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The Challenges of Implementing Tower Neighbourhood Renewal in the Greater Golden Horseshoe

Taking advantage of the opportunities of Tower Neighbourhood Renewal will require a coordinated and integrated approach. The following section outlines areas where further investigation may be required in developing a comprehensive Tower Neighbourhood Renewal strategy in the Greater Golden Horseshoe (GGH).

6.1 Financing Renewal

Overview

Recent local and international studies have placed the cost of green refurbishment of Apartment Towers in the range of \$25,000 - \$45,000 per unit.* These figures reflect a wide range of refurbishment strategies, from only energy measures in the low end, to comprehensive refurbishment, including a degree of unit and common space modernization at the high end.

Additional costs would be associated with site renewal and community development, as well as the introduction of green infrastructure, such as district heating/cooling, distributed energy systems, or alternative forms of waste management.

As a result, building and site refurbishment are capital heavy projects.

Renewal Financing Precedents

The European Union (EU) case studies explored earlier in this report offer some potential precedents for financing Tower Neighbourhood Renewal.

In the Schulze-Boysen-Straße low energy tower in Berlin (see section 4.3), financing was arranged by the housing company HOGOWE through partnership with the City of Berlin, and low interest loans from the German National Economic, Social and Ecological Development Bank known as KfW.

Also in Germany, project financing has been achieved through private lenders, as in the case of Berlin's Markisches Viertel, owned by the Public Housing company GESOBAU. GESOBAU secured private loans through rent increases that provided a guaranteed revenue stream. Rent increases were then offset by energy savings, resulting in a net zero or marginal rent increase for tenants, with significant improvements to housing quality through suite modernization and site upgrade along with green refurbishments. The Markisches Viertel neighbourhood contains a wide range of income groups, and the economically vulnerable were protected through rent subsidy.

In the United Kingdom (UK), the Homes and Communities Agency (HCA), the Government's National Housing and Regeneration Agency, is a finance partner in housing and regeneration projects throughout the UK. With an annual budget of £5 billion, the HCA provides gap financing in the form of low interest loans, generally in the range of 20 per cent of the cost of a renewal scheme, to augment private financing. The HCA will work with project stakeholders to establish a development agreement that ensures best practice in the social, environmental and ecological spheres. The HCA has been an active partner in the majority of UK Tower Renewal projects discussed elsewhere in this report, such as the Crossway, Swiss Cottage, and Tower Hamlets Community Housing.

Throughout the EU, though particularly in the UK, the development of surplus land has been used to create revenue streams for renewal. In these cases, lands within Apartment Tower Neighbourhoods, generally run by not-for profit housing associations, are developed as market housing. The revenue from the new development helps to finance renewal of the existing Apartment Towers, as well as the development of community amenities that benefit both existing and new residents. In most cases, a portion of the new housing is also dedicated to social housing, and often another portion to intermediate housing – a form of affordable home ownership. In these schemes, the location and general site planning of the new projects is negotiated with the housing association as well as tenant groups, such as the location of new paths, public spaces, and amenities, with the goal of creating a refurbished and better organized district.

Cost of Renewal

*The Tower Renewal Guidelines (John H. Daniels Faculty of Architecture, Landscape and Design, University of Toronto, CMHC, 2009) place the most comprehensive renewal option at \$32,250 per unit. The City of Toronto's Tower Renewal Community Energy Plans (Arup, 2010) place comprehensive renewal, with related measures, at \$27,300 per unit. The UK study, Roadmap to 60%, Eco-Refurbishment of 1960's Flats (2008), places higher level refurbishment measures at £17,900 (\$27,500) per unit. Berlin's Schulze-Boysen-Straße low energy tower, the most comprehensive of these examples including a degree of suite modernization and site renewal, places costs at €32 600, (\$43, 700) per unit. These are approximate figures and relate to a limited number of studies. Of these, the only built example is the Schulze-Boysen-Straße low energy tower. A pilot project may be required to better understand the costs of refurbishment in the local context. Green refurbishment paired with full unit refit would increase per unit costs.

PACE Bonds (United States)

**Property Assessment Clean Energy (PACE) Bonds, where the proceeds are lent to property owners for the purpose of financing environmental refurbishment and are repaid over a fixed period, for example twenty years, through an annual assessment on their property tax bill. PACE bonds are increasingly common in the US where they are issued by municipalities.

Some financing schemes involve a change in tenure of existing buildings. Policy in the UK promotes the building of purpose-built housing for families living in tower blocks. An example is the Crossways in East London, an estate consisting of three large towers that were refurbished. Here, new terrace housing was built at the base of the existing Apartment Towers, and families living in the towers were given the option to relocate into the new housing. The remaining tenants within the three towers were consolidated into two towers, with the third tower converted to higher end housing for sale. The revenue from the units within the third tower, as well as additional terrace housing at-grade, financed the refurbishment of the existing buildings as well as the upgrade of community facilities and general site renewal.

Local Context

The Ontario context provides specific opportunities and challenges for financing compared to the European precedents discussed above. In Ontario, the most striking difference from Western Europe is that the majority of Apartment Towers are in private ownership. Specific statistics on public versus private ownership of GGH Apartment Towers were not available for this study; however, in Toronto, approximately 85 per cent of Apartment Towers are in private ownership.

Furthermore, ownership in the GGH is highly diversified among a wide range of owner groups of varying size and sophistication, which results in great variation in the ability to leverage financing.

As an additional complication, individual buildings within Apartment Tower clusters are often under different ownership. As a result, renewal of these sites would require the cooperation and coordination of multiple building owners, each with specific abilities and levels of interest.

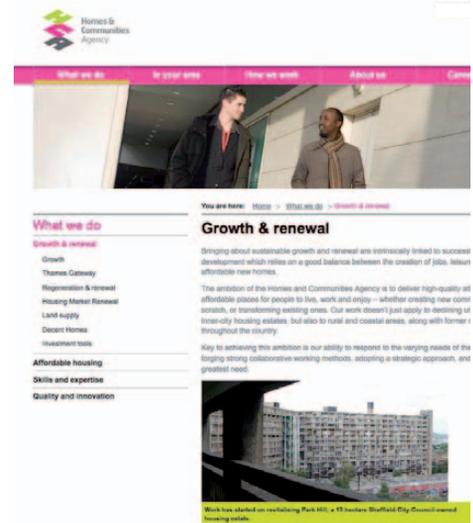
An additional local variation is the cost of energy. The low cost of energy in Ontario, specifically natural gas, changes the pay-back profile of retrofit compared to European counterparts, as does the lack of a carbon tax. A further complication is access to upfront capital for financing renewal projects. Currently, private lenders are unlikely to finance renewal projects in isolation, and government programs have yet to aggressively target the Apartment Tower stock.

It is apparent that the financing of renewal projects in Ontario will require a variety of approaches. As in the international cases, successful financing might require the coordination of public and private funders and multiple stakeholder cooperations. The establishment of finance options will require further investigation into the pro-forma of achieving Tower Neighbourhood Renewal objectives in the Ontario context. Specifically, further study is required to determine the following:

- role of private lenders, utilities, pension funds and other investment funds in financing Tower Neighbourhood Renewal;
 - role of governments at all levels in guaranteeing long term loans of private lenders;
 - potential for intensification to generate revenue streams for building and site refurbishment;
 - role of governments at all levels in providing gap financing to augment private lenders;
 - role of bonds such as Property Assessment Clean Energy Bonds** in financing individual projects;
 - circumstances under which governments could act as sole provider of low-interest loans for renewal;
 - the potential for funding through a Greenhouse Gas Reduction special purpose account related to the Province’s Cap and Trade system - currently under development;
 - role of public housing in initiating and financing renewal.
- Currently, the rehabilitation of public housing is a priority for all levels of govern-



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- 01) Housing Design Standards, UK
- 02) Website for Homes and Communities Agency, a Government Agency that provides Gap Financing and Partnerships for the Implementation of Renewal Projects, UK
- 03) Website for KfW Bank, the German National Economic, Social and Ecological Development Bank

ment, and is being implemented through programs such as Infrastructure Ontario's Affordable Housing Loan Program among others. There is an opportunity to focus this funding on projects that meet the objectives of Tower Neighbourhood Renewal, such as green refurbishment and social investment. There is also an opportunity to determine the conditions in which these existing funds or new financing tools could begin to provide private affordable housing with refurbishment capital. The City of Toronto's Tower Renewal Financing Corporation, currently under development, is one potential step.

With nearly 2,000 Apartment Towers in the GGH, the economic, social and environmental impact of Tower Neighbourhood Renewal can be significant. Investigations into sustainable methods of financing is a key next step.

6.2 Land Use Planning Policy Framework for Tower Neighbourhood Renewal

Research related to successful renewal in the EU indicates that optimum results were achieved where clusters of buildings were involved, and renewal was coordinated at the neighbourhood level to create vibrant, sustainable and connected neighbourhoods. The most successful examples brought together:

- comprehensive neighbourhood planning;
- coordinated public and private investments; and
- long term management strategies.

In the GGH, 63 per cent of identified towers are in clusters of five or more, providing significant opportunity for such coordination. It is in these clusters of towers, home to thousands, where gains can be made in achieving complete, connected and low-carbon communities; and where district energy systems, open space networks, and thoughtful infill housing can be introduced. However, there are challenges in the Ontario context.

Currently, policies are unclear in regard to the coordinated renewal of Apartment Tower Neighbourhoods. For example, the single-use zoning that exists on the majority of Apartment Tower sites is an obstacle to many of the community and economic objectives of Tower Neighbourhood Renewal, such as introducing small-scale commercial activity, community services, or additional site development.

Another challenge is fragmented ownership. Often buildings within Apartment Tower clusters are owned by a range of private rental companies and, to a lesser extent, public housing and not-for-profits. This situation has tended to occur over time, with developments generally built by one owner, and eventually fragmenting through sale of individual buildings. Fragmentation of ownership is often paralleled with physical fragmentation. Tower clusters that were originally conceived of as a single neighbourhood unit have become divided and separated over time with fencing and other barriers. What is missing in Ontario is a policy framework to encourage coordinated renewal involving multiple owners. As an initial step, further research is required to determine the ownership breakdown of the Apartment Tower stock in the GGH, in order to begin to develop a framework for collaborative reinvestment.

Apartment Tower Neighbourhoods contain significant open space and, as noted in Section 3.4, 57 per cent of towers are directly adjacent to another Apartment Tower property, creating significantly large land areas for reinvestment and reconsideration. What is currently lacking is a means of evaluating this land resource,



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- 01-02) Fragmented Tower Properties and Blocked Access, Toronto
03) Infill Family Housing at Base of Tower Block, Camden, London, UK
04) Open Air Market in Tower Neighbourhood, East London, UK

to determine which areas of land should be maintained as open space, natural areas, pathways to transit, connections to adjacent properties, and so on, and which areas of land are appropriate for new mixed-use development.

Enabling Appropriate Mixed-Use Development

Building on the research in this report, a key next step may be an in-depth study of land use capacity within Apartment Tower clusters, which would include establishing a typological breakdown of clusters related to physical and demographic characteristics as well as location within the region, in order to better understand effective strategies for renewal.

Further study is also required to determine the appropriate land use planning policy framework for the implementation of Tower Neighbourhood Renewal that would address:

- coordination of planning across multiple Apartment Tower properties and multiple stakeholders to engage in the full scope of Tower Neighbourhood Renewal;
- mechanisms to ensure views and aspirations of residents of Apartment Tower Neighbourhoods steer the development of renewal strategies;
- the means of assessing appropriate levels of mixed-use intensification;
- appropriate design guidelines for infill development and Tower refurbishment;
- green standards for new construction within Tower Neighbourhood Renewal sites;
- infrastructure needs and capacities;
- ensuring social and community development objectives of renewal are met; and
- long term management strategies for Apartment Tower sites following Tower Neighbourhood Renewal.

Supporting Social and Economic Development

Another key aspect of Tower Neighbourhood Renewal that has implications for land use planning policy is encouraging local economic and community development and access to services through the introduction of new uses in Apartment Tower Neighbourhoods. In addition to current zoning restrictions, related challenges include attracting needed services into Apartment Tower Neighbourhoods, such as community health centres, as well as how to provide residents with the tools to participate and prosper in an entrepreneurial, community development and social enterprising endeavour.

In this regard, further study is required to determine:

- how to provide micro financing for small business development within Apartment Tower Neighbourhoods;
- approaches to overcoming barriers to land-use diversification within Apartment Tower Neighbourhoods, such as the conversion of the ground floors of towers for use by small scale commercial enterprises and not-for-profits, as well as the introduction of kiosk retail, seasonal markets, and varying degrees of mixed-use infill developments within apartment properties;
- the means of ensuring access to community and health services within Apartment Tower Neighbourhoods through municipal programs and partnerships;
- the role of non-profit agencies in delivering community development programs, training, and access to knowledge to residents for starting an enterprise; and
- the role of community development corporations in facilitating community renewal and establishing space for community service delivery, businesses and organizations.



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Further Macro Economic Studies of Impacts of Comprehensive Tower Neighbourhood Renewal

Further analysis should be conducted related to the economic development potential of refurbishment and mixed-use growth within Apartment Neighbourhoods, including construction, both new built and retrofit, demand for green products, and new commercial activity, particularly around transit stations. Analysis should also be conducted to determine the impacts of reduced energy, water and waste costs on local spending power, and potential reductions to the long term costs of health and social services due to improved social and environmental conditions within these currently marginalized areas.

6.3 Maintaining Housing Affordability While Expanding Housing Choice

A key aspect of Tower Neighbourhood Renewal’s success internationally has been the improvement of the quality of housing within existing Apartment Towers, as well as the introduction of new housing and amenities within tower neighbourhoods. This raises a challenge with respect to maintaining housing equity and affordability in the face of Tower Neighbourhood Renewal. Specifically, how to ensure that economic evictions do not occur as a result of Tower Neighbourhood Renewal and that Tower Neighbourhood Renewal expands housing choice for existing Apartment Tower residents. To address these challenges, further study is required to determine:

- methods for ensuring affordability post-renewal;
- methods for minimizing tenant discomfort during the renewal process; and
- methods for ensuring that displacement does not occur as a result of renewal.

In regards to expanding housing options within Apartment Tower Neighbourhoods, further study is required to determine:

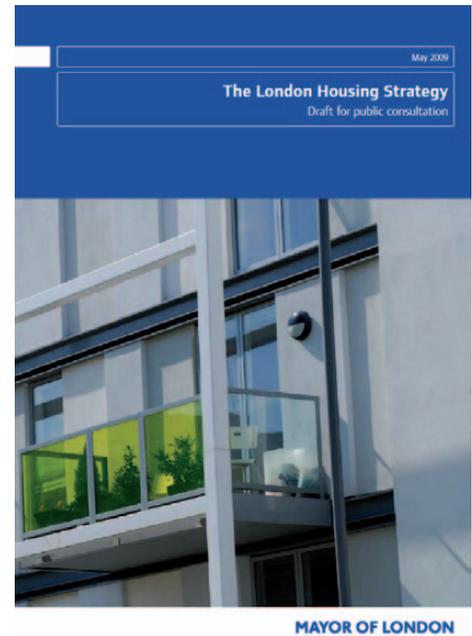
- methods for expanding housing tenure options and home ownership to residents within Apartment Towers while ensuring housing equity and affordability;*
- the potential for municipalities to be empowered under the Planning Act to use inclusionary zoning in new infill developments to provide affordable housing as a component of market development; and
- the applicability of programs such as the UK’s ‘Intermediate Housing’ and ‘First Time Buyers’ Program’ in the Ontario context.**

There is an opportunity for Ontario’s Long Term Affordable Housing Strategy, currently under development, to begin to address these issues.

6.4 Sub-Metering

The introduction of sub-metering, wherein each household unit pays for their actual energy usage rather than a portion of the average usage of the entire building, is a key strategy for lowering energy use in Apartment Towers. It provides each household with the ability to monitor their personal energy use, and it creates an economic incentive for each household to conserve. There is a concern, however, with installing sub-metering prior to building refurbishment. Sub-metering prior to refurbishment potentially removes the incentive for the building owner to invest in green upgrades, because energy costs, and potential energy savings, are transferred to tenants.

Furthermore, the existing conditions of Apartment Towers, including poorly performing envelopes, limits the ability of residents to make individual changes related to space heating that have a significant impact on their energy use without sacrificing comfort.



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Mixing Tenures

*Of the many opportunities for mixing tenures within Apartment Neighbourhoods, one option includes providing a mix within individual buildings for meeting affordable housing needs. Traditionally, tenure mix has been among buildings, with condominium towers located next to affordable private rental or not-for-profit towers. Alternatively, various forms of stratified ownership could be instituted to mix tenure within buildings as part of renewal schemes. A not-for-profit housing provider could acquire ownership of certain units within a privately owned for-profit rental or condominium building and then manage the units as affordable rental housing.

Intermediate Housing (UK)

**In the UK, the intermediate housing program aims to provide an option for affordable home ownership. Intermediate housing is a housing tenure, often aimed at first time buyers, where the unit is co-owned by the buyer and the owner of the building, often a Housing Association, reducing the cost of entry into the housing market. Participants in the program must initially purchase a minimum 50 per cent of the unit, paying rent on the balance, with the sum of 50 per cent mortgage and rent being less than 100 per cent ownership. Owners are then given the ability to purchase the full 100 per cent over a future timeline. Part ownership can also be sold in the housing market. Participants in the program must meet certain criteria, such as having a family income at or below £60,000. New housing projects generally contain a requirement to include a percentage of Intermediate Housing units. The Intermediate Housing, and First Time Buyers’ Program is administered through the Homes and Communities Agency.

Installing sub-metering post-refurbishment can ensure optimum performance, and provide the knowledge and incentives for tenants to control energy use within a modernized, thermally efficient and comfortable apartment.

6.5 Private Ownership and High Social Need

Apartment Towers currently play a vital role of providing several hundred thousand units of private, affordable rental housing throughout the region, often housing those in great need. However, affordability in market housing is generally related to the desirability of the housing on offer. In the case of Apartment Towers, lower rental costs are often a function of an isolated location, a lack of conveniences and services, or in certain cases, deteriorating housing quality.

Primarily developed and marketed to middle income tenants in the 1960s and 1970s, much of this housing stock was not designed to address the needs of current tenant groups.

As a result, a considerable challenge in the Ontario context is the high degree of social need associated with the housing stock, paired with private ownership. The needs of at risk residents are often not met, because programs related to newcomers, youth, families, education, training, and access to daily conveniences, and health services are beyond the scope of private owners. Mechanisms for providing needed social infrastructure within these communities requires further consideration.

In addition, the difficulty in securing financing needed for renewal without relying on rent increases is a challenge. The current situation presents a stalemate preventing investment. Financing alternatives require consideration.

As these buildings continue to age, they will require investment to remain viable housing. Furthermore, this finite resource is becoming a smaller percentage of the overall housing stock. This calls into question the means of providing more affordable housing, from the private, public and not-for-profit sectors, as the region grows. It further highlights the need for a coordinated strategy for reinvesting in this important housing resource and the neighbourhoods in which they lie, as a key aspect of achieving equitable and complete communities throughout the region.



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- 01) Cover of London Housing Strategy, UK
- 02) Current state of Apartment Site, Mississauga

