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Building Community: A Critical Appraisal Of Toronto's Tower Renewal Program

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BUILDING COMMUNITY: A CRITICAL APPRAISAL OF TORONTO'S TOWER RENEWAL PROGRAM

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ABSTRACT

BUILDING COMMUNITY: A CRITICAL APPRAISAL OF TORONTO'S TOWER RENEWAL PROGRAM

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High-rise housing is a global phenomenon. In Toronto, the sheer number of tower blocks and declining conditions within them has pointed to the importance of redeveloping high-rises in order to improve their current performative capacity and secure their use for future generations. In addition, improving the public realm and social infrastructure in these communities has emerged as an important component of the redevelopment approach. Looking at the City of Toronto's Tower Renewal program, the paper critically evaluates its environmental, economic and social/cultural objectives using Tower Renewal documents, local case studies and relevant literature. Analysis of program specifics leads to a greater understanding of the potential and prospects, as well as areas for improvement in tower redevelopment programs, the roles and collaborative relationships between participating parties, and how placemaking processes are and can be pursued and accommodated in redevelopment programs.

Keywords: Tower Renewal, high-rise, retrofit, inner suburbs, community building, placemaking

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INTRODUCTION

One of Toronto's defining architectural features is the multitude of multi-residential high-rises (buildings having twelve or more stories; hereby referred to as towers) dotting its landscape from its downtown core and, more commonly, its inner suburbs. Toronto has been called a city of towers, containing upwards of 2,000 high-rises, second only to New York City in North America. Of these 2,000 buildings, approximately 1,200 of them are the towers targeted by the Tower Renewal initiative, the concrete slab buildings built in the post-war period found scattered across the city (TR Guidelines). These buildings, former modernist marvels, have been increasingly falling into disrepair and are burdened by their energy inefficiency and, particularly in the case of inner suburban towers, their infrastructural and social disconnect from other Toronto communities. The emergence and perpetuation of these problems has precipitated the need for concerted efforts to bring about solutions and feasible and enforceable strategies for tower renewal.

Toronto's towers are significant producers of greenhouse gases and thus have an increasingly negative impact on the environment. Furthermore, in their current state, they represent an obstacle to Toronto's green-friendly initiative to drastically reduce its carbon output. For example, the average residential tower produces upwards of 1, 200 tonnes of CO_2 per year compared to the 5.6 tonnes released by the average bungalow (City of Toronto, 2008). Modernizing building envelopes and introducing green technologies in these buildings would work to improve the performance capacity of towers, reduce operating costs associated with energy wastefulness and work towards the long-term sustainability of these dwellings. Renewal of post-war towers is also necessary to prolong the lifespan of such buildings and thus secure their future use.

However, in addition to extending the lifespan of buildings, there exists the need to breathe new life into these communities, to reenergize them, so to speak. Tower blocks have long been criticized for their monofunctionalism and relative inability to support diverse opportunities and spaces for social life and dynamic use. By virtue of their design, geographic location and often disharmonious relationship to the surrounding environment, many towers blocks are disconnected from other neighbourhoods and necessary amenities and resources. Thus, many tower block residents, particularly those in peripheral areas, have become disadvantaged by the inability to equally access the same opportunities extended to others by virtue of their proximity to the city's existing infrastructural and social networks. Disinvestment in these areas has further complicated this issue.

Public space in tower blocks is often poorly maintained and unsupportive of dynamic use by a diversity of groups. Its often unkempt green spaces and swaths of grey surface parking point to an unimaginative use of space which fails to adequately provide social and recreational opportunities for residents. The deterioration of buildings and tower properties in general has led to living environments that seem to communicate poverty, resulting in the stigmatization of tower dwelling. Towers have also come to be associated with social problems, crime and gang activity, and in a city like Toronto, inner suburban tower communities have become the contemporary manifestation of the "inner city", the previous signifier of urban unrest (Dippo and James, 2011). Improving the overall tower living experience can go a long way in bettering the lives of residents. Thus, improving the spaces within, between and adjacent to towers is necessary to address problems associated with living in these types of communities.

Goal of the Paper

City of Toronto's Tower Renewal (hereby referred to as just Tower Renewal) works on two fronts: 1) to improve and modernize the built environment and physical infrastructure of the city's tower communities; and 2) to, by virtue of the former objective, bring about a more inclusive, dynamic and place-sensitive social realm in these communities. The paper will critically examine these twin objectives by reviewing Tower Renewal on the basis of literature, best practice and application case studies. The social agenda, both implicit and explicit of Tower Renewal is the major focus of this paper. Through close analysis of program design and its policy objectives, the paper will assess the capacity of Tower Renewal for bringing about change in tower communities.

Particular attention will be afforded to Tower Renewal's placemaking objectives and the paper will evaluate the importance of these strategies within the overall Tower Renewal framework. Furthermore it will explore how ideas of place, community and local distinctiveness are integrated within the program and how their inclusion in the overall strategy is expected to change tower block living. The causal relationship between the process of physical rehabilitation of towers and reinvestment and community building will also be analyzed.

BACKGROUND

High-rises are found in many countries across the globe. In North America, the New York, Toronto and Chicago metropolises have the greatest number of high-rise buildings, followed by Vancouver, Miami, Los Angeles, Montreal and San Francisco (City of Toronto, 2008). However, the difference in actual numbers is striking with Toronto having approximately twice as many high-rises as Chicago, speaking to the prevalence of this building typology within Canada's largest metropolis. They are also found in great numbers in the greater region, with the Quebec City-Windsor Corridor containing roughly 100,000 high-rises.

While they may share similar histories and physical characteristics, not all high-rises and tower communities have followed the same developmental trajectories or experienced similar patterns of decline. In order to avoid generalizations, it is always important to keep in mind the influence of local contexts and place-based specificities. Geography, people, socioeconomic and political forces have a greater influence on a community than the built form of dwellings inhabited by residents. For example, some tower neighbourhoods have remained upper-middle class and thus have not experienced the concentration of poverty that may have occurred in other neighbourhoods. Some towers are located in more amenity and resource-abundant neighbourhoods and thus are better serviced than neighbourhoods lacking this infrastructure.

In other words, the experiences of tower dwellers across the country and the world may be different and there is no room for a reductionist pathology of high-rise living in this type of discussion. However, this is not to say that the there may not be great similarities from place to place – similarities which can inform a more general response to tower block issues and problems.

The structural inefficiencies of post-war towers are one of the characteristics shared from place to place. Furthermore, associated problems due to land use segregation and monofunctional zoning principles that defined tower developments and how these factors have limited residents' use of space and the development of a dynamic public realm in these communities are other common points. Socio-demographic decline due to disinvestment and increasing poverty concentration in tower neighbourhoods is another trend experienced in many such communities across the map. Due to these common issues, the development of an effective response is also of mutual interest. While this paper focuses on Toronto's high rises and the Tower Renewal high-rise rehabilitation strategy in particular, its

ideas have significant implications for communities outside of the city, outside of the province and outside of Canada.

This section will be structure under three headings to present the narrative of the tower phenomena and the reasons for and implications of high-rise neighbourhood decline. It will be broken down as follows:

1) Precedents, goals, philosophies and the history of the process of tower development internationally and in Toronto
2) Physical decline of towers and socio-demographic decline and marginalization of tower communities internationally and in Toronto
3) Introduction to the development and goals of Tower Renewal

1. *Tower Development*

a) International

The proliferation of concrete towers or high-rises came about in the period following World War II. The construction of high-rises for the purposes of housing a booming population was informed by the planning principles of modernism, the overarching philosophy of governance and planning that took hold in the post-war period. The widespread adoption of this housing typology was contemporaneous with other key developments such as freeway expansion, suburban growth, the proliferation of automobiles and the rise of the consumerist society – these interrelated developments brought about large-scale shifts in the urban landscape and shaped new patterns and routines of living, work and travel. In terms of planning, city building was predicated on extensive and transformative centrally-coordinated projects, efficiency of design, mass-production techniques, mobility and progress, scientific precision and rationalism (Beauregard, 1991).

Tower blocks themselves were part of " municipal prestige- [driven by the] the desire to make a mark on the landscape to display technical proficiency and to announce the arrival of a new age' (Nuttgens, as cited in Jacobs and Manzi, 1998, pg. 160). In other words, their development, in a sense, symbolized post-war recovery and the establishment of a new (sub)urban future unburdened by the past. Towers

were predicated on cost-efficient uniform design and geometrically ordered spatial arrangements. Land use segregation and the separation of vehicular and pedestrian traffic informed the design of these properties. This general planning approach was clinical and linear – housing authorities and government-supported private developers developed tower blocks based on a birds-eye-view concept of spatial ordering. In other words, developments were arranged in geometrical patterns that may make sense when looking from above but perhaps did not make sense for people on the ground. This is the source of one of the chief criticisms of tower blocks – their insensitivity to human scale.

Furthermore, tower blocks could easily be built and replicated from neighbourhood to neighbourhood, city to city due to then-contemporary advents in building technology. The "flying-form" concrete construction technique invented in Toronto allowed for concrete frameworks to be built and raised floor-by-floor. This technological innovation allowed for towers to be built quickly and affordably (Kesik, 2008). Building dimensions were also informed by this technique, resulting in the standardized construction of towers that were very similar from building to building. Uniformity of design and the developmental philosophy of tower blocks took precedence over local contexts or geographic specificities, resulting in the widespread application of one-size-fits-all planning approaches. In the case of former greenfields in which towers were pioneering housing typologies, the land use planning and design strategies of high-rise development shaped how these areas were to be used and experienced by their populations and, also, informed the pattern for future growth.

Tower design was informed by the philosophies of several renowned architects that came to prominence in the early 20th century. These influential figures offered utopian visions and grandiose plans for the cities of the future and pushed forward the idea of how society could be saved through the transformative and redemptive powers of architecture. The most famous of these figures was Le Corbusier who introduced the idea of the "tower in a park". Le Corbusier's 1922 work *Ville Contemporaine* and 1925 *Plan Voisin* shaped the template for future tower development. Advocating the importance of natural light, air, nature and space to human habitation and experience and the superiority of materials such as steel and concrete, Le Corbusier proposed a new urban pattern predicated on free-standing office and residential high-rises built on parks and set at significant distance from one another and the strict separation of land uses (Mumford, 1995). Le Corbusier's plans were in direct opposition to the prevailing urban form of his adopted France which he interpreted as bringing about squalor, congestion and chaos (Mumford, 1995).

Le Corbusier's "tower in a park" model was first adopted in North America in New York City. The context was present in New York's particular tradition of elevator apartments and multi-unit residential buildings and the objectives of housing reformers in bringing about new, more orderly urban patterns (Mumford, 1995). The model also came to be associated with slum clearance efforts. The model was first applied by the Metropolitan Life Insurance Company's 1939 Parkchester development in the Bronx which accommodated about 42,000 people in 51 high-rise buildings (Mumford, 1995). Over the years, several housing developments were built according to "tower in a park" principles in New York City including the Queensbridge Houses (1940) East River Houses (1941), Stuyvesant Town (1943-1948), Sedgwick Houses (1949) (Mumford, 1995).

Until the 1950s, there was little high-rise housing outside of New York City and there was great public trepidation as people generally associated them with tenements (Ford, 1986). However, government-funded high-rise housing projects came to be developed in other large cities, the most famous being Chicago's Cabrini-Green and St. Louis' Pruitt-Igoe projects while private market high-rises came to be part of the nation's suburban expansion, although not to the extent as in Canada (Ford, 1986).

In the United Kingdom, high-rises were favoured in areas that had been destroyed in World War II. Cruciform and slab apartment buildings were both literal and symbolic indicators of the UK's post-war recovery (Jacobs and Manzi, 1998). Towers were also introduced in built-up areas and were part of slum-clearance programs. From 1955 to 1975 over 440,000 high-rise properties were built due to government initiatives to meet housing shortages and the provision of progressive storey/height subsidies to construction companies (Jacobs and Manzi, 1998).

In Northern Europe, in countries like Germany and the Netherlands that did not have a tradition of high-rise housing, towers were introduced in the 1960s as part of governments' strategy to meet chronic housing shortages (Kempen and Mustard, 2007). Thus, these typologies came about due to necessity and not consumer desires. In the Soviet Union and its satellite states, the mass proliferation of towers was emblematic of post-war reconstruction, urban expansion and economic progress. High-rises were needed to accommodate the Soviet Union's growing urban population both in suburban areas and in the new towns conceived largely around tower blocks (Lizon, 1996). Furthermore, the utilitarian, no-frills aesthetic of towers was deemed to be in line with the doctrine of socialist realism which directed

Soviet culture (Lizon, 1996). These buildings, despite their deteriorating conditions, continue to be a critical housing resource in the former Soviet bloc nations.

b) Toronto

The majority of Toronto's towers were built during the massive apartment housing boom that took place in the city from the 1960s to the early 1980s. The intensity of this boom is illustrated by the fact that in 1966, 40% of Toronto's existing housing stock and 77% of housing starts were towers (City of Toronto, 2008). The growing preponderance of the high-rise typology drastically transformed the urban and suburban landscape and brought about new patterns of travel, interaction and living. Suburban expansion was driven forward with the construction of countless high-rises in the formerly undeveloped green fields outside of the downtown core.

The tower boom was, however, not a spontaneous development or a purely market-driven reaction to older housing forms but was, instead, the result of a concerted, carefully calculated planning effort by the municipal government to address growing growth pressures and manage post-war urbanization. This degree of interventionism was unique to Toronto, resulting in a distinct form compared to other North American suburbs (Filion, 2011).

The developmental trajectory of the inner suburbs was the result of the administrative structure of the Municipality of Metropolitan Toronto, the second-tier municipal government created by the Province of Ontario in 1954 (Filion, 2011). Metropolitan Toronto consisted of the old City of Toronto and several townships corresponding to the former municipalities of Etobicoke, Scarborough, North York, York and East York. This allowed for coordinated planning of the downtown core, suburban areas and peripheral rural areas under one administration (City of Toronto, 2008). The administrative structure enabled the government to address issues of fiscal inequities and uneven infrastructural capacities across municipalities and consolidate and manage growth to bring about an integrated metropolitan region that would be equipped to collectively respond to growth pressures (Filion, 2011).

Metropolitan Toronto, in a strategy that has been called smart growth before smart growth, advocated containing growth and, therefore, increasing density within metropolitan bounds while preserving the greenbelt (City of Toronto, 2008). Tower development was believed to be the best course of action to

realizing these goals. Highly economical and consequently profitable due to streamlined assembly-line production and standardized design, towers were deemed to be the most cost-efficient typologies for securing density targets, addressing housing shortages and promoting development in suburban areas (Kesik, 2008).

The introduction of towers resulted in great residential density variations in addition to a general mix of housing types and tenures as well as public housing settlements in the inner suburbs. These developments were consistent with the government's insistence that all constituent municipalities contain "their just share of high-density and public housing" (Frisken, 2007), a manifestation of its highly-held principle of geographic equity (Filion, 2011). The diversity of apartment sizes and tenure types supported a variety of household demographics allowing for different groups to settle in the inner suburbs as compared to the middle-class heterogeneity of post-war American suburbs (Kesik, 2008).

The increased density of tower neighbourhoods was believed to provide the critical mass that would justify and support infrastructural projects particularly transit expansion. Thus, many towers were located along arterial roads, creating superblocks at chief intersections and abutting streets. Toronto's planning vision, while heavily auto-centric, was nonetheless more transit-oriented than that of its North American counterparts, and it sought to eventually extend transit networks into its suburban communities (Filion, 2011).

2. *Tower Decline*

a) International

The decline of towers, particularly in the case of North America, can be attributed to two chief factors; the first being planners' inability to realize the full breadth of the tower experience as advocated by figures such as Le Corbusier and the second being poor maintenance by property owners and housing authorities and general disinvestment in these neighbourhoods.

According to theorist Eric Mumford, the majority of towers built in the post-war period "represented a utilitarian compromise between avant-garde urbanistic visions and rigid cost constraints", resulting in a bare-bones aesthetic and limited sensitivity to how these spaces would be perceived and experienced

by the people who would live there (Mumford, 1995, pg. 39). Therefore, only certain parts of the "tower in a park" model were applied while other elements were not realized for the reasons of minimizing construction costs. As a result, design considerations and amenity provision were often sacrificed. This selective and partial application of the plans of modernist visionaries was manifested in the pioneering Parkchester development, in which "there was no concern for creating carefully modulated spatial experiences as one moved through the project" and in which the open space was determined solely by the land "left over after the tower buildings had been sited at various angles dictated by ... site boundaries" (Mumford, 1995, pg. 28). Aesthetics were relegated to minor importance. The functionalist design rationale of these types of projects was largely concerned with the physical properties of the buildings themselves and, thus, less concerned with the kind of living environments such designs would engender. In other words, the idea of human spatial experience was often missing from the equation.

Therefore, much of the problems attributed to tower communities cannot be directly be attributed to what are often perceived as the sterile or anti-urban planning and design philosophies of influential figures such as Le Corbusier. Instead, it can be argued that the emergence of such problems was due in part to the misapplication of the "tower in a park" model compounded with a legacy of neglect which contributed to the decline of these communities. For example, Le Corbusier's tower ideal demanded a steady stream of expenditure and the continued efforts of a vigilant staff to properly maintain high-rise communities (Marmot, 2011). Elevators, lobbies, hallways, green space, social and recreational infrastructure and other building amenities all needed to be carefully maintained for the building to perform at a high level and to provide a satisfactory living environment for residents. Thus when the building and property falls into disrepair, the community is at risk of falling into disrepair as well.

This is what led to the decline of St Louis' Pruitt-Igoe, a public housing development that has retrospectively become a symbol of the supposed "failure" of high-rise architecture. A large housing project consisting of 33 buildings, Pruitt-Igoe was built between 1952 and 1955 and was eventually demolished less than two decades later (Gans, 1992). The reasons for its demolishment were less to do with the design of the buildings and more to do with declining government investment in the community (Gans, 1992). Building conditions deteriorated leading to a physically impoverished environment which became decreasingly attractive to tenants. The community itself became a site of extreme poverty concentration with residents receiving little support from the forces that brought about the development in the first place. Moreover, social problems such as crime, gang activity,

substance abuse and squalor exacerbated by poverty concentration took hold in Pruitt-Igoe (Gans, 1992). Criticisms of Pruitt-Igoe driven purely by ideas of the inherent "badness" of high-rise housing are representative of the fallacy of architectural determinism – the buildings themselves were not the source of these problems, instead the buildings were merely sites where, unfortunately, these problems were manifested. This speaks to the persistence of the misguided "high-rise = tenement" heuristic in North American society.

Tower blocks were often poorly executed and failed to deliver on the promises and ideals of the "tower in a park" model. For example, Le Corbusier himself advocated that towers needed to be designed for all socioeconomic groups and not just poor populations, as has occurred in the United States where towers were built largely for low-income groups (Marmot, 2011). Disinvestment has resulted in environments that communicate and, as a result, perpetuate poverty. For tower-dwellers, generations of neglect and limited investment in their communities has worked to their disadvantage. Once again, this is not due to the housing typology itself but instead how tower blocks have been executed and maintained.

b) Toronto

The planning regimes behind Toronto's largely inner-suburban post-war high-rise boom did not anticipate many of the problems that have since emerged in these neighbourhoods. Compared to other North American local governments, Toronto was particularly invested in the idea of urban development driven by the establishment of high-rise neighbourhoods. Some of the contemporary problems associated with local tower blocks can be attributed to governments' inability to fulfill some of its more ambitious tower-related goals. For example, tower blocks were intended to spur the development of complementary infrastructure to create functional and dynamic communities across metropolitan Toronto. When this did not occur as envisioned, certain problems within these neighbourhoods came about. For example, a particular goal associated with the establishment of apartment neighbourhoods was the creation of self-sufficient macro-communities across the suburban landscape (Kesik, 2008). As previously mentioned, conscious densification efforts were intended to set the stage for greater accessibility to private and public transit, the latter of which was not realized as initially envisioned due to decades of waning investment. Thus, pioneer tower neighbourhoods such as Don Mills and Flemingdon Park became isolated rather than self-sufficient due to infrastructural inequities that disabled their becoming fully integrated with the rest of the city. These problems became more

pronounced as these areas became concentrations of low-income populations with markedly less resources and options available to them to negotiate and overcome accessibility and mobility obstacles induced by built form and uneven infrastructure networks (Filion, 2011).

The design principles that informed tower communities themselves also contributed to their growing isolation even within their respective neighbourhoods. Following Le Corbusier's tower in the park model, planners promoted maintaining significant swaths of open space around towers (up to 90% of the property) based on the rationale that it allowed for people-friendly, breathable environments that would benefit from access to green spaces (Kesik, 2008). Developers were also keen on this as municipal regulations permitted them to build taller buildings in exchange for greater portions of open space (City of Toronto, 2008). Unfortunately, open space has remained underutilized and its natural amenities have been poorly maintained. Furthermore, the creation of superblocks surrounded by great stretches of parking lots and unimaginative green space with poor connections to the greater community has, over time, resulted in these towers becoming physically isolated islands in their respective areas. Strict land use segregation further contributed to the isolation of these communities from the amenities necessary for daily life.

The demographic composition of Toronto's towers is also changing. Postwar tower residents are getting poor and, in general, the inner suburbs in which the greater part of these towers is located are also getting poor. In Toronto, tower decline can be explained by the decline of the city's inner suburbs. In recent times, there has been a growing body of research concerning income and social polarization in metropolitan areas. Notable research has been undertaken by local think tanks and social advocacy agencies to explore the idea of an increasingly polarized and fragmented City of Toronto. The most influential work in this growing field of study is *The Three Cities within Toronto, 1970-2005* by J. David Hulchanski of the University of Toronto Cities' Centre. Hulchanski's report examined neighbourhood change measured by the change in the census tract average individual incomes as a percentage of the Toronto metropolitan area average between 1970 and 2005. Demographic analyses show three distinct groups in Toronto, forming what Hulchanski has termed the three cities. These three groupings are broken down as follows:

City #1: increase of 20% or more representing 100 census tracts or approximately 20% of the city population

City #2: increase or decrease of less than 20% representing 208 census tracts or approximately 40% of the city population

City #3: decrease of 20% or more representing 206 census tracts or approximately 40% of the city population

City #1 roughly corresponds to the neighbourhoods of the Old Toronto and North York surrounding the Yonge corridor, the waterfront communities and the historically affluent neighbourhoods of central Etobicoke. City #2 is comprised of neighbourhoods surrounding City #1's north-central stretch, the majority of East York, Scarborourough's lakefront neighbourhoods, most of central and southern Etobicoke as well as the gentrifying inner city neighbourhoods of Old Toronto. City #3 corresponds to most of central and northern Scarborough, northern Etobicoke, the majority of the York's traditionally working class neighbourhoods and the northeastern and northwestern portions of North York. These geographic groupings form large contiguous swaths of neighbourhoods exhibiting similar income demographics, supporting the idea of the fragmentation of the city into three different mini-cities.

Hulchanski has noted several critical changes in the income distribution of the city. The first is the noticeable large-scale clustering of neighbourhoods based on income levels whereas in the past Toronto exhibited more of a scattered pattern in this respect (Hulchanski, 2006). This speaks to a growing income gap in the city. In addition, Toronto has experienced a shrinking of middle income neighbourhoods, from over 60% in 1970 to the present rate, demonstrating the growth of poverty and greater concentration of low-income neighbourhoods (Hulchanski, 2006).

According to the 2006 census, 46% of Toronto's low-income families lived in neighbourhoods where more than one-quarter of households were low-income (United Way, 2011). Furthermore, poverty concentration is occurring, for the most part, in the inner suburbs. It is within these marginalized, underserviced communities of City #3 that being poor is the hardest due to social and infrastructural inequities.

In addition to income, City #3 exhibits several characteristics that distinguish it from the other two cities. For example, it has an above average youth population and a higher percentage of single-parent families. Approximately half of households rent and a greater percentage of people spend a greater proportion of income to meet these rents. The percentage of immigrants living in City #3 is greater than

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in City #1 and #2 and is above the city average. Furthermore, there is a disproportionate amount of visible minorities compared to higher-income and middle-income areas (Hulchanski, 2006). While residential towers are found across the city, a great portion is found in City #3. For example, while approximately 25% of all high-rise households were categorized as being low-income in 1981, this percentage has risen to about 40% in 2006 (United Way, 2011). This shows a growing trend in poor families moving into these types of buildings.

Several changes in the period from the 1970s to the 2000s are recognized as having contributed to the income shift in the inner suburbs. One of the key changes has been the drastic decline in real family income in the last three decades and, therefore, an increase in poverty levels (United Way, 2011). This is in part due to the realignment of the economy which led to the loss of manufacturing jobs, jobs which had in the past secured the livelihoods of many moderate and middle-income households (Hulchanski, 2006). Whereas in the post-war period, Toronto, like many North American urban centres, had experienced deindustrialization of the core in favour of industrial expansion in the inner suburbs, the latter decades of the 20th century witnessed an analogous flight of businesses from the inner suburbs to outer-suburban regions where land was plentiful and costs were significantly lower (Filion, 2011). The proliferation of precarious low-income service sector jobs in the place of these departed industries led to a very restrictive employment market in the inner suburbs. The lack of opportunities and the difficulties in accessing opportunities elsewhere, particularly difficult for the poorest residents, contributed to declining incomes in these areas of the city.

The housing stock available in the inner suburbs also gradually fell out of favour for some consumers who chose to relocate elsewhere. Whereas upon their inception towers were believed to be the pinnacle of attractive living, much like how condominiums are perceived today, their desirability to the public waned as these buildings began to show their age and other modes of living became more popular (City of Toronto, 2008). Certain groups possessing the financial means to relocate chose to settle in the gentrifying and more amenity-rich city or in larger properties in the outer suburbs (Filion, 2011). As these groups left these areas, the private housing stock, a large proportion of which consists of towers, filtered down to lower-income groups. Due to affordability, these tower communities came to house many recent immigrants and thus precipitated a demographic shift in the inner suburbs (Filion, 2011).

Given rising housing costs and the virtual non-construction of new affordable, family-sized apartment units, Toronto's aging concrete towers have emerged as a critical source of affordable rental housing for the city's moderate and low-income groups (United Way, 2011). It is for this reason that the maintenance and betterment of this housing resource is such a critical issue for Torontonians.

The dramatic demographic shift of the inner suburbs can also be better understood by recognizing shifts in the political realm that had occurred during this period. As mentioned in a previous section, development in the inner suburbs occurred in a time of increased government interventionism. This included involvement in the management of the inner suburban economy, promotion of high densities and particular spatial patterns and the establishment of a critical network of public services. However, successive administrations shifted to a neoliberal model of governance marked by diminished government intervention (Keil, 2002). As a result, government funding of public services waned and inner suburban infrastructure could not be maintained or ameliorated and thus deteriorated.

 Two of the sectors most affected by these changes were public housing and transit. Construction of new public housing units stalled and the existing stock deteriorated due to limited maintenance budgets. Furthermore, the supply of public housing was unable to meet increasing demand for units and, due to the adoption of a highest-need prioritization system, in many instance housing projects became concentrations of extreme poverty (Filion, 2011). Declining investment in public transit affected levels of service in the inner suburbs and hindered the processes of transit-oriented development envisioned for these neighbourhoods (Filion, 2011).

Furthermore, there was little investment in community infrastructure and amenities which resulted in many underserviced communities (Dippo and James, 2011). The fact that investment was pulled from these areas in such a critical and, for the most part, early period of their development contributed to declining conditions in the inner suburbs. In other words, it prevented these communities from fulfilling their potential. By virtue of being newer neighbourhoods, and neighbourhoods with an increasingly impoverished population, they lacked the history, political clout and a community organization to lobby for changes in their local environments compared to older neighbourhoods closer to the core.

3.   Tower Renewal

The City of Toronto's Tower Renewal program, conceived as a holistic "building upgrade, community reinvestment and greening initiative [focused on] bringing real investment to tower neighbourhoods, fostering vibrant communities and reducing greenhouse gases throughout Toronto" (City of Toronto, 2008), is an initiative that seeks to solve the shortcomings and realize the opportunities present in the city's tower blocks. Its mission is one of urban sustainability as these towers, home to approximately a million Torontonians, are an invaluable housing resource that must be protected and upgraded for future use. Furthermore, the program recognizes great potential for improving these communities by reversing their infrastructural inequities and focusing on improving (sub)urban landscapes to increase the well-being of residents. Thus, Tower Renewal works on two fronts – to improve and modernize the built environment and physical infrastructure of the city's tower communities and to, by virtue of the former objective, bring about a more inclusive and dynamic social realm in these communities.

Tower Renewal's principles were informed by research conducted by E.R.A Architects and the University of Toronto between 2004 and 2007. This joint research body concluded that high-rise retrofit projects could mobilize and expedite community revitalization projects (City of Toronto, 2007). The incredibly high number of multi-residential towers within municipal bounds pointed to the issue of deteriorating high-rises as an issue of great importance to Torontonians and one which demanded immediate attention. Former mayor David Miller's administration co-opted this research and formalized it in the Tower Renewal Project Office (TRO) in late 2007.

The TRO endeavoured on developing and implement a pilot strategy for four pilot sites. The pilot strategy is to inform the development and implementation of what is intended to be a citywide tower redevelopment rollout strategy (City of Toronto, 2007). The sites are as follows:

1. 2677 and 2667 Kipling Avenue (2 x 23 storeys; 458 units)
2. 175 Shaugnessy Boulevard (1 x 18; 139 units)
3. 215 Markham Road (1 x 18; 192 units)
4. 200 Wellesley Street East and 275 Bleecker Street (1 x 30; 711 units and 1 x 22; 322 units)

Pilots sites 1, 2, and 3 are located in the inner suburbs (Etobicoke, North York, and Scarborough, respectively) and are part of Hulchanski's City #3. Pilot site 4 is located downtown in an economically mixed area containing pockets of concentrated poverty. Site selection is indicative of the program's focus on at-risk communities and its social equity mission.

Guiding the Tower Renewal retrofit strategy are several guiding principles as put forward by TRO. These principles are as follows (IMP):

- **Performance** – achieving safe, healthy and sustainable housing through the conservation of resources, specifically energy, water and solid waste
- **Economy** – sustaining housing stock through cost-effective measures that enhance the durability and adaptability of buildings without compromising their long-term affordability and financial viability
- **Aesthetics** – promoting sensitive and responsible architecture that contributes to an interesting and enjoyable shared urban landscape and the improvement of our quality of life
- **Replicability** – advancing building technology and the skilled trades to improve the quality, reliability and durability of building retrofit methods and materials and providing mass customization at a competitive cost with traditional practices
- **Smarts** – implementing sophisticated control systems networked within the building system and interconnected to the supporting infrastructure of energy and water

These principles focus on issues of architecture and hard infrastructure. Improvement in this realm is, according to the program's logic, to lead to the amelioration of the built environment which is thought to have a positive effect and affect on residents' private and communal lives. Thus, retrofits set the stage for advancement of Tower Renewal's community building aspirations. TRO has defined these interrelated, mutually reinforcing goals to be:

A **cleaner and more healthy environment**: reductions in greenhouse gas emissions, zero-carbon goals, improved public transportation, cycling and pedestrian options, applications for renewable and district energy, green roofs, greening of public spaces, urban agriculture, on-site waste management and water efficiency, wet weather flow management.

Stronger communities: local job creation, enhanced availability of local food and services, safe and enjoyable community interactions, improved green space and outdoor recreational space, engagement of tenants in the planning and implementation of the pilot projects.

Greater cultural awareness and activities: focus on collective and individual heritage, onsite public art, aesthetic qualities of external building insulation and landscape heritage.

Enhanced local economic activity: on-site retail and services, commercialization of green technology, new employment and business opportunities (City of Toronto, 2007)

These objectives speak to the multitudinous opportunities of tower renewal-led community regeneration. Of course, there is significant emphasis on greater functionality through diversifying transport options, providing on-site services and improving accessibility of services, amenities and opportunities for work and play but the idea of increasing resident capacity for enjoyment of their local spaces is also a significant facet of these objectives. In other words, provision of a greater variety of opportunities in local environments allows greater resident engagement with these extended amenities and, vis-a-vis this heightened community life, greater interaction with other people in the neighbourhood.

Tower redevelopments would, following this logic, develop the context for multi-dimensional public life in the inner suburbs by providing amenities and resources that encourage sustained use and interaction with one's neighbourhood. Tower Renewal aspires to transform tower blocks into distinctive places that can support a multitude of activities and experiences. These ideas will be further developed in the next section.

METHODOLOGY

In order to assess Tower Renewal's policy, the paper will consult both professional and academic literature from a diversity of disciplines. Tower Renewal documents such as the Mayor's Tower Renewal Opportunities Book, the Tower Renewal Guidelines and the Tower Renewal Implementation Book will be analyzed in concert with relevant planning literature in order to highlight the theoretical underpinnings of the program's approach to community regeneration and evaluate the program's potential to bring about change in its targeted focus areas.

Tower Renewal's environmental, economic and social/cultural objectives, together with which seek to solve problems within tower communities and transform them into functional, dynamic spaces integrated at the local and metropolitan level, will be analyzed to understand the scope of the Tower Renewal project. In order to determine the practicality and applicability of these objectives, the paper will also look at three case studies of creative city building initiatives in inner suburban tower communities. The case studies are:

1. San Romanoway Revitalization Association
2. East Scarborough Storefront
3. 2667 and 2677 Kipling Avenue (Tower Renewal pilot study)

These examples have been selected for several reasons. First, these three revitalization projects are headed and operated by different actors: property ownership group, charitable organization and municipal agency (Tower Renewal), respectively. Thus, these examples illustrate how these diverse actors can work to achieve common goals, particularly in their shared approach of place-based interventions to mobilize neighbourhood revitalization. Each example, owing to the financial ability of and project scope adopted by its actors, fulfills environmental, economic and social/cultural objectives to varying degrees. That fact that the examples are headed by different administrations will be beneficial for the sake of drawing conclusions regarding the capacity and efficacy of actors for addressing issues of neighbourhood change in inner suburban communities. The case studies are discussed in further detail in the following subsections.

1. *San Romanoway Revitalization Association*

The San Romanoway tower complex is located in the north-east quadrant of the Jane-Finch neighbourhood in Toronto. It consists of three privately owned towers offering both subsidized and market rent units with a total of 892 units housing 4,400 residents of whom approximately 3,000 are children and youth (Teotonio, 2011). Throughout the 1980s and 1990s, the community struggled with high crime rates and gang violence. Property damage and vandalism was rampant and the neighbourhood gained a citywide reputation for being rundown and dangerous (Teotonio, 2011).

In response to escalating problems, property owners and concerned residents collaborated to form the not-for-profit San Romanoway Revitalization Association (SRRA) in 1999. With an initial $2 million investment by the owners, the SRRA spearheaded the physical revitalization of the community by improving the built environment, fixing amenities, installing outdoor lighting and CCTV systems, removing graffiti and cleaning up its open spaces (Teotonio, 2011). This intervention was predicated on the idea of Crime Prevention through Environmental Design, the idea that changing the built environment could minimize crime and create safer neighbourhoods (SRRA, 2012).

In addition to improving the built environment, the SRRA directed efforts to the social realm in order to provide greater opportunities for its residents and the wider Jane-Finch community. With a strong focus on children and at-risk youth, the SRRA reconverted ground floor units in the towers into flexible program spaces. Enrichment programs and services include youth drop-in programs, tutoring, entrepreneurship training, language classes, music recording studios, breakfast and after school programs (SRRA, 2012). These programs are intended to keep youth focused, help them discover and build on their interests, foster friendships and nurture positive community attachments and offer safe inclusive spaces for use. In addition, the SRRA has launched several seniors-focused and newcomer-focused programs.

Funding for programs has come from government grants and the participation of various social services organizations as well as through donations from the private sector (Teotonio, 2011). Funding from these various partners has also resulted in improved amenities from refurbished basketball and tennis courts to the establishment of an in-building theatre, an art gallery and multi-purpose and youth-focused

communal spaces. As a result, the San Romanoway towers have become a community hub for the wider Jane-Finch neighbourhood who choose to participate in its programs and spaces.

2. *East Scarborough Storefront*

The East Scarborough Storefront is a multi-service delivery hub located at 4040 Lawrence Avenue East in the Kingston-Galloway/Orton Park priority neighbourhood. From its inception in 2001 until 2005, the Storefront was located in the now-demolished Morningside Mall and is currently located in a dedicated space in a former police substation. Launched by the charitable organization Tides Canada, the Storefront's 40 member agencies provide a variety of programs and communities services targeting the multiple foci of the organization's mission from "poverty alleviation to violence prevention to civic engagement and inclusion of disadvantaged populations in civil society" (Tides Canada, 2012).

According to the Storefront's official website, the organization is dedicated to providing "accessible sites for community members of all ages and cultures to find and share solution they need to live healthy lives, find meaningful work, play and thrive" (Storefront, 2012). In other words, the Storefront works to provide an inclusive and flexible space which locals can use to interact with one another and build a sense of community, thus transforming the building into a distinctive place within the neighbourhood. The Storefront is a community focal point and its services and programs work to remove barriers to participation and promote broader civic engagement.

The Storefront has become the epicentre of community activism in the Kingston-Galloway/Orton Park neighbourhood. In addition to acting as a multi-resource centre addressing the various needs of the community, the Storefront is also concerned with community building through placemaking in one of its most-renowned projects, the Community. Design. Initiative. A collaboration between the Storefront, the University of Waterloo and local architecture firms sustainable.to and archiTEXT, Community. Design. Initiative. is, according to the Storefront website, an

> *"innovative partnership project focused around using the power of architecture and design together with place-based poverty reduction to engage youth in one of Toronto's most challenged neighbourhoods. The project brings together a dynamic range of people - ones*

that generally would not work together in this manner - in order to create beautiful architecture for a community where it is absent" (Storefront, 2012)*.*

The project has focused on planning and designing the Storefront and its immediate environment, engaging in beautification efforts, creating accessible and inclusive spaces and designing the building's proposed expansion wing intended to be an eco-food hub and healthy eating centre. In harnessing the expertise of the participating planning firms and the enthusiasm and experiential knowledge of local youths, the project capitalizes on the abilities and visions of both parties, bringing about spaces that are reflective of community needs and aspirations. The process of working on the project and the building itself is to be a "tangible expression of the pride that is felt within this community" (Storefront, 2012).

3. *2667 and 2677 Kipling Avenue*

2667 and 2677 are two privately-owned twenty-three storey towers totalling 458 units, located on Kipling Avenue north of Finch Avenue West. This community is one of four pilot sites launched by the Tower Renewal Office. In addition to elevator replacements and energy efficient retrofits, several projects have been pursued including the refurbishment of party rooms for use as on-site multi-purpose community spaces, improvements to the open spaces surrounding the towers and building recreational amenities, reclaiming parking lots for use as event spaces and food markets, improving the Kipling pedestrian corridor and engaging neighbouring property owners to establish an accessible pathway from the towers to nearby Humberview Park (IMP, 2011). Improvements have been made but many of these projects are still ongoing.

The successes of the Kipling Avenue pilot site have been leveraged through the establishment of the Action for Neighbourhood Change (ANC) Rexdale office in one of the towers' reconverted units. The United Way-funded organization is dedicated to pursuing place-based initiatives to sustainable development and neighbourhood revitalization and has collaborated with the Tower Renewal Office as its on-the-ground support system (IMP, 2011). Harnessing the ANC's community development and local outreach expertise has expedited the realization of the two party's mutually held goals.

The greater area in which the towers are located is a high-growth node in the Toronto experiencing a ten-fold increase in percent population growth between 2001 and 2006 as compared to the Toronto

average. Furthermore, owing to its many towers, the population density is 10,000 residents/km^2 compared to the Toronto average of 4,000 residents/km^2 (IMP, 2011). Given that there has not been any significant residential construction during that time, appropriately accommodating the growing population is a great concern, one that can be addressed through infill development.

Property owners, architects and consultants are currently, under the guidance of the Tower Renewal Office, are currently conducting rezoning applications in order to diversify land uses on the property. Included in the proposal is additional on-site buildings and a culturally-sensitive medical centre (IMP, 2011). These proposals are reflective of the residents' expression of the need for more affordable housing and on-site services. The extent to which these needs are met is first dependent on how the area will be rezoned.

The projects pursued in the Kipling Avenue pilot site are representative of Tower Renewal's idea of complete communities. Such changes would help make residents' local spaces work for them and minimize the need to look outside ones' neighbourhood to address essential needs. Developments at 2667 and 2677 Kipling Avenue point to the great revitalization potential that exists within Toronto's high-rise neighbourhoods.

CRITICAL EVALUATION

The process of tower redevelopment is for the most part a fairly recent innovation. The need for such projects was motivated by the recognition of the physical and social problems and shortcomings that came about in certain tower block neighbourhoods in the decades since their construction. Furthermore, a shift in planning philosophies and government attitudes brought about the socio-political climate in which tower redevelopment programs were developed and received. Whereas before design and development was preoccupied with functionalism and maintaining standardized site plan requirements, today there is greater focus on how development can support goals of sustainability, low-impact development, environmental responsibility and social equity (Kesik, 2008). As stated in the Tower Renewal Guidelines document, "tower sites are now seen as an important part of city infrastructure, integrated the building, site and city in a way that is more performative and ecologically based" (Kesik, 2008, pg. 23). Therefore, towers are seen as assets, not just as important housing resources but for what they can contribute to city building projects and for what they can offer to residents.

Therefore, to secure these assets and ensure that they can be used by future generations, comprehensive retrofit of towers has been deemed essential by the Tower Renewal Office. However, the Tower Renewal vision involves many objectives in addition to the physical upgrade of building themselves. Tower Renewal can be thought of as a wide-scope, environmentally responsible, socially-sensitive community revitalization project designed to accrue benefits to residents, tower communities and the city as a whole.
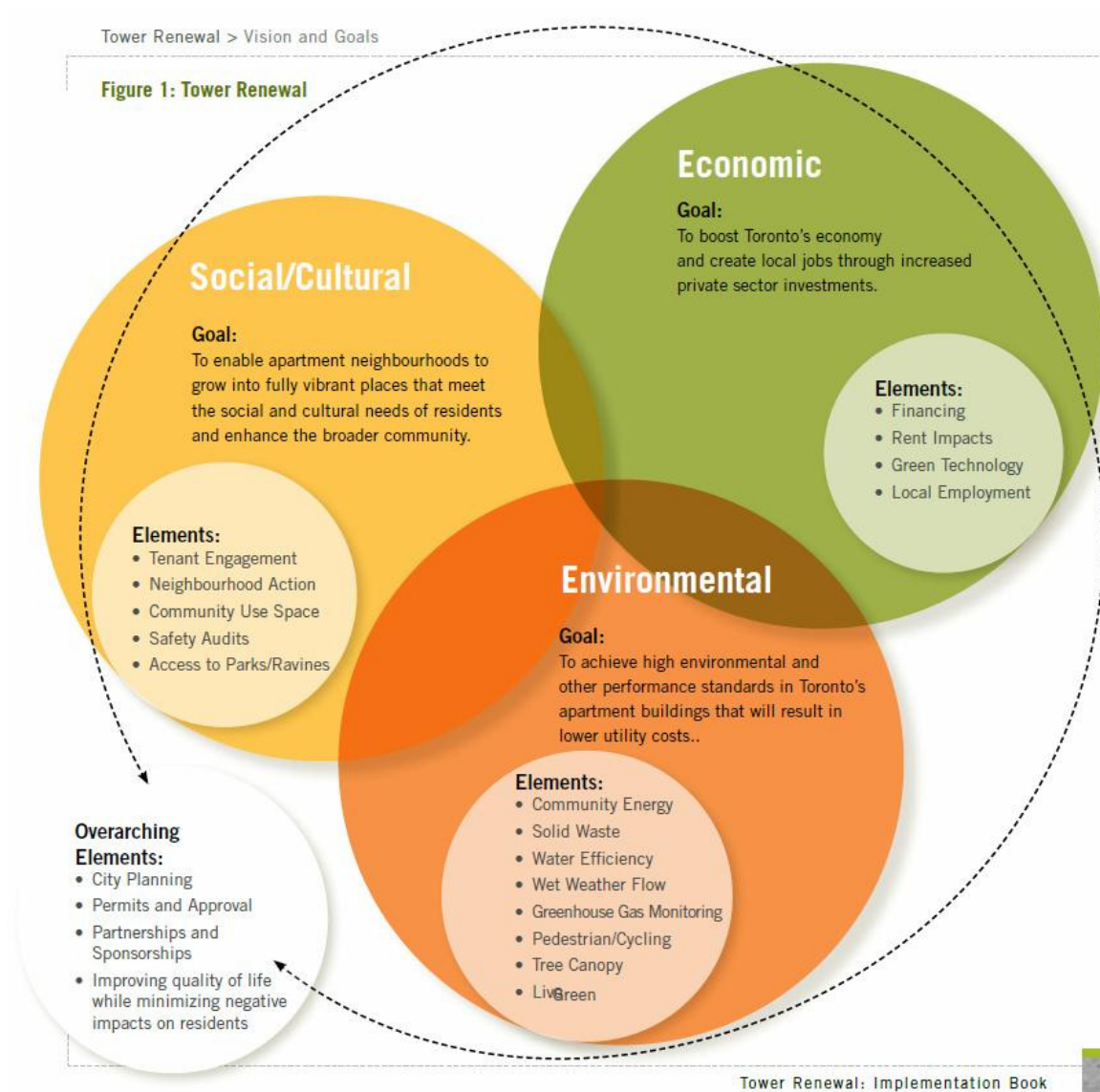
Fig. 1. Tower Renewal's interlocking environmental, economic, and social/cultural objectives (IMP)

The Tower Renewal Office has broken down the program's mission into three interlocking, mutually reinforcing objectives – environmental, economic, social/cultural, as graphically summarized in **Fig. 1**. These objectives are to guide renewal projects in order to achieve the TRO's goals of "a cleaner and greener city, ... increased social and cultural benefits and stronger communities ... and improved local economic activity [in tower communities]" (IMP, 2010).

These objectives will be analyzed in the following subsections according to the following structure:

a) Tower Renewal policies

b) How the three case studies have applied or implemented these ideas

c) Relevant academic literature

d) Strengths and weakness of Tower Renewal's design of approaching the three interlocking focus areas

1. *Environmental Objectives*

a) Tower Renewal

"To achieve high environmental and other performance standards in Toronto's concrete frame apartment buildings."

Tower Renewal's environmental policies are informed and aligned with municipal legislations and programs such as the Better Buildings Partnership, the Climate Change, Clean Air and Sustainable Energy Strategy, the Toronto Green Standard and Live Green Toronto among others (IMP). Thus Tower Renewal, as a tower-specific strategy, seeks to respond to the environmental challenges posed by these buildings and contribute to the municipal effort to bring about carbon neutrality and high green standards across the city.

In terms of performative capacity, Toronto's postwar towers are steadily declining and their future is precarious as many are approaching the final stages of their life cycle. Building amenities are in disrepair while the energy inefficiency of the towers has resulted in rising utility costs, thus having a direct negative impact on residents, and greenhouse gas emissions which affect the city on the whole (TRI).The design of Tower Renewal's environmental policies are informed by the opportunities present in the current state of the city's tower blocks which provide the context for renewal.

For example, a noted advantage of these towers is their robust, overbuilt quality due to their having been built in an era of cheap energy that allowed for concrete and steel reinforcements in excess of contemporary building standards (City of Toronto, 2008; Kesik, 2008). These armatures allow for, given cyclical retrofits, buildings with a lifespan between 300 and 400 years (CBC, 2012). Green-friendly upgrades can be applied to existing buildings. Tower Renewal's envisioned upgrade model involves

conservation measures such energy-efficient over-cladding and enclosed balconies to prevent energy wastefulness, new servicing techniques such as the application of solar water heating and geothermal technologies and amenity upgrades such as living green roofs, infill development, on-site waste management and community gardens allowing for local food production (City of Toronto, 2008). These innovations are summarized in **Fig. 2**.

Fig. 2. Tower Renewal's sustainable built environment concept

The scale of buildings and the fact that they are often found in clusters provides the critical mass to make these interventions viable (City of Toronto, 2008). Over-cladding creates a thermal break between buildings and the external environment, offering better insulation and preventing energy leakage and thus works to fulfill the conservation objective of Tower Renewal. In addition to conservation, renewable energy production is another objective of the program. Toronto's tower blocks, built according to the tower in a park model, contain significant swaths of open space which can be utilized to host turbine installations, stormwater retention and greywater recycling systems, photovoltaic panels and other co-generative technologies to bring about local production of renewable clean energy (IMP, 2010). According to Tower Renewal, tower blocks can become hosts to significant local energy networks which can power the neighbourhoods themselves and lessen the impact on the municipal energy grid.

Furthermore, another dimension of Tower Renewal's environmental objective is transforming tower blocks into pedestrian-friendly, transit-oriented and amenity-rich neighbourhood in order to improve access to resources and minimize automobile dependence and transport-based carbon emissions (IMP, 2010). This involves bringing about changes to the built environment to make it more conducive to pedestrian activity and changing zoning to allow for the introduction of services and commercial uses within tower block properties. In bringing about these changes, the intention is to create more environmentally friendly patterns of living and travelling in the inner suburbs. Tower Renewal has suggested that resident-organized auto-sharing or car-pooling programs and group purchase of transit passes are effective strategies to working to this end in the short term.

b)   Case Study Implementation

The East Scarborough Storefront's eco-food hub project is an example of how environmentally-friendly practices are being applied in inner suburban tower communities. According to partner agency the Community Design Initiative, the eco-food hub is "designed as a creative and practical space that acts as a nucleus of food and green activity for an entire community" (Sustainable.TO, 2010). The space is to act as a information-sharing space, educational facility and drop-in centre for the promotion of healthy eating, environmentally-friendly behaviours and community action. Thus, social needs can be addressed through shared participation in programs that drive the organization's environmental objectives. In terms of physical greening, the Storefront has engaged in making on-site gardens from which fresh ingredients can be sourced. This is an example of how new uses can be brought into a previously underutilized landscape and how inner suburban spaces can become sites of production.

Furthermore, a documentary is currently being developed about the Storefront eco-food project by volunteers in conjunction with participating agencies (Sustainable.TO, 2010). The Storefront intends to disseminate this experiential knowledge in order to provide a catalytic template for other organizations embarking on similar projects and to promote investment in eco-food infrastructure in marginalized communities. The efforts of the Storefront have been supported by the Tower Renewal Office in recognition of its complementary goals of environmental responsibility and providing community infrastructure in tower neighbourhoods. These efforts exemplify how these goals can be progressed on

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the neighbourhood level through the leadership of an umbrella organization of multiple partners and the active participation of the populations which they aim to serve.

In the case of the Tower Renewal pilot projects at 2667 and 2677 Kipling Avenue, several initiatives have been undertaken. In order to address shortcomings in the pedestrian network, Tower Renewal has initiated a walkability study conducted by the University of Toronto's Department of Geography, the Jane's Walk organization and local area residents to make recommendations for improvements in the public realm (IMP, 2010). The Tower Renewal Office is also investigating funding options and potential timelines for long-term improvements to the Kipling Avenue pedestrian corridor (IMP, 2010). In terms of energy retrofit, Tower Renewal has aided the property owner Humber Properties in its application for roughly $1 million in low-interest loans to be used for the installation of low-flow toilets, upgraded HVAC systems, replacement of balcony doors and the installation of energy-efficient lighting systems (IMP, 2010). As this is a project headed by Tower Renewal, its action items are closely related to its proposed strategies for undergoing tower retrofit.

c) Literature Review

Literature suggests that retrofit of high-rise towers is effective in achieving environmental best practices while avoiding problems of community destabilization and displacement associated with demolition and reconstruction (Stewart, 2010). Such an approach is often termed ecological renewal which involves the implementation of policies and strategies to address economic and social problems in a way that respects and protects the environment (Bus and Voogd, 1998). This implies a holistic approach to neighbourhood regeneration that is consistent with the pillars of urban sustainability. In European countries such as the Netherlands, Sweden, Germany and the United Kingdom, retrofitting towers has been adopted as a socially and environmentally responsible and viable strategy for extending the life span of deteriorating towers and bringing about greater carbon neutrality and low-carbon communities (Stewart, 2010).

Dedication to environmental issues also speaks to a reorientation in public policy and private enterprise to looking at natural elements and features as constituting "green infrastructure" (Benedict and McMahon, 2002). Thus, development processes are more considerate of local ecology. Literature supports the various benefits of preserving green infrastructure. For example, green infrastructure

systems "help protect and restore naturally functioning ecosystems by providing a framework for future development that fosters a diversity of ecological, social and economic benefits... [including]... enriched habitat and biodiversity, maintenance of natural landscape processes, cleaner air and water, increased recreational opportunities, improved health and better connection to nature and sense of place" (Benedict and McMahon, 2002, pg. 14). Abundance of accessible green spaces is also linked to desirability of communities and, although it is for the most part supported by anecdotal evidence, have the capacity to improve social life and bring together various groups within a neighbourhood (Sherer, 2006; Barbosa, 2007).

Preserving and enhancing green spaces also has a positive effect on neighbourhood livelihoods, particularly for low-income communities. According to the literature, green spaces are indicators of social sustainability and make resource-deprived neighbourhoods more liveable and enjoyable, providing recreational opportunities for at-risk youth and low-income families and their children (Sherer, 2006). Furthermore, academic studies support the idea that access to parks, green spaces and recreational facilities is strongly correlated to reduction in crime and juvenile delinquency (Sherer, 2006). In this sense, green infrastructure can also be thought of as cost-effective social infrastructure. Speaking in terms of tower redevelopment specifically, enhancement of the natural features of tower in a park developments is, therefore, an important goal.

d) Critique

Due to the high initial costs involved with the acquisition and installation of the sophisticated green technologies advocated by the Tower Renewal, the widespread application of these technologies is greatly dependent on the leadership of an agency such as the TRO. Therefore, the number of actors that can realize the ambitious environmental goals of Tower Renewal is limited due to prohibitive costs. Moreover, these costs and property owners' noted resistance to change and up-front capital investment may also limit the scope to which these projects are realized in Tower Renewal pilot studies.

The case studies speak to the success of the non-profit sector in promoting smaller scale green-friendly technologies such as composting, recycling programs and solar panels and environmentally-conscious behaviours and education. Due to their smaller size and community focus, these organizations can work closely with their target populations and change how people think about and interact with the

environment. However, the success of these programs is highly dependent on the willing participation of local populations as well as the organizations' resident engagement strategy. In an example such as the East Scarborough Storefront, environmental initiatives work positively to increase the energy efficiency of serviced facilities but the surrounding neighbourhood remains energy inefficient due to a lack of similar eco-friendly infrastructure. However, it must be said that progress in this respect in the energy wasteful inner suburbs is most important however isolated.

Moreover, Tower Renewal's environmental program has considerable focus on the promotion of walking and transit use in tower communities. As mentioned in the Background section, the planning vision behind Toronto's tower boom was informed by ideas of what is today known as transit-oriented development. Dense settlements along arterial roads were to provide the critical mass to validate and necessitate further transit expansion. Of course, these lofty goals were never fully realized as exemplified by the city's current transit service inequities. As it is today, intra-inner suburban commuting was poorly accommodated by transit and automobile travel took precedence for many suburbanites, particularly for those located at a distance from developed transit networks. Car culture continues to dominate in these areas. Thus, in an effort to counteract these widely accepted travel patterns, it is necessary to expand transit infrastructure and improve service to an extent that makes public transformation a more attractive, budget-friendly and commute time-conscious alternative to private travel.

At the time of its inception, Tower Renewal was closely linked with Transit City. Transit City, with its various LRT lines extending into underserviced areas of Toronto, was intended to reverse transit inequities in these communities and revolutionize how people moved around across the city. Due to the administrative shift that took place after David Miller's mayoralty, the plan has fallen into limbo and the need for greater transit expansion has continued to be unaddressed. Tower Renewal's lofty environmental objectives in terms of transit require the realization of a plan like Transit City. Taking a proactive role in transit expansion and provision is, of course, outside of the powers of the TRO. The current state of transit in Toronto only affirms auto dependency.

However, Tower Renewal has embarked on smaller initiatives to bring about improvements in this respect. For example, the TRO has looked into working with resident associations to promote group purchases of Metropasses (monthly TTC passes) which would allow residents to benefit from the

discounts accrued under such arrangements. Furthermore, TRO has also promoted organized car-pooling for grocery trips and taking children to school, for example. This works to reduce the number of solo trips and extend greater opportunities to families who may not own cars. Once again, the success of these initiatives is dependent on residents themselves but the existence of these opportunities is in itself a considerable step forward. In their own way, residents can contribute to reducing the carbon footprint in their own neighbourhoods.

Tower Renewal's considerable focus on pedestrian realm improvements both within tower blocks and along surrounding streets is also beneficial to reducing a neighbourhood's carbon footprint as well as providing more liveable environments for residents. It has also concentrated efforts on improving connectivity with local green infrastructure, as seen in the improved connections made between towers and the nearby park and ravine in the Kipling Avenue study. As a result, natural features are opened up to enjoyment and exploration for residents allowing them to make greater use of their local spaces.

Overall, it is difficult to judge the majority of Tower Renewal's environmental objectives as they have been developed with a long-term planning horizon in mind. Success will be determined by the collaborative relationship between the TRO, property owners and the private market and the proper volume of investment needed to fund and operate green technologies in tower communities. Given the fulfillment of these conditions, Tower Renewal's environmental goals may come to fruition over time. The program is ambitious but, if the accomplished European programs it is modelled upon are any indication, there is great potential for success.

2. *Economic Objectives*

a) Tower Renewal

"To significantly enhance the health of the economy and labour-market both of local communities and of Toronto as a whole."

Tower Renewal is intended to have great impact on Toronto's economy through job creation and the development of cutting edge green industries. Highlighting the economic advantages in pursuing a citywide retrofit rollout is important in Tower Renewal's efforts to gather support of municipal agencies,

the private sector and property owners in what is initially a cost-intensive project. Researchers working for TRO have estimated that retrofitting all of Toronto's postwar towers would be a 20-year project, thus requiring an entire generation of skilled manpower in the construction, green energy, HVAC, engineering, urban planning, design and architecture professions. It is estimated that net wages of these workers would equal upwards of $2.12 billion (City of Toronto, 2010). Furthermore, Tower Renewal recognizes the opportunity for Toronto and its local industries becoming global leaders in tower retrofit and neighbourhood renewal. Thus, as stated in the Tower Renewal Implementation Book, its projects can work to sustain and reenergize existing industries and create new ones, thus bolstering the city's capacity for responding to the changing economy.

In this sense, tower communities are laboratories from which new industries can grow and in which new technologies can be implemented. In addition, Tower Renewal also posits tower blocks as sites of economic production which can work to improve the livelihoods of these communities. For example, given the installation of district energy installations as advocated by Tower Renewal's environmental strategy, surplus energy can be sold to other communities (City of Toronto, 2008). These funds can potentially then be reinvested back into the neighbourhood. On-site food production through urban agriculture can also create monetary gains for communities as foodstuffs can be sold to local markets. On-site agriculture can also result in greater access to healthy, nutritional foods at lower costs for local residents. This would have the most positive impact in the most economically marginalized and underserved tower communities in Toronto. Thus, the problems of living in an inner suburban food desert with limited access to private or public transport could be minimized.

The empty spaces within tower communities offer a workable context for diversifying land use to realize said neighbourhoods' productive potential. Tower Renewal is invested in the idea of introducing new uses in tower blocks through infill development. These newly built spaces can then be used to host various organizations and businesses. Service providers can set up operations in neighbourhoods in need and local entrepreneurs can set up businesses in their backyards, so to speak. As stated in the Mayor's Tower Renewal Opportunities Book, "support for local retail, organizations and cultural production will promote engagement, entrepreneurialism and pride of place, as well as unlock the boundless ingenuity that is currently trapped behind closed doors (City of Toronto, 2008, pg. 82)." Furthermore, community improvement programs, both those currently existing and those mobilized through Tower Renewal, can work to improve the skill set of participants, particularly among local

youth, and thus bring about a skilled and engaged young population that contributes to the economic viability of their communities.

b) Case Study Implementation

The range of youth-focused programs offered by the San Romanoway Revitalization Association are designed to direct young peoples' interests in productive and creative fields or to prepare them for competition in the job market. This is particularly important in marginalized communities such as San Romanoway where such opportunities may be limited. In this sense, these programs are there to not only boost self-esteem and nurture interests in young people but to help them gain the skills and attitudes that will benefit them and help them find gainful employment.

The East Scarborough Storefront runs analogous programs intended to engage youth and other members of the community. For example, involvement in the eco-food project enables volunteers to gain skills and positive experiences by participating in collaborative workshops and classes. Participants have work closely with architects, interior designers, environmentalists and landscapers and learn about eco-friendly design, architecture and sustainability. The East Scarborough Storefront offers an environment in which interested parties can learn about these disciplines, apply this knowledge and take proactive roles in their communities.

c) Literature Review

Literature supports the bridging of social and economic objectives to bring about improvements in both spheres in areas targeted for regeneration or redevelopment (Hull 2000; McGregor and McConnachie, 1995; Musterd, 2008). Integrating residents in economic development projects can have the positive effect of alleviating social problems particularly in terms of unemployment. A review of the history of urban regeneration schemes in the United Kingdom has pointed to the lack of linkages between local labour markets and redevelopment projects as one of the key factors that led to the failure of pioneering regeneration projects in the 1970s and 1980s (McGregor and McConnachie, 1995).

In undertaking economic regeneration of disadvantaged areas, studies have shown that it is necessary to take into account the reasons why certain populations and their respective neighbourhoods have

become economically challenged. These factors include a shortage of local jobs, poor accessibility to employment opportunities across the city, lack of education, other obstacles to employment such as costly day care and the continuing stigmatization of these disadvantaged neighbourhoods (McGregor and McConnachie, 1995). Thus, objectives include local job creation, overcoming accessibility issues, providing skills training, integrating social services into the neighbourhoods and promoting positive images of neighbourhood and place.

The private sector investment is recognized as an essential part of this process, particularly in order to:

- "rehabilitate and diversify the housing stock of these areas;
- create or to enhance the commercial services needed to construct balanced and self-sustaining communities; and
- generate the employment and training opportunities essential to raise household incomes on an enduring basis" ((McGregor and McConnachie, 1995).

Rehabilitation of the physical environment and on-site land diversification provides a revamped environment for resident use and a multitude of uses which can benefit residents (Chan and Lee, 2008). Mixed-use in terms of providing on-site commercial, business, institutional and recreational uses also improves accessibility in particular to economically challenged groups who face greater accessibility and mobility issues (Kleinhans, 2004). Diversification of land tenure within targeted areas for renewal can bring about a greater socio-economic mix in disadvantaged areas and improve the liveability of an area through physical upgrade but literature shows that diversification cannot directly solve deep-seated problems of social disenfranchisement and disadvantage (Kleinhans, 2004). For these reasons, responsible renewal projects must involve strategies for including poor populations and reversing the conditions that led to their disadvantage and exclusion. Furthermore, involvement of these populations needs to be sustained after renewal is complete.

It has been suggested that training programs be set up within renewal areas for local residents in order to address these issues (Hull, 2000). This is one way in which residents, in particular youth, can gain valuable and transferrable skills that can lead to employability. This can contribute to the overall socio-economic wealth of a neighbourhood on an individual by individual basis. It has also been argued that training programs directly related to the type of work that will be undertaken in the physical

regeneration process need to be established so that residents can gain the appropriate skills to be employed in renewal projects (McGregor and McConnachie, 1995). In this scenario, residents can directly contribute to the improvement of their own neighbourhoods, take pride in giving back to their communities and become prepared to pursue future employment opportunities in their respective fields. This ensures that some portion of jobs created through renewal projects will go to residents and that neighbourhood regeneration remains in part a local effort (Hull, 2000).

Literature shows that active community involvement is likely to decline after the completion of regeneration projects (Kleinhans, 2004). Therefore, it is necessary to bring about mechanisms and platforms for the continued participation of residents. One theorist has argued that a "critical element of sustainability is the residents' ability to continue to have influence, control and leverage service delivery and the management of community facilities" (Hull, 2000, pg. 308). Such a scenario works to ensure that these facilities and services continue to work in the public interest and are able to adapt to changing community needs. Although participation is ultimately dependent on the people themselves, measures should be undertaken to promote collaboration between residents and the organizations and commercial interests that have been established in post-renewal neighbourhood.

Local entrepreneurialism should be encouraged in the search for tenants in newly created commercial spaces (Musterd, 2008). For this to occur renewal agencies need to be cognizant of the untapped skills and proficiencies of residents and thus mechanisms need to be established to promote dialogue between these different bodies. Furthermore, encouraging the involvement of community leaders in entrepreneurial activities can also have positive effects for a neighbourhood in that, following the model of social entrepreneurship, businesses can retain a focus on community benefits rather than purely personal gains (Johnstone and Lionais, 2004). Having people that are invested in their neighbourhoods and are integrated in local social networks operating businesses and other services contributes to the social capital of a neighbourhood while stimulating economic activity within it (Johnstone and Lionais, 2004). Such businesses can also become important focal points in the community.

d) Critique

Ultimately, the central focus of Tower Renewal's economic program is to highlight the multitude of cross-sectoral employment opportunities and the profits that it would bring about to participating firms.

Thus, the Tower Renewal Office has concentrated efforts in making retrofit projects as attractive to the private sector as possible and in communicating how the renewal process could be undertaken through professional studies, presentations and roundtable discussions with industry stakeholders. The reason for this focus is apparent – the Tower Renewal Office absolutely requires the private sector to take a proactive role in enacting tower retrofit projects. Moreover, the nature of this public-private partnership needs to develop in a way that is consistent with the Tower Renewal vision in order to further the program's environmental, economic and social objectives and bring about consummate change in Toronto's tower communities. For these reasons, getting the private sector on board, so to speak, is imperative.

In terms of Tower Renewal and employment opportunities, the focus has been laid overwhelmingly on outlining the how and to what extent highly-skilled employment activities such as planning and design, overcladding, HVAC, water conservation and roof replacement will be integrated into the project as well as the opportunities for enhancing industry capacity to integrate cutting-edge eco-friendly technologies (City of Toronto, 2010). Another focus area has been communicating the positive effects retrofit projects could have on the economy.

The Tower Renewal strategy however does not outline employment opportunities for tower residents in retrofit projects nor does it include a stipulation for providing vocational training for residents to empower them to take an active role in activities such as construction, site work and landscaping. In this sense, community members do not have an active role in the physical upgrade of the buildings and therefore are not granted opportunities for personal economic gain through employment in retrofit projects. In this sense, the link between Tower Renewal's social objectives and this aspect of its economic mission is not reinforced. As stated in the literature, problems of socioeconomic deprivation can be addressed through local employment in renewal projects. However, there is room for change in this regard. One idea that could be adopted is the creation of a smaller agency within the Tower Renewal Office that would focus on designing and mobilizing vocational training programs and developing strategies for integrating graduates of these programs into the labour pool for renewal projects. The creation of such an agency could, arguably, be better poised to improve the economic livelihoods of residents than allowed for in its current state.

In general, Tower Renewal's objective to enhance local economic activity is vague. The outcome is clear – a mix of retail/commercial uses, cultural organizations, community amenities, local economic production – but how this outcome is to be achieved is unclear. In terms of attracting service providers, the TRO has done considerable work in consulting with organizations such as the United Way and ANCs and enabling them to establish operations in targeted neighbourhoods. However, an analogous strategy has not been developed for encouraging local entrepreneurial activity in the reconverted ground floor units and newly developed storefronts that are to be part of post-renewal tower blocks. This however may be developed in the later stages of tower block renewal when these spaces are actually created and require tenants. Moreover, Tower Renewal's highly-held principle of fostering communicating with and engaging residents is a positive sign for the development of a strategy for enhancing local economic activity.

The East Scarborough Storefront and SRRA case studies show how residents can be fruitfully incorporated into neighbourhood revitalization. In the Storefront example, volunteers could participate directly in the revitalization of the organization's building and of their surrounding neighbourhoods, an experience which endowed them with certain technical and creative skills as well as nurturing a sense of responsibility to the community. The SRRA runs a multitude of special-interest and vocational training programs that can increase the future employability of its young participants. These programs allow people to transcend what may perhaps be the limited opportunities available to them in their neighbourhoods and enrich their lives in many respects. These are both good examples of how social and economic objectives can be consolidated.

The Storefront and the SRRA function well in this regard due to several reasons. First, they are community-oriented in that the sole reason for their work is to improve the lives of people in their respective communities. Second, this neighbourhood focus allows these organizations to work closely with residents and develop positive dialogue with them and gain their support. Through resident engagement, locals come to see these organizations as community assets and can come to be motivated to collaborate on projects. Third, the Storefront and the SRRA have capitalized on the expertise of other service providers and thus expanded their capacity for pursuing their objectives. For example, the Storefront is both a multi-service space and umbrella organization; this allows for the pooling of resources, exchange of knowledge and close collaboration between participating organizations. The SRRA has actively pursued partnerships in order to fund, mobilize and operate projects and programs.

Tower Renewal has shown progress in this area as well. For example, the introduction of ANC Rexdale in the Kipling Avenue pilot site has greatly bolstered capacity to link services with residents. However, the range of service providers needs to be expanded and support needs to be given to grassroots agencies, particularly in Toronto's most disadvantaged neighbourhoods. By integrating these service providers in revamped tower blocks issues of socio-economic disadvantage can be better addressed. However, over-programming should be avoided and flexible spaces that are informed by the needs and imagination of residents should be encouraged. This could include a storefront in which local artisans can sell their product, a communal computer lab, a boxing gym or a "jam" space for aspiring musicians. These kinds of spaces promote creative use. Incorporating some of the ideas and approaches of the Strorefront and the SRRA in the Tower Renewal strategy could increase opportunities for meeting social and economic objectives on the neighbourhood level.

3. *Social/Cultural Objectives*

a) Tower Renewal

"To enable apartment neighbourhoods to grow into fully vibrant, sustainable places that meet the social and cultural needs, expectations and wishes of residents."

Tower Renewal's social/cultural objectives are based on the idea that tower communities have the potential to become dynamic neighbourhoods able to accommodate a variety of spatial uses. Central to Tower Renewal's strategy is changing the strict land use segregation principles which informed the design of tower blocks and have restricted the development of an inclusive and dynamic public realm able to accommodate communal use. The provision of communal space is critical to its social/cultural objectives as this is seen as an important step in building a sense of community and fostering people-place relationships (City of Toronto, 2010).

A main feature of Tower Renewal's strategy is its promotion of tower blocks as self-sustaining urban "villages", consistent with the "complete communities" model espoused by the Province of Ontario's Places to Grow Act. This concept is closely related to Tower Renewal's aforementioned promotion of district energy and local productive uses but also takes into account the need to provide accessible

public spaces, on-site amenities and pedestrian-friendly, human-scale environments to improve quality of life within tower communities. This concept is summarized in **Fig. 3**.

Fig. 3. Tower Renewal's complete communities concept

Revamped tower blocks are envisioned as community building hubs. Tower Renewal's calculated infill strategy takes full advantage of the redevelopment opportunities present in the tower in the park model to bring about tower communities with an inclusive, multi-functional public centre. This is especially important for residents of Toronto's most peripheral tower blocks – for people who have a more difficult time accessing amenities, services and public spaces due to their distance, a neighbourhood mini-centre could greatly improve their lives.

Redeveloping tower blocks through land use diversification and the provision of communal spaces and amenities is part of Tower Renewal's strategy for reversing the legacy of disinvestment that has

hindered tower communities particularly those in the inner suburbs. Thus, providing unique living environs in tower communities is emblematic of the social equity drive that has informed Tower Renewal's social/cultural objectives. Redevelopment of these neighbourhoods extends to them the on-site benefits and advantages of communities in which there has been considerable investment thus putting them on an equal and fair playing ground. These strategies can work to fill the "gaps" present in the city's tower communities and create more spatially fluid environments and accommodate diverse experiences. In this sense, Tower Renewal envisions tower communities that are distinct places in themselves, places that will be able to meet the needs of residents.

An important feature of Tower Renewal's social/cultural mission is that of placemaking. Placemaking is a multi-faceted, collaborative planning and design approach to neighbourhood improvement predicated on the importance of nurturing functional dynamic public spaces for local populations (PPS, 2012). Tower Renewal's urban village proposal is in part a placemaking strategy in that it seeks to improve the public realm in tower blocks through the land use diversification and the creation of communal spaces able to support a variety of spatial experiences. This is configured as a response to one of the defining conflicts inherent in contemporary tower living – the incongruity of a heterogenous population and the relative homogeneity of experience supported by their living environment. By localizing these social opportunities within the neighbourhood, it is assumed that people would be able to look to their immediate environments for fulfillment of their daily needs and social aspirations. This has the potential to change people-place relationships and motivate people to see their communities as valuable assets. As stated in the Tower Renewal Implementation Book, its initiatives will facilitate these neighbourhoods to "grow into strong, vibrant communities that Toronto's diverse residents are proud to call home" (City of Toronto, 2010, pg. 11).

The Tower Renewal program recognizes the great potential for placemaking in peripheral tower communities that today seem most unsupportive of such developments. According to the Mayor's Tower Renewal document, "faceless buildings can evolve into important neighbourhood landmarks and the surrounding sites [can mature] into unique and vibrant communities" (City of Toronto, 2008, pg. 52). It recognizes that neighbourhoods presently characterized by placelessness have the potential to evolve into distinctive places in their own right.

In integrating the necessary physical infrastructure into these communities, the program would create the opportunity for the organic development of complementary social infrastructure to consolidate

these efforts and maximize the potential of revitalized tower communities. This is consistent with the Tower Renewal Office's advocacy of the need to empower local communities through revitalization allowing for residents to take greater control in local affairs (City of Toronto, 2008). Resident participation can work to change their neighbourhood reputations from being communities in need to being dynamic communities in their own right. Furthermore, the Tower Renewal program recognizes that the potential for such positive strides exists within these populations but that the proper tools need to be extended to them to realize this potential (City of Toronto, 2008).

b) Case Study Implementation

The focus of the SRRA's rehabilitation projects has been mostly on social issues. Due to the San Romanoway's neighbourhood's issues with crime and safety, the first step on the agenda was the completion of safety audits to target areas for improvement within the tower block. After the physical environment was made safer for residents and, therefore, the environment was made more accommodating for recreational use, the SRRA focused on the providing safe, accessible spaces for a diversity of positive uses in recognition of the lack of such spaces in the Jane-Finch area.

The SRRA defines its mission as being to "create a sense of belonging in the San Romanoway by assisting families, individuals and groups to support each other by building a safer and healthier environment" (SRRA, 2012). As discussed in previous sections, a sense of belonging brings about strong place attachments and the internalization of sense of place, and therefore personal investment in these places. A revitalized San Romanoway community offers more opportunities and therefore experiential activities for its residences; these opportunities and experiences offer substance for local pride and the development of place-based identity. In this sense, one's neighbourhood extends opportunities than restricts them and its spaces expand the capacity for public life. The mission statement stresses the communal nature of such efforts and that coordination between institutions, service providers and residences is crucial to bringing about change in inner suburban tower communities.

The SRRA approach is similar to the ideas behind Tower Renewal – improving towers, diversification of land uses, reimagining tower communities to expand their capacity for public life, creating sustainable connected communities for example. Since the SRRA was founded, crime and vandalism have dropped significantly, vacancy rates are lower and resident satisfaction rates have skyrocketed (CKC, 2011). As

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one resident stated in a 2011 Toronto Star article: "Now, this is more of a community. When you see your surroundings improve ... you bring a sense of ownership to resident". The SRRA example offers a local best practice that can be considered in Tower Renewal projects, particularly in the most marginalized and amenity-poor tower neighbourhoods.

The aggregate effect of the flexible program spaces provided in the buildings is a kind of community centre that has become the epicentre of community life in the tower block and a tangible expression of the community's investments in their neighbourhood. The SRRA has taken on an important role in the social health of the greater Jane-Finch area by extending participation in programs not only to building residents but people from neighbouring communities, many of which are underserviced. What has occurred in San Romanoway supports Tower Renewal's postulation of rehabilitated tower blocks acting as community building hubs. The towers have evolved, under the leadership of the SRRA and with the support of local populations, to become distinct places in their own right.

The East Scarborough Storefront also operates on this idea of providing a space that can become the central focus for a community. The Storefront, however, is not located within a tower block but instead is located in an area with many high-rise buildings. In this sense, it offers an example of how a facility can address community needs for a multitude of proximal communities. In terms of bringing about vibrant places in what could be termed architecturally monotonous areas, the Storefront has focused on beautification of the natural environment and aesthetic distinctiveness in the design of the facility. The physical design of the centre is intended to be a manifestation of the creative energies behind the Storefront and the innovative social capital produced within it. Therefore, the Storefront challenges assumptions and prejudices of the kinds of places that can exist within the inner suburbs and consequently promotes the need for such imaginative and dynamic places in these areas.

The Storefront offers a unique vision of how community renewal projects can take place in the inner suburbs and how residents can engage with the built landscape. What the Storefront has done is provided these opportunities to the community, opportunities which work to bring about different activities and spatial uses, people-place relationships and avenues for strengthening community bonds. The Storefront's plan is in line with the tenets of Toronto's Tower Renewal and a case study of the surrounding tower neighbourhoods has been embarked on by the Tower Renewal Office (Lind, 2011).

Such developments are thought to have the potential to help mobilize revitalization in high-rise communities (Lind, 2011).

In terms of Tower Renewal's social objectives, the focus of the 2667 and 2677 Kipling Avenue pilot site has been on the provision of communal space. The Tower Renewal Office has endeavoured to connect to external service providers to animate reconverted units cum-communal spaces by designing and leading programs that address the social, cultural and recreational needs of residents (City of Toronto, 2010). Multi-lingual outreach seminars and welcome packages have been developed to connect diverse populations to these programs and with one another.

Efforts to improve children's' play areas, introduce outdoor street furniture on the property and develop an outdoor gathering area that could accommodate off-the-truck produce vending are all indicative of positive steps towards enhancing the public realm in the community.

c) Literature Review

An important feature of tower redevelopment beyond the physical upgrade of buildings themselves, is the modification of tower blocks to make them more conducive to communal activity and more supportive of a variety of uses. As tower blocks were, for the most part, built according to standardized plans and design strategies, the sites themselves are reflective of the mass production techniques behind their conception and realization. As a result, these neighbourhoods are often non-distinctive in that their physical properties and overall "look" and "feel" were determined largely by the functionalist aesthetic espoused by planners, a paradigmatic preoccupation which overrode concerns of local specifities, culture and geography. In other words, tower block neighbourhoods did not come about organically.

Placemaking is a planning philosophy and strategy that seeks to reverse such conditions. Its ideas are informed by the relationships between humans and built spaces and the emotions, conditions and spatial experiences these relationships illicit. Placemaking refers to the "creation of built environments that impart a distinct sense of place of an area while meeting basic physiological and psychological needs of people" (Al-Kodmany, 2011). Thus, placemaking as a planning and community development response came about through the recognition of the limitations present in existing spaces as well as the

need for transforming said spaces to encourage greater use by people. People animate spaces and thus imbue them with meaning – an important condition for nurturing community consciousness. As people who will be using these spaces are central to the discussion, the placemaking approach is invested in the importance of a flexible community consultation process (PPS, 2012).

Placemaking is informed by concepts of place attachment and sense of place as explored in human geography. For these reasons, its philosophies and design principles are people-centric. The notion of place implies both a formal conception of geographic parameters and location as well as a subjective geographic experience (Relph, 1976). Place is space that is lived in, therefore coded through human experience and the meanings endowed to the space (Pask, 2005). Recognition of the distinctiveness of place is the internalization of the meanings that places hold for people. A sense of place communicates the unconscious subjective feeling of belongingness and affinity for a place, felt as an individual and as a member of a group (Relph, 1976).

As stated in the Background section, the culture which guided the development of Toronto's towers was not conducive to bringing about distinctive places. The modernist planning regime under which Toronto's tower blocks came about was invested in the idea of the manipulability of landscapes to maximize efficiency and productivity. In creating communities through standardized, large-scale approaches, planners denied the value of local contexts and people-place relationships. The result is what has been termed a geography of placelessness brought on by the creation of uniform places undistinguishable from one another, providing for the same avenues of experience (Relph, 1976).

In order to reverse conditions of placelessness, renewal must be sensitive to local specificities. It is argued that "regeneration has to be context-specific, building on the [existing] networks between individuals and harnessing the resources and enthusiasm of residents" (Cattel and Evans, 1999, as citied in Hull, 2000, pg. 306). Furthermore, residents must be involved in the process so that local sensitivities are integrated in the renewal strategy and so that community leaders are not alienated from projects (Hull, 2000). Resident participation in renewal projects is one pillar around which community bonds can be strengthened.

One of the strategies for reversing placelessness and bringing about neighbourhood distinctiveness is the diversification of land uses particularly in a way that allows for the development of an inclusive and

dynamic public realm able to accommodate communal use. Diversifying land use in tower communities would thus open up tower blocks to opportunities for common experience and provide for the public articulation of social relationships (Relph, 1976; Blokland, 2008). This is particularly productive in neighbourhoods that are dominated by residential and therefore private uses (Talen, 1999). Communal spaces allow for congregation, interaction and communication, creating shared focal pints that serve as a "counter-pressure to community fragmentation" when such activities are largely privatized (Talen, 1999, pg. 1364). This would bring about functional and dynamic neighbourhoods able to accommodate an active and inclusive public realm.

Neighbourhood space is defined by high levels of interaction among residents, shared interests and communal spaces and locally-derived place attachments; it is these conditions which work to transform neighbourhood space into a unique place in its own right (Perdikogianni, 2007; Witten, 2010; Talen, 1999). Neighbourhoods marked by diverse uses, have more avenues for people-place identification – neighbourhoods are home but are also sites of entertainment, debate, play, work, creativity and community. These additional dimensions transcend the neighbourhood-dormitory dialectic and provide places for multiple experiences and meanings. It is these dimensions which bring about local distinctiveness. Literature supports the idea that neighbourhoods with a communicable identity and a locally-invested population are an indicator of increased social capital (Tuan, 1974; Relph, 1976; Manzo, 2008).

In areas in which few emotional links or opportunities exist to foster place attachments and in situations where they do, residents may not have the physical or economic ability to capitalize on these bonds through grassroots neighbourhood improvement (Brown, 2003). Integrating residents in the renewal process can work to correct this situation during the revitalization of their communities. Furthermore, through gradual interventions that expand local opportunities available to residents, place attachments can be fostered, setting the foundations for broader neighbourhood revitalization post-renewal (Brown, 2003). Such a development could also work to bring about a more independent population with greater willingness and ability to take control and influence the direction in which their community develops.

Resident participation can work to localize power and protect the common interests of the community. Efforts of neighbourhood networks can be thought of as constituting local-level social infrastructure building, expanding community capacity to care for and represent itself, offering support for residents

and resisting marginalization (Boudreau and Wood, 2011). Developing a semblance of local place-based culture is important for nurturing feelings of commonality, mutual interest and civic pride, all emotional qualities that can manifest themselves in resident involvement in issues which affect the community at large. In this sense, the social objectives of renewal can continue to be furthered after the completion of the physical revitalization of a community itself.

Furthermore, a highly developed sense of place predicated on neighbourhood distinctiveness is economically and socially advantageous for communities (Dale, 2008). All these factors coincide to present a positive image of a neighbourhood that is disseminated to the entirety of the city; such conditions can work to attract outside investment, motivate the establishment of amenities and services and increase a neighbourhood's political currency. For example, literature argues that the presence of community resources is an indicator of the "wealth" and "health" of a neighbourhood in that access to public services and amenities is one way in which social inequities can be mitigated (Witten, 2010). This also works to challenge the "perception and reality of social exclusion" (McGregor and McConnachie, 1995, pg. 1590).

d) Critique

Several factors point to the potential of Tower Renewal for realizing its social/cultural objectives. For example, the program foregrounds the needs of disadvantaged communities and is informed by a strong social equity drive. Transformation of tower blocks is intended to reverse the history of structural inequity and unevenness in the inner suburbs by extending them the on-site benefits and advantages of communities in which there has considerable investment. At the present moment, infrastructure inequities have brought about an economically challenged, increasingly vulnerable population in inner suburban areas. Residents have to contend with existing networks which, in essence, are not designed to effectively support their patronage and respond to their needs. Networks include public transit systems and the geographic distribution of community facilities, service providers and employment areas.

Tower Renewal argues that there is not an inherent problem in the tower block form itself, but instead that the problem lies in how these communities have been maintained, serviced and connected to their respective areas, largely the result of strict zoning and disinvestment which has discriminated against

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the realization of the full potential of these communities. Amongst other things, Tower Renewal can be thought of as a campaign for reversing these conditions and promoting opportunities for community improvement through reinvestment and incremental infrastructure development. In bringing attention to contemporary inequities and systemic prejudices in metropolitan governance and offering a strategy as to how this situation can be reversed, Tower Renewal can be said to be indicative of growing dedication in Toronto to the idea of citywide integration through the improvement of individual communities and the linkages between them. This gives credence to the idea that the inner suburbs need not be simply an afterthought, but an integral part of responsible and sustainable city building.

To maximize potential for success, Tower Renewal has been co-opted as a participating body in the City of Toronto's Committee on Integrated Place-Based Initiatives, an inter-divisional planning roundtable bringing together senior staff to discuss and oversee the coordination of revitalization strategies (City of Toronto, 2010). Under this system, the Tower Renewal Office can benefit from the expertise and knowledge base of other departments and coordinate activities with them thereby bringing about an integrated approach to tower block renewal. Furthermore, this consolidated approach ensures that departments are synchronized with one another and that Tower Renewal initiatives are consistent with the work of other municipal departments.

As stated in the literature, resident participation is recognized as an important prerequisite for successful neighbourhood revitalization. So far, Tower Renewal has a proven track record in this regard as it has been effective in organizing community consultations and design seminars, safety audits and researching options for involving residents in the planning and implementation of projects. However, given that pilot projects are in their preliminary stages, it remains to be seen how resident involvement can be sustained in the coming years and what opportunities will be afforded to local populations for the management of their shared spaces.

Furthermore, the Tower Renewal vision both accommodates and is dependent on the involvement of service providers and other organizations for furthering its social objectives. Such organizations are recognized as experts in their respective fields and thus are able to have a greater impact on targeted communities than if the Tower Renewal Office took on these roles itself. According to relevant literature, "a range of solutions and the expertise and resources of diverse partners are required to deliver services which make the links to residents' needs and tap their creativity in new and innovative

ways" (Hull, 2000, pg. 309). The need for partnership with service providers is arguably most pronounced in the most underserved and disadvantaged communities. Tower Renewal also benefits from the presence of community development programs that have been established prior to the advent of Tower Renewal. In these areas, Tower Renewal can build on what are existing neighbourhood networks and service provider-resident relationships and, in conjunction with existing organizations, pursue mutually reinforcing goals. An example of this is the Action for Neighbourhood Change (ANC) offices in the Priority Neighbourhoods of Rexdale-Jamestown and Scarborough Village, containing the 2667 and 2677 Kipling Avenue and 215 Markham Road pilot sites, respectively. In the case of the Kipling Avenue pilot study, the leadership of the Tower Renewal Office allowed for the establishment of the local ANC's offices within the towers themselves.

Tower Renewal's sensitivity to the local dynamics of tower community's and its advocacy of placemaking is supportive of a context-specific approach to redevelopment. Tower Renewal is invested in the idea that each community can follow its own distinct path of development. This points to a central paradox in the Tower Renewal model – it is at once a context-specific redevelopment initiative and a comprehensive rollout strategy. The physical upgrade and energy retrofit aspect of Tower Renewal is intended to be replicable and the standardization of this approach is to work to expedite the implementation of such upgrades for towers across the city in the most cost-efficient manner possible. However, such an approach will be ineffective for meeting the program's social/cultural objectives. Therefore, to best address local specifities and context-bound issues it is necessary to avoid sweeping standardized approaches.

The community itself and its geographic and socioeconomic characteristics should determine the social infrastructure and the public spaces that are to be developed. Design specifications, service provision and programming should be reflective of these characteristics. Tower Renewal's urban village concept should not be accepted as a one-size-fits all approach but rather as a flexible ideal that can be changed and reshaped according to local specifities. Continuing to collaborate with service providers and other organizations that hold intimate knowledge of their catchment areas and their peoples is critical to the success of context-specific redevelopment. The examples of the East Scarborough Storefront and the SRRA are testament to this idea.

One criticism of Tower Renewal is not particular to the program itself but instead is of the limits of what place-based strategies such as Tower Renewal can achieve in marginalized neighbourhoods. The current state of towers in Toronto is the product of several phenomena including infrastructural inequities, housing discrimination, the racialization of poverty, the perpetuation of poverty concentration and inner suburban disenfranchisement. A general criticism of place-based revitalization strategies is that they do not adequately recognize that context-specific problems are not the product of neighbourhoods themselves but instead of greater societal phenomena and structural forces (Cowen and Parlette, 2011). These approaches assume that wider socioeconomic problems can be tackled effectively by targeting specific neighbourhoods. Place-based poverty reduction strategies have been particular criticized for inherently holding such assumptions (Cowen and Parlette, 2011). In other words, simply changing conditions within a neighbourhood cannot directly alleviate all the afflictions and inequalities experienced by its residents.

Literature argues that "spatially targeted approaches [need to be] linked to, and supported by, wider "aspatial" or generally available, often universal, policies for health, social assistance, employment, innovation, and the like" (Bradford, 2005, pg. 9). Therefore, an initiative such as Tower Renewal requires support from upper-level governments to invest in general public services that work to address social polarization, poverty concentration and inner suburban disadvantage. This includes income support, child care, health care policy and employment and educational opportunities (Bradford, 2005). In order to meet its wide-ranging social-cultural objectives and achieve the comprehensive transformations described by Tower Renewal rhetoric, the TRO needs to be equal parts lobby group and place-based renewal agency, pushing for greater support from federal and provincial governments and overcoming location-specific challenges through socially-conscious neighbourhood revitalization. Of course, success is limited by the narrow urban agenda of Canadian upper level government but this discussion is outside of the scope of the paper. However, engaging in spatially-targeted programs allows for greater understanding of how sectoral policies are work on the ground and points to strengths and weaknesses in general public services (Bradford, 2005). Therefore, in its pilot studies and successive tower block revitalizations, the TRO can gain considerable insight and experiential knowledge in this regard and continue to develop strategies that work within as well as transcend the limitations of general public service provision.

It can be argued that one of the advantages of place-based strategies is their "laboratory-like" approach. In other words, lessons learned from projects undertaken in a specific area can be applied to other areas. Strides made in pioneer projects like Tower Renewal's four pilot sites can, in effect, challenge misperceptions about these areas, shape attitudes in respect to the importance of such projects, create a political climate that is more open to tower revitalization and, ideally, influence policy makers to create legislative frameworks to enable the widespread mobilization of such efforts as well as push for greater support from upper-level governments. Neighbourhood revitalization projects could have the aggregate effect of ameliorating social problems across greater areas through spillover benefits.

Another potential shortcoming of the Tower Renewal approach speaks to general criticisms of placemaking processes. Placemaking, due to its focus on bringing about change through design, often tends to be end-based (i.e. the building of an amenity) rather than outcome-based (i.e. the effect that it will have on people's lives) (Lanham, 2007). Simply providing outdoor furniture or a community garden in a tower block will not necessarily bring about social cohesion. Such amenities can create a more pleasant built environment but the growth of a sense of community is dependent on how residents animate these spaces and the networks that they create within their neighbourhoods. Uses should not be prescribed but instead should be influenced, as stated earlier, by local needs and location-specific challenges. The institutionalization of placemaking by professional firms has led to a commonly accepted check-list of conditions and interventions that are necessary to successful places. Informing these check-lists is a "build it and they will come" attitude that can potentially lead to over-reliance on the idea of community betterment through design. This can be problematic when it leads to a standardized application of placemaking principles across neighbourhoods.

For these reasons, Tower Renewal should ensure that local residents are integrated in the placemaking process wherever possible. Ultimately, people should determine what a successful place is rather than a set of guidelines. Furthermore, placemaking is often defined by rhetoric of redemption through design (Lanham, 2007). This is reminiscent of the environmentally deterministic attitudes of the planning and design approaches that exacerbated problems associated with tower blocks in the first place. Attention needs to be afforded to the outcomes of newly introduced amenities and spaces – how they can promote flexible use, how they can support the organic development of neighbourhood networks and how they can improve the lives of residents young and old. Tower Renewal should be careful to avoid the paradoxical standardization of placemaking by opening up the processes of nurturing distinctive

places to the people themselves, allowing for the expression of vernacular traditions, local histories, geographic specificities, diverse backgrounds and providing a common platform for community building.

CONCLUSION

Analysis of the environmental, economic and social/cultural objectives of Tower Renewal in conjunction with relevant literature and the case studies has highlighted the strengths, weakness and opportunities of the Tower Renewal model. This discussion has shown that Tower Renewal cannot stand alone – it requires inter-departmental and government support to integrate renewal-related initiatives and accommodate its ambitions for comprehensive change, it requires the expertise and operational capacity of service providers and other organizations to leverage results and meet the program's limitations for mainline service planning and it requires local input to make revitalization work effectively for residents and the city. Given uncertainty regarding funding, costs of retrofit, building owner fragmentation, prohibitive zoning and structural limitations to enacting neighbourhood revitalization, the program will have to adapt and make compromises in order to continue to meet its objectives under less accommodating conditions. For example, the East Scarborough Storefront and SRRA examples speak to how creative city building and community improvement in tower neighbourhoods can occur outside of the Tower Renewal model. Given an administration that may not support Tower Renewal, these examples show how small-scale revitalization can be undertaken to bring about large-scale changes in the lives of residents.

Analysis of the Tower Renewal model and the case studies has also demonstrated the strengths and shortcomings of organizations for service delivery and resident integration. For example, it has been shown how smaller non-governmental organizations operating under a specific community focus have been able to effectively engage residents in target communities. Furthermore, it has also been argued that such organizations are better equipped to address the economic livelihoods of a community on the local level through skills training and inclusion in community revitalization programs. On the other hand, larger organizations, such as municipal agencies like Tower Renewal, have a greater capacity to take on ambitious environmental projects such as the installation of new green-friendly technologies in tower blocks. This discussion has pointed to the great opportunities for collaboration between governmental agencies, non-governmental organizations, social service providers and residents for leveraging results and brining about positive change in Toronto's tower blocks.

Placemaking/Revitalization Considerations

Consistent with the paper's placemaking focus, nine placemaking considerations have been highlighted. Drawn from policy documents and the literature, these are presented as important considerations to inform placemaking projects in tower communities. They are as follows:

1. Creating a unique sense of place is a critical component in successful tower revitalization and community building.
2. Community consultation is a necessary prerequisite for the development of context-specific revitalization strategies.
3. Redevelopment needs to be sensitive to local specifities and unique geographic and social contexts to in order to avoid problems associated with standardized, one-size-fits all approaches.
4. Redevelopment needs to be reflective of the population to facilitate the development of an authentic place-based culture.
5. Infill development needs to provide diverse uses for the population, in particular amenities necessary for daily life and inclusive social spaces.
6. Partnerships with various agencies, social services providers and neighbourhood groups are crucial to successful community building.
7. Gradual infrastructure investment can be compounded and leveraged through citizen engagement.
8. Revitalization strategies should work to forge new inner suburban aesthetics and develop dynamic modes of life-work-play in tower communities.
9. Tower redevelopment projects offer the opportunity for influencing policy change in an effort to create the conditions for city-wide implementation of place-based renewal initiatives.

Recommendations for Future Research

Due to time constraints, literature limitations and the scope of the paper, certain dimensions of tower revitalization could not be discussed. However, there are significant opportunities for future research

that can enrich our understanding of tower revitalization and its effect on the environment, the economy and on social life and community relations. These focus areas include:

- Develop different approaches for how to pursue Tower Renewal goals given varying degrees of funding, building owner support and accommodation for different uses through rezoning; understanding how strategies will need to be changed under these hypothetical scenario's can improve the TRO's preparedness and ability to respond to changing conditions and structural limitations.
- Develop financing arrangements for small-scale business ownership and local entrepreneurship in tower communities (Stewart, 2010)
- Delve deeper into opportunities for the enhancement of local economic activity in tower blocks and the integration of educational resources into on-site social infrastructure
- Develop strategy for resident engagement in the physical and planning aspects of the renewal process inspired by experiences in this regard by the non-profit sector
- Conduct research regarding balance between programmed spaces and non-programmed spaces and the importance of both in healthy social life and community building
- Investigate strategies for the promotion of green-friendly behaviours in among residents
- Research opportunities for innovative partnerships to further Tower Renewal goals

In the present moment, there is a relative dearth of academic works on tower revitalization and placemaking. Further research in this field can positively contribute to our understanding of the practical, political and social dimensions of community renewal in a specifically high-rise context. Given the global nature of the high-rise typology, the need to understand how to contend with declining conditions in tower communities will become increasingly important.

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