specific intensification targets for municipalities and geographical locations for intense growth, known as Growth Centres. Additionally, the 'Big Move' Regional Transportation Plan outlines transit planning priorities in the GGH through to 2031, including a series of 'Mobility Hub' growth areas where minimum growth targets are mandated within planned rapid transportation station areas.

For the most part, these provincial documents place the focus of intensification in Urban Growth Centres. Areas outside of these centres are largely considered to be 'stable neighbourhoods' with limited growth anticipated. Additional layers of growth planning have been added in some cities, such as Toronto's Avenues strategy.

Using existing and planned rapid transit lines alongside the City of Toronto's designated Growth Centres and Avenues, a preliminary infrastructure and policy map was created to evaluate the relationship of tower sites to planned growth areas. This map makes visible which tower neighbourhoods are currently best positioned to accommodate growth, and which are already supported by municipal infrastructure and mixed use areas. From this overlay, it is possible to visualize that:

- 1.** Municipal growth planning and infrastructure is already supporting some tower neighbourhoods, setting the conditions toward mixed-use growth which could support Renewal;
- 2.** Other tower neighbourhoods exist outside of planned growth areas and will require more diffuse strategies, such as social infrastructure supports and more modest direct site interventions, designed to improve access to services and strengthen communities.
- 3.** Lastly, within the City of Toronto, a new zoning policy, known as the Residential Apartment Commercial (RAC) Zone, widely liberalizes land-use around selected tower sites, allowing for a broad range of commercial and community uses to support local initiatives — building more complete communities both within and outside of planned growth zones.

Figure 5: Apartment Towers + Market Zone Map of the City of Toronto



Market Zones

A key factor impacting Renewal strategies for tower sites throughout the region is local market activity. While Toronto is undergoing a massive investment boom in real estate, these investments are largely taking place within the limited geography of the central core and in nodal locations along key infrastructures. Using data provided by NBLC and CMHC, a preliminary market zone map was compiled for the City of Toronto, upon which the location of tower sites was overlaid. This map compiles 2015 housing starts and price points data for both highrise and townhome condominiums, as well as CMHC rental rates, creating an aggregate map of a range of market zones within the city. These market conditions are informed by the site geography and growth policy conditions explored above.

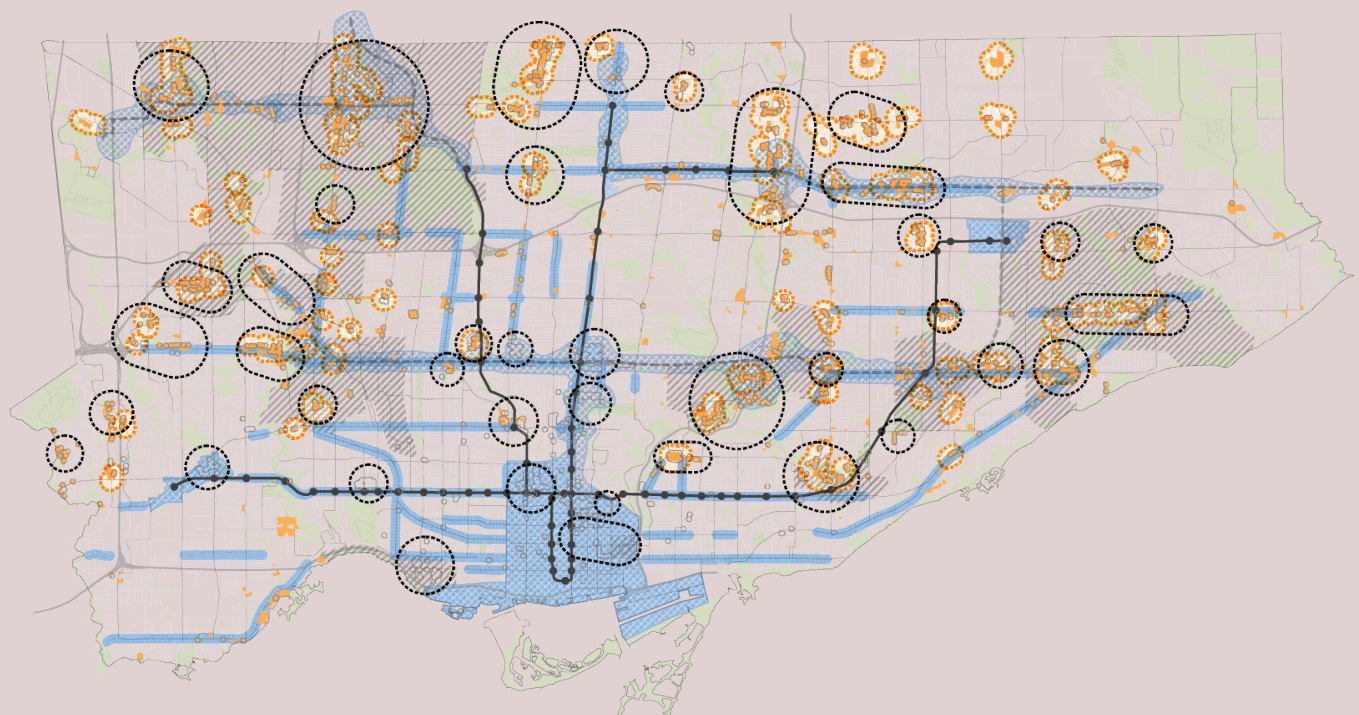
The market zone map indicates that areas in the city core and along key rapid transit corridors exhibit a high level of market activity and higher rental rates, while areas away from the core and rapid transit exhibit low levels of new construction and lower rents. This map may be viewed as both illustrating relative affordability, as well as areas in the city in which market-based development is both attractive and viable.⁴

Overlaying the market zone map with tower sites indicates that the vast majority of Toronto's tower areas are located outside of areas of high market activity. From this, we can conclude:

- 1.** Tower sites in which market-based infill is a viable strategy is currently limited to sites located in the core and along rapid transit lines. The degree to which such development can directly support Tower Renewal activity is affected by local market conditions and the specific development model applied; and
- 2.** The majority of tower sites are located in areas where market-based development is currently suppressed. Here, strategies of market-based infill as a tool for site renewal are less likely, and alternative strategies which support renewal are required.

⁴ This map is preliminary and will continue to be refined over time with evolving and expanded data sets.

Figure 4: Apartment Towers + Infrastructure & Growth Policy Map of the City of Toronto



Legend

- | | |
|--|---|
|  Tower Neighbourhoods with High Social Need |  Existing Towers |
|  Future Transit Corridor Development |  RA Zoning |
|  Downtown, Central Waterfront and Centres |  RAC Zones |
|  Avenues |  Existing Rapid Transit |
| |  Funded Rapid Transit |
| |  Neighbourhood Improvement Areas |

Even on large sites with development potential, however, the cost of deep retrofit to support Tower Renewal goals may require capital investment beyond the revenue generated on the site through development. This deficit, even in favourable market conditions, signals the need for a financing stream to address market gaps in support of Renewal. Federal loan programs targeted at encouraging deep energy retrofits in the private market have proven extremely effective in countries such as Germany, and these models will be explored in further detail in upcoming research briefs.

This current market zone map represents a snapshot in time and will evolve as market factors shift, such as when new investments in rapid transit come online. However, this snapshot provides a framework through which to assess how the housing market impacts potential strategies for Tower Renewal. From observed macro trends, areas for further study toward potential policy responses have become evident:

HOW TO LEVERAGE TOWER RENEWAL OPPORTUNITIES IN THE CONTEXT OF HIGH-GROWTH AREAS EXPERIENCING DEVELOPMENT PRESSURE;

HOW TO SUPPORT TOWER RENEWAL ACTIVITIES IN LOW-GROWTH AREAS OF THE CITY, WHERE DEVELOPMENT PRESSURE IS ABSENT.

1. The context low-growth areas experiencing development pressure is absent.
2. The context high-growth areas experiencing development pressure.



1



2

CONCLUSION

Despite the superficial homogeneity of the apartment tower stock, post-war towers and their neighbourhoods are in fact differentiated by a range of site-specific factors. A range of factors, including site geography and ownership, relationships to growth areas and infrastructure, and market zone, have substantial impacts on the readiness of a site for comprehensive Tower Renewal. Tower Renewal can build more complete, healthy communities which are well connected to their cities, but it will require a host of universal and site-specific tools to achieve these goals. Broadly, these strategies may include:

Understanding the range of conditions which can affect Renewal strategies on tower sites, it is possible to conclude that two sets of tools are required:

A RANGE OF TOOLS TAILORED TO VARYING SITE GEOGRAPHIES, MARKET CONDITIONS AND LOCAL POLICY CONTEXTS,

such as site development models, specialized land-use and growth policies, transit investments strategies, consolidated service delivery models, with particular emphasis on structures to support local economies, service-provision and community-led initiatives.⁵

A RANGE OF TOOLS THAT CUT ACROSS THE DIVERSITY OF THE TOWER STOCK,

providing broad support for Renewal that does not exclude sites based on geographical location or local market conditions. This might include financial tools to allow owners to meet improved housing performance standards, and policies that support site investment while maintaining affordability, with particular emphasis on providing access to financing deep retrofits of the tower stock to improve housing quality, tenant comfort, and energy performance.⁶

5, 6 Subsequent research briefs will explore these tools and the conditions required for their implementation.

