1-1-2010

Dynamic Equilibrium : The Intensification Of Toronto Avenues

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DYNAMIC EQUILIBRIUM
THE INTENSIFICATION OF TORONTO'S AVENUES

By

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A design thesis | project

Presented to Ryerson University

In partial fulfillment of the

requirement for the degree of

Master of Architecture

Toronto, Ontario, Canada, 2010

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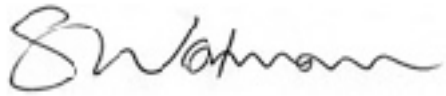

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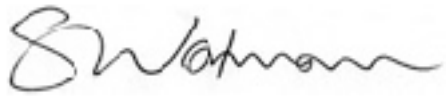

Abstract of Thesis Project

Dynamic Equilibrium The Intensification of Toronto's Avenues
Master of Architecture, 2010
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This thesis envisions a successful intensification of Toronto avenues, using the vehicle of newly formulated design guidelines for higher-density, mixed-use, mid-rise built form. The aim of this thesis is to invigorate development along Toronto's historically relevant yet often contested main streets, in a way that recognizes infrastructure as a defining element for culturally and economically sustainable urban development.

Acknowledgements

Thank you Masha Etkind for your guidance and support. Thank you Oren Tamir for your guidance and insight. Thank you to the Ryerson faculty for your support.

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Introduction

It has often been said that the city is an ideal setting for the creation and development of ideas. It should then be no surprise that many of our richest ideas are likewise about the creation and development of our cities. A modern day account of the city of Toronto is surely one of prosperity, yet not without its share of growing pains and challenges. The establishment of North America's suburban way of life, that which was created over the 20th century has been closely associated with an individual pursuit of happiness, amidst a backdrop of the continual economic expansion and prosperity. However, this way of life has also been closely linked to the rapid progression of urban sprawl and of growing dependency on non-renewable resources. Recently many warnings have been yielded, predicting society's inability to continue upon this path. Numerous concerns have been addressed with regard to what some have labeled as North America's unsustainable way of living; a living dependent on the consumption of natural and economic resources, those that are feared to be in significant decline. Simply stated, Toronto can no longer afford to absorb the cost of paving new roads and providing the associated services that accompany them, let alone continuing to maintain its current broadened infrastructural obligations. The city is now actively pursuing alternative plans to locate future development more compactly in the 21st century. Surely great change is upon us.

The current city of Toronto Official Plan adopted in 2002 has endeavored to steer the city toward a more responsible existence. It was created to help manage new development in a manner that can protect the environment, support economic prosperity and help our community achieve a high quality of life. Intensification is a key word that describes the initiative to safeguard the community against unsustainable future growth. As more than half a million new residents, both new immigrants and former suburbanites are anticipated to settle in Toronto before the year 2031, the Official Plan has sought to direct this population toward the identified growth areas which total approximately 25% of the city's land area. These areas include the existing downtown core and waterfront area, four identified centres, (smaller outposts within the greater Toronto area (GTA) encouraged to model characteristics of the above mentioned downtown core) and Toronto's existing avenues: lands rich in existing city infrastructure.

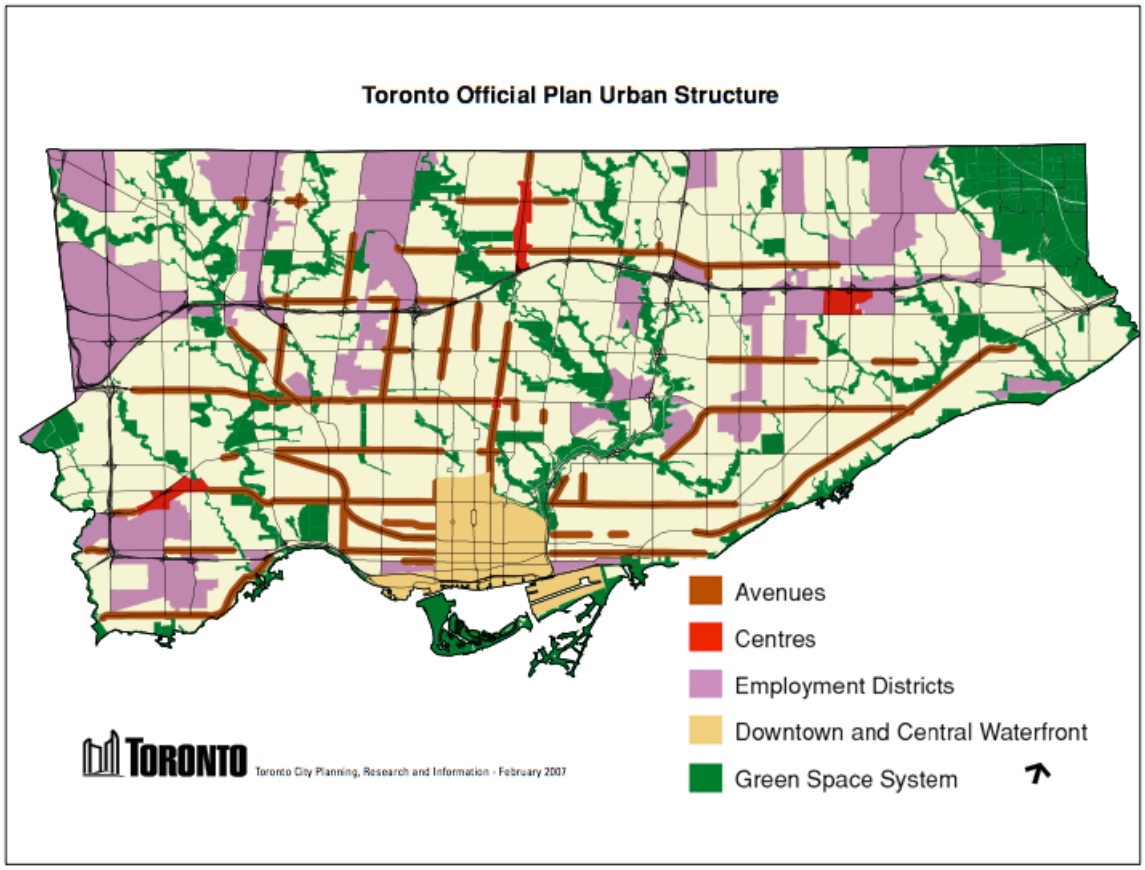


Fig. 0.1 Image courtesy of the city of Toronto

The Avenues Initiative found within the Official Plan aims specifically to intensify Toronto's key main streets. This is where a wealth of retail and community services and public transit is currently in place, and coexist alongside modestly scaled and often character-rich, pre-war stable residential neighborhoods. The Official Plan clearly recognizes the quality and value of Toronto's existing avenues and their adjacent communities and seeks to protect this character. However, the plan also identifies the avenues as rich breeding grounds for intensification to occur immediately, and calls for this development to take place building by building gracefully over time. Furthermore, the plan calls for the framework for new development to be established by new zoning by-laws and design guidelines, created in consultation with local communities.

The ideal suited architectural vehicle for such intensification on the avenues is believed to be that of mid-rise structures and Mid-Rise Urbanism. The city of Toronto has generally defined mid-rise buildings within a range of 4 to 12 stories and those that are taller than a typical house or town-home and approximately as tall as the street or

public right of way is wide. Additional characteristics include structures commonly constructed in concrete and containing transparent ground floor commercial spaces, common circulation, elevators and parking.

As Robert Freedman, director of Toronto's Urban Design and Planning division states, the Avenues Initiative in our Official Plan is a policy tool designed to transform Toronto's 162 kilometres of Avenues into a city of great avenues. These avenues are already functioning as neighborhood commercial corridors, with a broad range of uses, including residential. However, Freedman maintains that our avenues are under-built, and with the city's continued growth, it is no longer suitable for our main roads to be lined with two-three story mixed use buildings in older areas and a jumbled assortment of single-story mixed commercial buildings, strip malls and apartments in newer areas. CIty estimates show that if all 162 kilometres of the avenues were to be built to an average of six stories, then 120,000 housing units can be provided, accommodating an additional 260,000 people. The aim to intensify through the creation of higher-density mid-rise housing options in the context of mixed-use communities will support the city's green agenda by reducing the demand for housing in the under-serviced areas of the GTA.

Freedman is quick to point to redevelopment such as the freehold town-home development located at 1400 Eglinton Avenue West at Fairleigh Crescent, immediately west of the Allen Road as a key example of what Toronto avenue intensification should not be. These three storey residential-only units exist on the avenue, significantly underdeveloped in density and severely contextually mismatched amongst its traffic-congested surroundings. It is apparent that these town-homes are not private enough to offer an ideal residential setting, yet not public enough to offer any amenity to the avenue community. Many interests, including the city of Toronto's urban planning envision a richer form of avenue intensification, that of mid-rise developments capable of harmoniously balancing the contradictory needs for public community and residential privacy. This form of development is believed to be the formula for success of many of the world's finest cities and is surely one that can thrive locally.

Fig 0.2 1400 Eglinton Ave. West town-homes, left courtesy city of Toronto, right courtesy MLS.ca

As the intensification of Toronto's downtown-waterfront and designated centres has robustly occurred over the past decade, a similar intensification of Toronto's Avenues has not. Despite recent efforts of city planning to encourage an environment of green-lighted approval and opportunity, the current perception of avenue intensification is that of wider-held skepticism toward the feasibility of Mid-Rise Urbanism.

In contrast to1400 Eglinton Avenue West, the city of Toronto has been forthright in displaying a small group of current developments that it believes to be far more successful models for avenue intensification. This list includes the Alexandra Gate Condominiums at Two Alexandra Boulevard at Yonge Street and the Montgomery Condominiums at 3085 Bloor Street West. These projects contain multiple higher-density residential units and mixed-use spaces within their six storey building envelopes, and have been displayed as models to emulate. But while these examples meet the current criteria for mid-rise classification, they appear to be far more closely associated with that of a high-rise development formula, a vehicle that has fueled the aggressive intensification throughout the downtown core. The high-rise model has commonly provided significantly greater floor-space ratios and therefore greater gross revenues for developers than smaller sized structures, but has also relied upon the availability of larger unobstructed areas of developable land, often free from contextual constraints. The Alexandra Gate, the Montgomery and the remaining above mentioned city development examples occupy large ideal corner sites, built on the majority of or all of its available city block frontage in parcels 30 meters or wider, capable of offering ideal access to quality dwelling spaces above and parking below. Such conditions represent

only a minority of sites along Toronto avenues, greatly outnumbered by smaller and narrower mid-block parcels of land, those without autonomy of their surroundings. Clearly the feasibility of modeling future mid-rise development from the likes of these examples is questionable.

Fig 0.3 The Alexandra Gate and Montgomery condominiums, images courtesy city of Toronto

An Outing Of Concerns

In 2005 the city of Toronto's planning division in association with the Canadian Urban Institute hosted a Mid-Rise Symposium, in an effort to explore opportunities for encouraging further intensification along Toronto's avenues. Simultaneously the symposium provided a chance to compile and address current community concerns for Mid-Rise Urbanism. Included in the issues addressed were perceived restrictions associated with zoning, egress, parking and methods of construction. Participants expressed that existing massing diagrams mandated to provide increased daylight onto city streets through the incorporation of regular setbacks within building massing was believed to be complicating the design process as it prevented a regular extrusion of floor plates from floor to floor. It was expressed that the requirements for inclusion of egress and parking amenities comparable to high-rise model standards had proven cumbersome at the mid-rise scale. Furthermore, an Ontario Building Code requirement to construct buildings, four storeys or greater solely in non-combustible concrete was believed to be inflating both cost and complexity of onsite construction. The practice of flying form concrete forming had been perfected in Toronto decades ago, in the context of high-rise developments with an abundance of adjacent lands for staging purposes and that of inexpensive resources. These concerns among others expressed, suggested that

the mid-rise building model shared similar if not identical characteristics, expectations and constraints to those of the high-rise model, only at an economical and practical disadvantage.

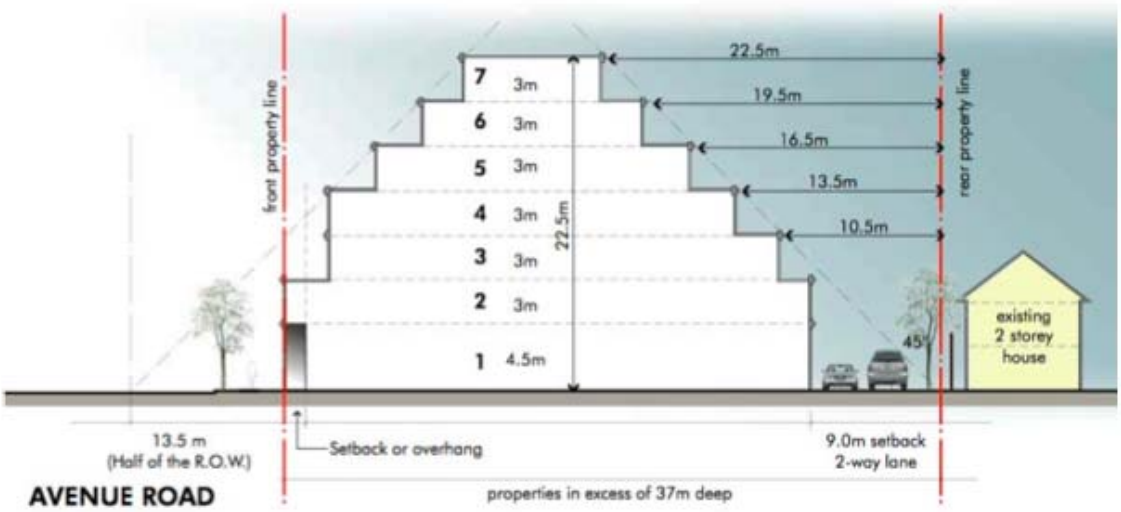


Fig 0.4 Typical avenue massing diagram, courtesy Avenue Road Avenue Study

Two additional key concerns voiced at the symposium were heard, first from the development community in the difficulty in their acquisition of developable land, and second from that of community resistance in the form of NIMBY'ism an acronym spelling "Not In My Back Yard." In an effort to plan mid-rise avenue developments that fit the mold of the requirements listed above efficiently, developers have sought to accumulate larger parcels of land. However the fine knit condition of avenues, with lots as narrow as 5-6 metres wide, accompanied with a complexity of fragmented individual ownership, often passed down from generation to generation, has made the consolidation of smaller lots a difficult task.

Toronto's numerous avenue studies have recognized the complexity of land acquisition. The studies prepared by private planning and urban design architects have attempted to further promote the Avenues Initiative of the Official Plan within their local context. The 2007 Avenue Road avenue study, which reaches North of Wilson Avenue to South of Lawrence Avenue West, acknowledges a lack of recent redevelopment in the area attributed to its complex lot and ownership structure. In response, section 3.6.2 identifies nine potential sites deemed appropriate for redevelopment. However the common characteristics of each selected site include larger than average lot widths and

depths, or corner lots adjacent to flanking streets, and all contain single-use, existing commercial structures. It is then no surprise that a tenth and even larger site not identified in the avenue study, has been the first to re-develop. Tribute Communities and Rio Can's 1717 Avenue Road, seven storey condominium currently under construction will replace the previous LCBO building and parking surface on a lot that spans an entire block, and one that is approximately twice as deep as the majority of the surrounding avenue lots at nearly 60 meters. The Avenue Road avenue study seems to reinforce what was expressed at the mid-rise symposium, suggesting only a minority of lots along Toronto's Avenues are appropriate for mid-rise developments, and also that only larger scale higher-density developments can actually break ground.

Fig 0.5 1717 Avenue Road development, top image courtesy Tribute Communities

It is perhaps no surprise then that a prevailing erection of a mere minority group of larger scaled avenue developments has initiated broader public skepticism toward all forms of avenue intensification. The suitability of mid-rise buildings defined as those which are as tall as the street is wide, in some cases 12 storeys tall, has been questioned, as many larger block-long developments have served to disaggregate the finer grained streetscape, psychologically encroaching onto the adjacent low-rise neighborhoods. As a result, a fear that permitting taller avenue intensification could result in gentrification and a greater destabilization of community balance has only fueled NIMBY'ism.

Presently the drag that weighs upon the City of Toronto's current model for mid-rise development threatens to stall avenue intensification from taking flight. As Freedman writes in his address to the 2005 mid-rise symposium, While the Toronto development community has cracked the code on point tower condominiums and long rows of townhouses, the secret to unlocking the mid-rise scale continues to evade us. It has been suggested that as the cost of energy and expense of suburban living increases as predicted, economics for mid-rise development will inversely improve. However economics alone cannot persuade a population, immersed in the longstanding practice of suburban sprawl, to embrace higher-density mixed-use dwelling.

But what if the boundaries that limit our existing models for mid-rise development could expand beyond that of the familiar high-rise typology? What if alternative contemporary models for formulating higher-density mixed-use developments could produce family living spaces as desirable as those found in suburbia? And what if these models could gracefully plug into Toronto's existing vibrant avenues. Then perhaps an environment that has struggled with conformity can transform into an environment of imaginative possibilities. I propose that to reinvigorate Mid-Rise Urbanism as an active and welcomed tool for avenue intensification, a dynamic redefining of mid-rise development is required.

01 The Case for Change

The public resistance that exists toward higher density urban living shall come as no surprise to those familiar with our city's past. Throughout the 20th century, various interests have endeavored to promote a dispersal of Toronto's population well beyond its traditional urban boundary. A rising reform movement would paint an image of urban dwelling in only the bleakest of colours, while government intervention legislated and financed a single-family home suburban alternative. Their resulting efforts have firmly infected community values, promoting the ideals of the suburban way of life, those that have been hard to part with.

1.1 Sprawl and the Suburban Dream

An early North American vision for the foundation of the suburban dream was that of luxury and exclusivity. Many cities witnessed the transformation of nearby farmlands to residential and leisure settlements for the financially elite. As Rosalyn Baxandall and Elizabeth Ewen, authors of Picture Windows - How The Suburbs Happened, states, between 1900 and the end of World War I, Long Island's North Shore saw unprecedented development. What had been a rural outpost of farmers and fishermen was transformed into a palatial country retreat for a new class of men made wealthy by huge industrial and financial enterprises that were reshaping America's economic landscape. It began as a trickle in the 1860's after the Civil War and gathered steam throughout the 1890s. What made Long Island so appealing to the new ruling class, those who made fortunes from steel, oil mining, railroads, and banks, was its proximity to the world's new commercial and financial center, New York City. America's then celebrity status economic elite helped to idealize the suburban image for the average citizen at the turn of the 20th century, taking advantage of Long Island's picturesque 'Gold Coast' un-city-like conditions.

However comparable exclusive suburban residential developments proved harder to cultivate outside Toronto city limits. Rosedale, now one of Toronto's most prominent residential districts was initially considered too remote a location for settlement in the late 19th century. As Tom Cruickshank and John De Visser, Authors of Old Toronto Houses state, in those early days, Rosedale's best asset was also its biggest problem. Although only a stone's throw from Bloor and Jarvis streets, the steep and wooded typography, particularly the Rosedale ravine was a persistent barrier that stifled

development for years. Moreover, the neighborhood was simply too far from town to attract much interest. Both William Botsford Jarvis in the 1850's and later nephew Edgar Jarvis in the 1860's failed to attract substantial investment toward their envisioned 'enclave of aristocratic estates' as local elite preferred more convenient southern locations along St. George, Sherbourne and Jarvis streets. In contrast to much of the American suburban evolution, Toronto's suburbs were first settled not by the upper class, but instead by its working class Blue Collar population.

At the turn of the 20th century the city of Toronto's area grew significantly, adding thousands of acres through annexation of it's adjacent districts. As Lawrence Solomon, Author of Toronto Sprawls - A History states, It was in the year 1883 that Toronto became land hungry and began to stretch forth ambitious hands to seize adjoining sections of the County of York. Such enthusiastic annexation, which included Rosedale, Yorkville, Parkdale and North Toronto was executed ironically to provide a supply of land for the city's envisioned population growth. However Toronto's annexation would produce a less than enthusiastic by-product, in the form of increased taxation to its ratepayers. As Solomon discusses, as a result of amalgamations, taxes in Toronto soon rose by more than 50 per cent. To bring municipal services in the annexed areas to Toronto standards, the city calculated, city taxpayers paid $2 for every $1 paid by taxpayers in the annexed areas. The resulting city inequitable taxation significantly accelerated both cost and dissatisfaction of city dwelling in the first decade of the 1900s, encouraging many to settle beyond city boundaries.

Amidst Toronto's rising associated costs, its working class population migrated north toward the largely un-serviced urban fringes in search of a more affordable existence. As Richard Harris, Author of Unplanned Suburbs – Toronto's American Tragedy 1900 to 1950 states, in Toronto, suburbs were settled by blue-collar workers who were in no position to insist on regulations and services; indeed, many preferred to dispense with such luxuries. Blue-collar workers constructed small-scale homes on small suburban lots on modest budgets and equally modest materials while managing to avoid both city taxation and restrictive building code. As Harris discusses, the cost of building a new home - building materials, labor and financing - rose more slowly than rents especially in the early years of the century. A growing disparity in the relative cost of owning and renting would have provided a further incentive for workers to buy. The intake of boarders or lodgers as a secondary source of income became common practice, while other workers purchased land for retail space on the avenues and lived above them. The

early decades of the 20th century was a period of prosperity for Toronto's suburban working class, who treated their homes as resources and sought to unlock its equity in efforts to achieve financial independence.

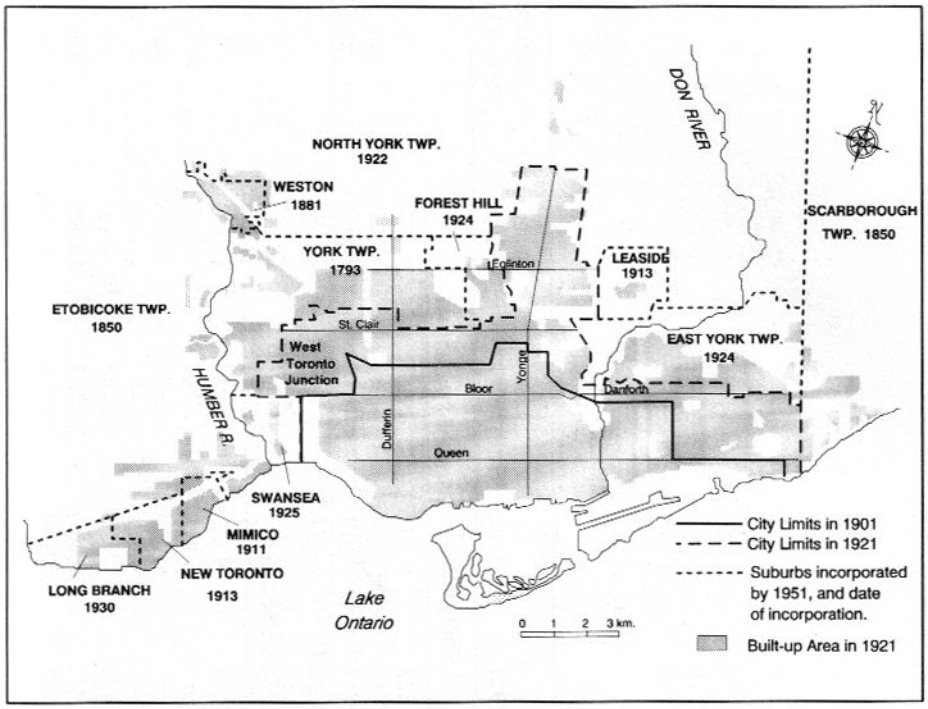


Fig. 1.1 Growth of Toronto map , courtesy Richard Harris, Unplanned Suburbs Toronto's American Tragedy 1900 to 1950

However a reform movement that was seeking the implementation of higher sanitary conditions in the name of greater 'social purity' had been developing for some time. This movement would soon dampen the prosperity of working class suburbs. As Harris discusses, urban reformers and early social scientists were concerned about the struggle for existence of immigrant and minority workers living in the shadow of city industry. Health and morality seemed to be at stake. Much of the reform effort would be focused on the characteristics and conditions of dwelling, attempting to restrict future higher density development.

The existence of multiple-unit-dwellings in their various forms were discouraged by reformers, and where possible prohibited. As Harris states, under pressure from reformers fearing the 'evils of tenements', Toronto in 1912 passed a bylaw prohibiting the construction of small apartment buildings – defined as three or more units – in residential neighborhoods. The practice of taking in Lodgers was also discouraged, while

conversely construction of larger homes with greater than six rooms was further discouraged on the basis that additional rooms would be used for lodgers. 'If more than six rooms are provided the tendency is to make up the additional expense by subletting to roomers, usually with injurious effect to home life.'

Reformers' disdain for the presence of lodgers within homes could only be equaled by their dislike for a lack of sanitary services. Doctor Charles Hastings, Toronto's medical officer of health who lead the reform efforts, argued that the presence of 'rear houses' built in backyards or lanes and outhouses and the absence of indoor plumbing – an absence that was then the norm – constituted 'a danger to public morals, and in fact an offence against public decency'. Pressure to reform sanitary standards would form. In 1913 city by-law number 6691 was passed "to regulate the installation of sanitary conveniences under the Public Health Act." Power was granted to force suburban homeowners without sanitary services to install basic plumbing at significant cost to the proprietor. Pressure continued in 1914 as Toronto passed a second bylaw giving its health department the right to inspect any and all homes. This was a dramatic financial blow to working class suburbanites and marked the beginning of a significant decline in home ownership. As Harris discusses, as late as the early 1920's, it was possible to erect a tiny suburban dwelling for the amount that the city was requiring low-income households to spend on plumbing.

The financial incentive that had initially attracted the working class toward the suburbs in the beginning of the 20th century had eroded. As Solomon discusses, during the 1920's, Toronto's suburbs had tried to provide more services than was prudent, leading toward large tax increases by suburban governments and to defaults by many residents. The desperate financial situation in the suburbs only became more serious after the 1929 stock market crash and the onset of the early 1930's Depression. As Harris states, as late as 1931 the suburbs were clearly more blue-collar in character than the city, and a majority of suburbs were heavily dominated by blue-collar settlement. During the second quarter of (the twentieth century), the balance tipped back. Throughout the 1930's and 1940's the working-class presence in the suburbs fell steadily. Inevitably a large number of working class citizens were forced out of their suburban homes returning to the central city, as renters rather than owners.

Toronto's city centre residents similarly made room for the migration of their former suburban neighbors by augmenting their existing living quarters, seeking to profit from the very same higher occupancy of which the reformers had warned. In the 1930s, an

astonishing 22 per cent of the city's single-family dwellings were converted to multiple occupancy, aided later on in the 1940's through city incentives to attract greater employment and rationing for the war effort. Reformers were temporarily forced to restrain their disliking for higher residential occupancies and largely unplanned densities within the city.

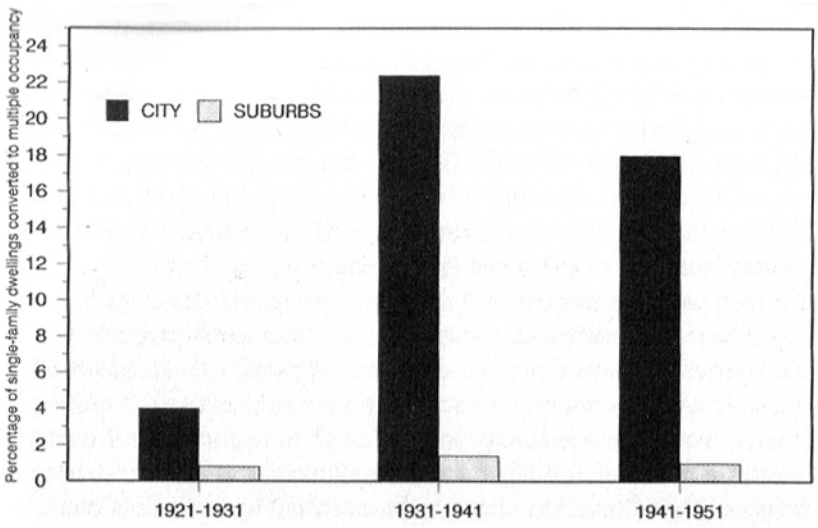


Fig 1.2 Growth of dwelling conversions, Toronto , 1921-51 graph, Courtesy Richard Harris, Unplanned Suburbs Toronto's American Tragedy 1900 to 1950

The period between the 1920's and the Second World War had resulted in a significant increase in densification in the City of Toronto, creating a tighter knit existence for many families doubling up. This crowded existence remained in contrast to interests of social purity that reformers preached. Such density was easily framed as an existence of necessity (that of the great catastrophe of war) rather than one of social ideals. As Solomon discusses, reformers resumed their pre-war discrimination of multiple family dwelling and communal housing, and further advocating for the greater suburban model. Crowded districts were deplored, but less as symptoms of poverty than as creators of deviants that reveled in licentiousness and other disreputable conduct, leading to sloth and poverty, lack of hygiene and disease.

Agencies such as the Toronto Housing Commission promoted single detached houses for their 'greater privacy' and individualism, qualities framed as integral characteristics of a healthy society. The Commission favoured private houses with yards. 'If a child cannot step outside the door of his flat without being on the property of others, or cannot play out of doors except on the street or in the lane, proper moral and

physical development is hardly possible'. Reforms made it clear that the very preservation of Anglo Saxon morality was at stake. Reformers favoured an idealized garden city movement founded by Sir Ebenezer Howard, where low density cities would be buffered among natural settings, far removed from the overcrowded conditions of the 19th century industrial city. As author James Howard Kunstler's work Geography of Nowhere – The Rise and Decline of America's Man-Made Landscapes discusses, The dream of the suburbs was the antidote to city life, and the antidote was going to be country living for everyone. The suburbs would then be a way of delivering that to the masses. As the era of great catastrophe of war was coming to a close, many efforts were made to bring 'crowded' living conditions to a permanent end, in a new era of cheap and ready energy and vast availability of land.

Unlike Toronto's initial economically unregulated phase of suburban growth, the following phase would be significantly subsidized through political policy. With the anticipation of the Second World War ending in the early 1940's, coupled with the pending return of 1,000,000 soldiers overseas, larger plans were laid to settle this population in rural and suburban districts. Additional concern regarding dense urban living was its ability to breed social unrest and unionization of labour, that which had been occurring in many North American cities and more profoundly with the 1917 Russian Revolution. Dispersing returning soldiers would be a first step in cultivating suburban communities, while avoiding a potentially dangerous accumulation of underprivileged serviceman.

The Veterans Land Act was created in 1942 for the purpose of providing soldiers and their families with land on the urban fringe to construct homes and to participate in part or full time farming. Similar plans had been unsuccessfully attempted to place returning First World War soldiers into rural farming roles with the 1919 Soldier Settlement Act. The Veterans Land Act was then planned as a compromise. As Robert England, Executive Secretary of the General Advisory Committee on Demobilization and Rehabilitation stated, 'the act would promote social stability and stave off the union movement.'

World War Two veterans began to apply for and received financing for half-acre lots in suburban areas. While many more soldiers requested financing for equitable urban construction, such financing was denied. As Solomon further states, housing loans were barred for construction of subdivisions of more than six dwellings or cityies with a population greater than 5,000. A distinct effort was made to demobilize returning

soldiers, often to their disliking. A majority of returning soldiers held no interest, capability or intension of participating in farming. However greater than 10 percent, and greater than 100,000 World War II veterans received such funding and played a key first step in populating the Canadian suburbs.

During the Depression era unemployment was a constant infliction for a large population, all but putting a stop to home construction and intensifying a housing shortage. The unemployed received financial assistance in the form of government relief payments. However many felt that public spending could be better spent on putting the recipients of relief to work on the un-serviced suburban land, while also creating a building industry. As Patricia W. Hart describes in her work, Pioneering in North York – A History Of The Borough, it was requested that the unemployed work for their relief money. Shovels and rakes were provided for the men to clean out the ditches along the streets. This was so successful that it was decided each man should dig a certain number of feet each day on the water-mains. Each man had so many feet to dig a week to be eligible for his pogey. The potential for making use of the unemployed in performing the otherwise difficult and expensive task of developing suburban infrastructure was envisioned as a public role to play.

Further government efforts were made in the creation of the Dominion Housing Act in 1935 to put people back to work. As stated by Herbert A. Bruce, Ontario's lieutenant-governor, at this very time money is going into relief at the rate of between $400,000 and $500,000 a month. That is, let us say, at a conservative estimate $5,000,000 a year in relief. No wheels are set in motion by this. Nothing productive is done. It does not stimulate employment. If taking the very lowest estimate, every house that was built during one year gave employment to one man during one year, and half the men employed were previously either in construction or in taking the places of those who would be brought into construction, this would mean that the city would save the relief of 1,000 families every year during the five years during which the building program continued. This is the lowest possible estimate. At the end of it all there would be something to show for the money expended, something accomplished. However as Hart continues to state, unfortunately, this work program was all but dropped early in the 1930's because it was driving the Township of North York toward bankruptcy. It cost the taxpayers more than straight relief because pipe and other supplies had to be bought.

Additional government acts to cultivate new housing in the 1930's encountered similar difficulty. Both the Toronto Co-Partner Garden Suburbs Ltd. later renamed the Toronto

Housing Company and the Toronto Housing Commission constructed low-cost publicly assisted housing in both urban and suburban areas. However both agencies were unsuccessful in creating reasonable affordability and accessibility to most Torontonians, and were forced to discontinue their efforts. Similar to North York's inability to publicly fund infrastructure development, as Solomon states, the failures of the Toronto Housing Commission and the Toronto Housing Company, led social reformers to believe that housing, to be efficient, needed to be done on a large scale. The public destiny of Toronto's suburban development would soon be met by private interest.

It was becoming apparent that suburban development required larger scale investment and reorganization from many sources. Government, not wanting to rely on countless smaller 'hammer-and-nails' contractors to produce needed housing, encouraged the formation of large building firms. As Federal Politician C. D. Howe states in author James Lorimer's work The Developers, Fundamental changes in the house-building process can only be brought about through the entry of larger-scale producers into the housing industry, and they could only enter upon such a business if they could anticipate a continued market, which would justify the necessary capitalization. Since the expectation of such market conditions has never yet seemed justified, the organization of the residential building industry has stagnated. It is only when large scale projects are planned that there are opportunities to introduce important features of industrial organization aimed to reduce the high labour costs in the building process.

Lorimer continues to state, for development to succeed, it required a steady and predictable stream of developable land. Municipality after municipality abandoned their efforts to keep up with demand for serviced land, and pushed the onus for servicing onto the developers. In exchange large development firms were permitted to acquire and bank large acreages of suburban land, achieving an oligopoly in the future supply of developable land. The large house-builders who got into suburban land assemblies did so, as they often point out, as a defensive move to ensure a regular supply of serviced lots. Often suburban districts were in a position to directly provide large parcels of land to developers. As Hart states, During the Depression North York did not seize either homes or farms from non-payment of taxes, although they sometimes pressured mortgage companies to pay up and add the amounts to the home mortgages. What they did seize were hundreds and hundreds of lots held by land speculators. Some had been subdivided before and after World War I but were never built upon because of the

Depression years. Large development would soon be responsible for the development not only of homes but entire communities.

Private and individual home ownership was a driving principle behind the reform movement vision for a suburban model. However suburban financing prior to the mid 1940's was largely prohibitive. Traditional lending institutions were hesitant to offer mortgages to suburban development, considering suburban residential mortgages too risky to provide and too remote to service. Traditional mortgage terms of the era were equally as prohibitive to the borrower. As Solomon states, home purchasers needed to provide down-payments of at least 40 percent of the property's value, mortgages lasted but five years and, if institutional lenders became risk adverse, they were under no obligation to renew the mortgages. Torontonians much like other North Americans did not yet have much experience with substantial long-term borrowing and were accustomed to making do within their means. The government sought out a method of inducing a more readily available supply of credit, in an effort to make suburban progress feasible.

The solution would begin in 1946 with the formation of the Central Housing and Mortgage Corporation (CMHC) following up on service performed by the Central Mortgage bank before its termination in 1939. The CMHC's central goal was to promote the development of remote areas by subsidizing private lenders, and permitting a reduced percentage of down-payment below ten percent, while also increasing the amortization period four fold. In 1954 The National Housing Act was created, offering banks government mortgage loans, and further offering insurance guarantees for institutional lenders, effectively reducing previous risk of suburban residential mortgage service. As stated in the City of Toronto's publication Your Home Our City – 100 Years of Public Control over Private Space, federal legislation made it easier for developers to build houses and for home owners to buy them. It was now economically viable for developers to build on a much grander scale, creating entire subdivisions rather than just a few homes for resale.

Similar lending incentives were created in the United States. The Veterans Administration and the Federal Housing Authority made loans available to the greater public with low interest rates, with little or no money down and with an even longer repayment schedule than the Canadian model, while also ensuring American mortgage lending institutions against default. As author John Palen's work The Suburbs states this was truly radical change. Banks suddenly wanted to make loans to millions of middle

and lower-middle class families who they previously would have spurned. Arguably a wider customer base had been created for development to house. Clearly new lending policy had altered both the financial and physical landscape of the previously rural outskirts of Toronto, greasing the wheels of mass suburban development and providing initial affordability to dwellers.

Larger infrastructure concerns had presented an additional hurdle for suburban development in the 1950's in the GTA. Serious water and sanitary concerns plagued boroughs such as North York, which lacked direct access to Lake Ontario's fresh water source. Multiple water shortages and rationing occurred in consecutive years in the borough, spreading rumors of babies being bathed in Ginger Ale and that of residents traveling to outside the borough simply to access water. Sewage infrastructure was another concern. As Solomon states, North York lacked central sewage facilities. There, 15,000 septic tanks were built in impervious clay soil, preventing human wastes from either evaporating or being absorbed into the soil and leaving the sewage nowhere to go. In other suburbs, overloaded sewage plants discharged partially treated effluents into streams and channels that flowed into the Humber and Don Rivers, turning them into open sewers. In 1949 a report by engineering firm of Gore and Storrie warned that the inadequate sewage system put 'serious limitations on the development of new residential areas'.

Suburban areas required significant infrastructure upgrades but could not be economically secured. Suburban areas did not have the justified population and corresponding tax base to acquire funds internally and required regional assistance. Similar subsidization would again occur through the first phase of amalgamation in 1954, creating a Metropolitan Toronto, integrating Toronto city services to the greater region at the expense of city dwellers. The averaging of costs of infrastructure to supply both high and low density customers equal access resulted in increased city rates, while reducing suburban rates.

Government intervention had skewed the economic feasibility of suburban habitation through various subsidizations of infrastructure, transforming the once under-serviced and unappreciated hinterlands into prosperous areas for improved dwelling conditions, aligned with the social reform movement. Future GTA growth would be managed through mass development of sprawling low-density single-family homes, the very kind that social reformers had promoted.

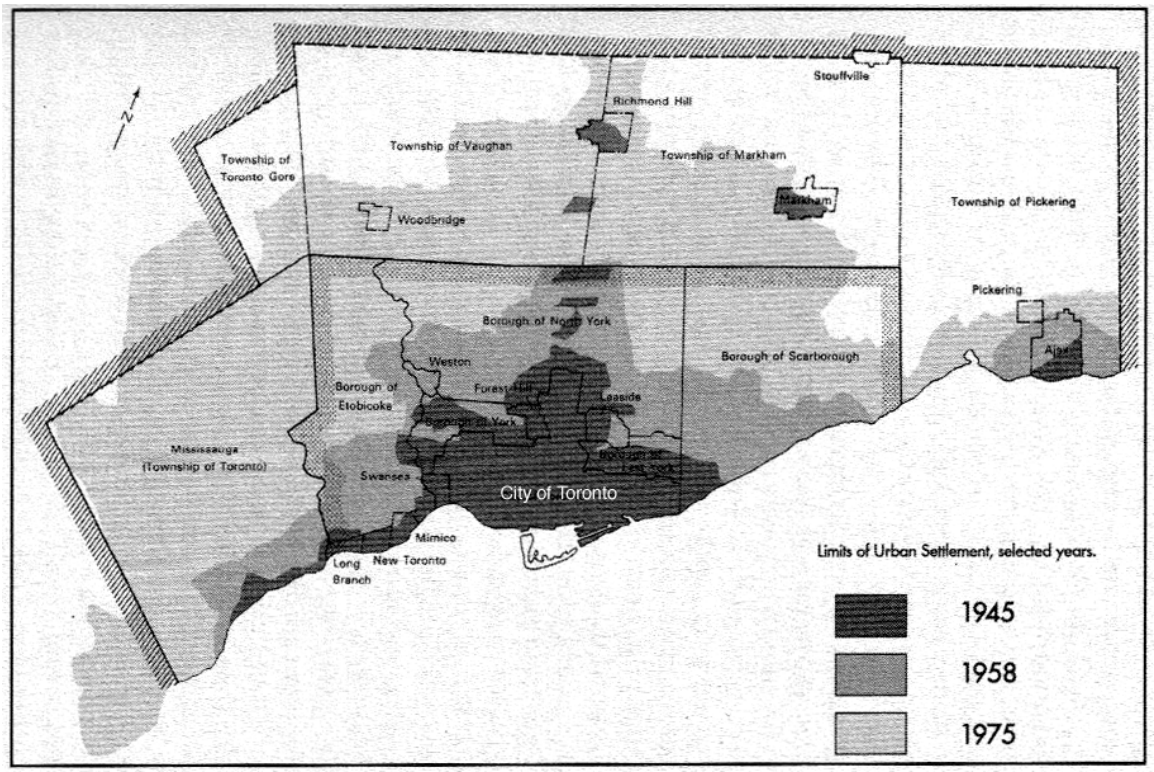


Fig 1.3 General boundaries of urban Toronto area map, courtesy John Sewell The Shape of the Suburbs Understanding Toronto's Sprawl

1.2 High-Rise Beginnings

In sharp contrast to the ideal conditions promoted in single-family detached home ownership, the development of the high-rise model was introduced in Toronto during the 1950's. Throughout the middle decades of the 20th century, rental apartments grew in quantity and scale. As E.R.A. Architects and the University of Toronto's Publication, Mayor's Tower Renewal - Opportunities Book states, Toronto developers favoured modern concrete towers for their efficiency of construction. The premise behind this construction was an economical and reproducible model, bundling cheaper dwelling units around more expensive shared service cores. Furthermore tax laws encouraged large-scale developers to shelter profits earned from home sales through the construction of rental properties. When originally built, modern apartments were often marketed for their sophistication, promoting a 'Jetsons' esthetic. However, in contrast to the ideal of the single-family home, the popularity of these newer forms of higher density living would soon fade.

Apartment construction would persist throughout the 1950-1970's, equipping the city of Toronto with 2,047 residential towers of 12 floors or greater as of 2008 and hundreds of thousands of dwellings, (including later constructed condominium towers) second in North America only to New York City. By 1966 rental apartments had grown to make up 40 percent of Toronto's existing housing stock and 77 percent of current housing starts.

Modern rental apartment construction was booming in the mid 20th century, however the demand for these dwellings was driven more out of necessity than from desire. Simply stated, rental apartments were increasingly needed to solve greater housing affordability issues.

Apartment living was widely viewed as a last resort option for families. As Lorimer states, Instead of providing most of the features, which people want in housing, high-rise apartments provide almost none of the key housing features people look for. While suburban houses are everyone's first housing choice, high-rise apartments come last on most people's list of preferences. Peter Homenuck's A Study Of High Rise: Effect Preferences And Perceptions conducted in 1973 corroborates such beliefs, sighting that apartments were most appropriate for 'the single, retired or childless' but not for families. This perception often created a transient environment, rendering the rental apartment as only a stop along the way to somewhere better.

Today's high-rise models may represent for many the image of our traditional urban centres. However Toronto's initial high-rise developments were primarily situated in its

inner suburban areas adjacent to large agglomerations of single-family homes, where large areas of developable land could be attained. The desire for people to relocate within suburban areas was also apparent in the location of these rental apartments. As the CMHC's Research Highlight, Growth Management and Affordable Housing in Greater Toronto states, from the 1960's to the 1980's Toronto averaged more than 2,000 new social housing units per year. Most of these new units were in inner suburbs. Similar trends occurred across the country, as Lorimer continues to state, The greatest concentration of apartment construction has been in those urban areas where the price of single detached homes is the highest, which tends to reinforce the argument that it is not just demand related to the general stage in the life cycle of the population that has encouraged this apartment boom, but also the prohibitive cost of alternative forms of suburban housing. Planning and development had included ways for those who could not afford a suburban single detached family home to at least become suburban in location.

Fig. 1.4 Typical suburban Toronto high-rises, right image courtesy Mayors Tower Renewal

North American modern high-rise towers were surely inspired by the European example of the "Tower in the Park" concept introduced most profoundly by Icon architect Charles-Édouard Jeanneret-Gris also known as Le Corbusier. Le Corbusier, a leader in the establishment of modern architecture aligned with the reform movement through his criticism of dense urban city centres and put forth a dramatic reorganization plan for Paris, France in the 1920's. This un-built plan included 20 crusi-form shaped high-rise residential towers, placed among green spaces and wide avenues, replacing much of Paris's existing denser city. While Paris' existing fabric would remain unaltered by such

a plan, fundamentals of the plan would migrate into many North American high-rise projects.

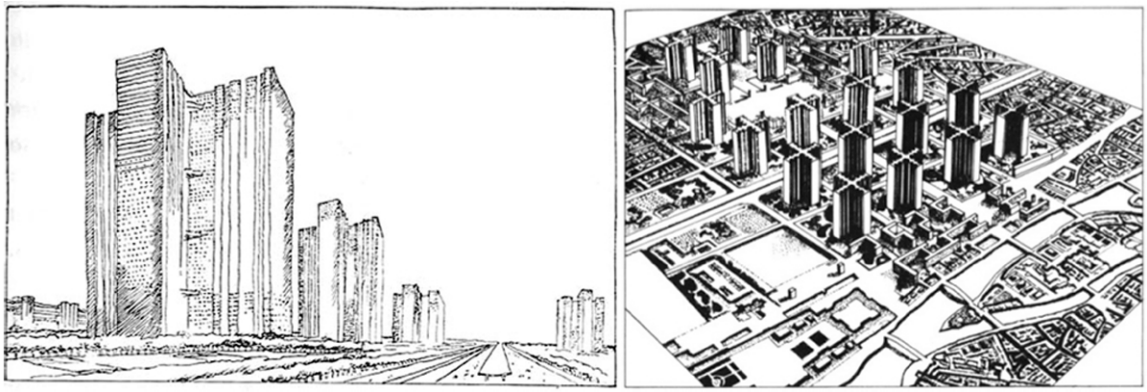


Fig. 1.5 Le Corbusier's Tower in the Park drawings, courtesy Towards A New Architecture

Similar tower in the park urban planning strategies for high-rise rental developments would become implemented within the GTA's suburbs. As illustrated by E.R.A. Architects, the average modern 'Tower in the Park' built in 1960s and 1970's in Toronto was constructed on sites containing thousands and thousands of square meters of land, but only chose to occupy approximately 10 percent, taking advantages of densities of approximately two or three times that area. This created an emphasis on the quality of the planned exterior amenity just outside resident's windows, offering the promise of picturesque views and exterior amenities.

However such quality of exterior green space amenity was too commonly unrealized within the tower in the park schemes in Toronto and elsewhere. As Safdie discusses, these earlier modernist, utopian visions were concretely realized, disappointment set in. Some more cynical, considered the results as evidence of a grand deception: drawings and descriptions of towers in the park had not adequately conveyed the void that would be created by the acres of parking, endless configurations of highways and undistinguished spaces that were beginning to appear on urban peripheries and centers alike. In reality, the green of the drawings became gray as the parks became asphalt.

The organizing spaces of the automobile ultimately served to situate residents within 'Towers in the Parking Lot', residents who often (then and now) do not fit the social or financial profile for automobile ownership. These open but often unwanted, unsafe and unusable spaces would serve to isolate occupants from the basic amenities of life. Inevitably the urban strategy for assembling high-rise developments outside of the urban

centre and within large areas of suburban land would prove highly profitable for developers, even if at the expense of its inhabitants. Furthermore their proximity to low-rise subdivision was surely initiating an environment of early NIMBY'ism.

Fig 1.6 Images of Toronto high-rise apartments: amenity space oasis set in concrete deserts

Residents expressed further discontent regarding the finer inner makeup of apartment living, paralleling exterior conditions. The interstitial semi private spaces that link dwellings within standard double-loaded high-rise models, the corridors and lobbies, fundamentally served as an extension of the broader city network. However these spaces were not supportive of a community and were largely unvalued. As Safdie states, Ubiquitous, artificially ventilated and lit corridors remains a singularly un-liked place. The greater disliking of rental apartments unwanted spaces often led to an even greater social isolation for its inhabitants. As Lorimer discusses, the physical design of the building discourages social relations, with the result that high-rise residents are much less likely to have friends in their neighbourhood than detached house residents. More often than not the increased density found in high-rise apartments did not foster an increased sense of community.

The rejection of ideological association toward the Russian Revolution and its social housing conditions, a fear now accelerated in the onset of the Cold War era, provided further negative association with apartment living. Moisei Ginzburg along with Ignatii Milnis constructed the Narkomfin Building in Moscow in the late 1920's, influenced by their Constructivist concept of a 'Social Condenser' to formulate a communal existence within a modern machine like concrete slab mid-rise apartment.

The ‘Social Condenser’ was aimed to create an intervention of the everyday life for the residents of the experimental higher density housing, mandating shared amenity spaces including interior corridors and further removing laundry and kitchen facilities from its 54 individual dwellings, a choice firmly related to the political change. As Anatole Kopp discusses in his work Constructivist Architecture In The USSR, The social condenser can therefore be seen as a sort of mechanism for transforming habits; for transforming former man, who was a product of the capitalist system, into the new man described in all the political and revolutionary literature of the time. However As E.R.A. Architects state, In the Soviet Union, (apartment buildings) represented nearly all-new housing from the mid 1960’s onward. The negative connection toward Russian socialist movement was easily drawn, affixing a lasting stigma upon apartment dwellers. Inevitably the dissatisfaction experienced and expressed towards Toronto’s early high-rise models served the purpose of further reinforcing a long lasting community desire for lower density single family homes while discouraging higher density living.

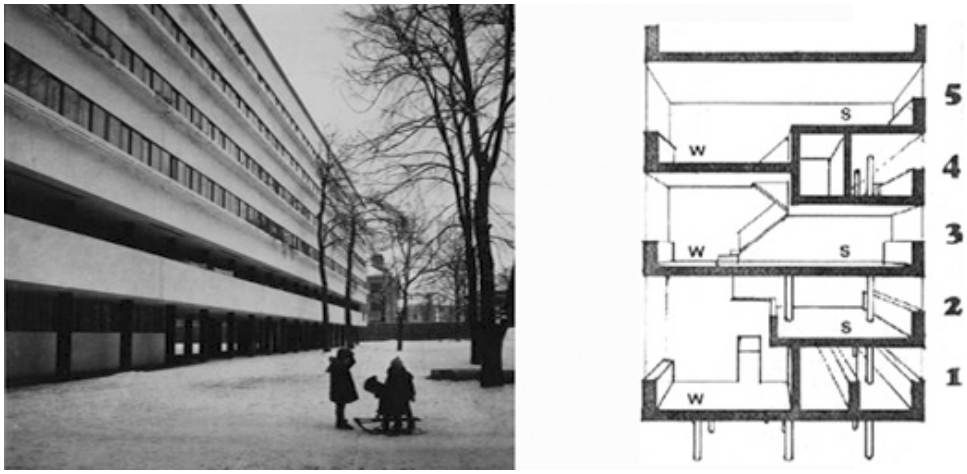


Fig 1.7 Image and section of Narkomfin building, courtesy www.tslr.net

1.3 Decentralization

Through an understanding of the social and political landscape of the 20th century, a withdrawal from investment upon Toronto's traditional urban mixed-use centres would have appeared to many as quite rational. The promise of a residential suburban utopia coupled with an era of inexpensive energy and subsidized infrastructure would have framed plans such as today's Avenue Initiative as shortsighted and outdated.

The ability to spread out and decentralize was a strong desire for many including the working class after the Second World War. The industrial revolution had radically altered the traditional modes of production of labor, colonizing large populations of previously autonomous workers into faceless corporations and centralized factory work. As Harris discusses, workers came to think of their homes as havens, or retreats, in which the pressures of the factory could be forgotten, or at least set aside. The home was a place in which workers could be their own boss. A separation of work and home would come to symbolize an escape both of the crowded city, and of an unfavourable hierarchy of class.

The capability of North Americans to decentralize within suburbia was significantly improved with the advent of the automobile. Previously, development was limited to areas where services and infrastructure, most notably public transportation could be accessed. Developments that proceeded without greater accessibility to and from the city centre did so at tremendous risk, and often failure. This implied that government could determine the distance and location of both commercial and residential settlement through its allocation of public transportation. The automobile would end such dependency, becoming widely available and affordable to the public in the 1920's. As Kunstler discusses, a car culture was started in the United States as a way to exploit the benefits of their readily and cheap supply of domestic oil. North American cities no longer depended solely on a single centralized business district, and could decentralize.

Urban industrial machine-like models of factory production previously used in central cities followed the model of Fordism, an ideological term coined after Henry Ford, founder of the Ford Motor company in the United States. As author Alan Berger's work Drosscape: Wasting Land In urban America states, Fordism operated by centralizing production and management into a single, large complex that produced all the components and assembled the product on site. Large industry depended on a centralized supply of material and labour to compete. However with the shift toward an automobile culture, centralization was no longer a necessity for big business. It is thus

ironic that the manufacturer's name 'Ford' was applied to an ideological mode of production 'Fordism', that would then produce a product 'the automobile' that succeeded in rendering that mode of production obsolete.

The resulting ideological change occurring after the Second World War was that of Post-Fordism. This mode of operation allowed for a flexibility of labour and production methods, those that could adjust more swiftly to changing demand, avoiding the limitations of centralization. Large business was able to manufacture from multiple locations and numerous suppliers, outsourcing various components of production. Such outsourcing could be extended or terminated at will to minimize risk. Post-Fordism allowed for manufacturing to disperse over hundreds of kilometers to collaborate, reducing the need for larger centralized city locations.

American icon architect Frank Lloyd Wright would further romanticize the possibility of decentralization, fusing the potential for the automobile to provide the suburban retreat in his 1935 plan for his Broadacre City. As Architect Moshe Safdie's work The City After The Automobile states, 'In fact to decentralize" Wright believed was one of several inherently just rights of man'. Wright believed that the cities were dehumanizing and posed real threats to greater democracy. Wright's plan for Broadacre City, influenced by the garden city movement, continued to reject the denser existence of the traditional city fabric, decentralizing dwellings that would depend on automobile access. The inclusion of the automobile's spatial requirements as a central organizing structure of his un-built urban design for a city went hand in hand with guaranteeing each resident a single rural acre of land removed from all elements of industry. The influence of Wright's visions for larger scale de-aggregation of residential and commercial land uses would continue to undermine interest in preserving the character of existing mixed-use urban centres throughout North American cities.

Fig. 1.8 Image of Frank Lloyd Wright's Broadacre City model ,courtesy Terence Riley, Frank Lloyd Wright: Architect

While the arrival of personal automobile ownership has often been viewed as a primary contributor toward decentralized single-use suburban communities, continued government tax policy continued to entice a separation of land uses and further depreciate traditional urban centres. In the United States the Federal Accelerated Depreciation Deduction (FADD) was created in 1913, initially to permit businesses to deduct depreciation values from machinery and later buildings. The government's intention was for business owners to reinvest their tax savings into new machinery, however no restrictions were ever imposed on this spending. The plan stated that most buildings held a lifespan of 40 years permitting owners to depreciate 1/40th of the value of the building per year. In 1969 this duration was shortened to 15 years to add further incentive. However this tax credit only applied to new construction, and did not accommodate existing structures. As C.D. Emerson's All sprawled out: How the federal regulatory system has driven unsustainable growth states, investors seeking the best return on their dollars now looked away from established downtowns, where vacant land was scarce and new construction difficult. Instead, they rushed to put their money into projects at the suburban fringe - especially into shopping centers. More often than not, to

receive the FADD credit, business was forced to relocate, abandoning traditional mixed-use centers. A resulting shortening of lifespan of many commercial, industrial and retail structures was promoted, discouraging commercial long-term commitments to neighborhoods both urban and suburban, and resulting in a leapfrog mentality.

The Implementation of comparable Canadian incentives further discouraged long term investment in urban contexts. Corporate income tax regulations offered a concession for developers called the “capital cost allowance” (CCA), which enabled them to defer paying most if not all corporate tax. On top of all their legitimate expenses like operating costs and mortgage interests, developers have been permitted to add a fictitious expense, the capital costs allowance. The justification for this expense is that it represents the depreciation in value of rented buildings. A developer was permitted to write off five to ten percent on rental properties, until the total cost of the building has been charged as an expense. The CCA permitted large development to shelter the majority of their profits and further fund investment in rental, residential and commercial properties that continued to increase in value, rather than depreciating as tax law suggested. More significantly, additional incentives were offered to retain deferred taxes through the demolition of existing rental structures deemed economically depreciated. These tax incentives firmly shaped the rational for separating residential and commercial use development, in an effort to more easily access the demolition of older structures. The character of commercial structures would become increasing viewed as a disposable commodity and less as a community amenity.

The resulting de-aggregation of land uses permitted across North America, has fundamentally altered the general perception of commercial interaction. Numerous suburban agglomerations of industry nodes were created along side suburban communities in the form of business parks, industrial parks, and shopping centres, replaced traditional mixed used commercial urban centres. As Berger discusses, These landscapes are not designed to bring extraordinary value locally. Instead it exists as a static, engineered component of the agglomerations production economics. Agglomerations of industrial and commercial activity take advantage of shared space, forming a network of disconnected single use zones, linked to community only through vehicular right of ways. While these developments are often billed as residential amenities, there make-ups now cater primarily to the needs of itself.

. From within this single-use single-interest environment, a growing underlining characteristic of suburban agglomerations is that of a non-committal temporary

existence. A choice example is found in the outer suburban district in Richmond Hill, where a contemporary 'Big Box' commercial centre is located immediately south of a similar era constructed single family and semi-detached residential area. The potential of amenity latent within the residential proximity to numerous household retail names including Best Buy, Canadian Tire, Loblaws grocery store, the Home Depot and the recently closed Sam's Club is profound. However the frigid urban condition of the commercial centre all but denies such access, turning its back on residential pedestrian access, instead placing emphasis on automobile access via the highway to the south. Little or no attempt is made to offer access to its northern neighbors, presumably all potential customers that such commerce rests within walking distance. In place of pedestrian scaled retail entrances rests vehicular loading docks and boundary fencing. Comparable examples can be effortlessly located across suburban districts. They are the mark of spaces in potential transition and uncertainty.

Explanations behind the lack of community access within the Richmond Hill example have often been attributed to the special influence of the automobile. Further assumptions often suggest that urban planning initiatives aimed at separating land uses resulted in basic oversights and missed opportunity. However it is equally probable that the lack of community interaction was entirely deliberate. As collaborator Erik Rutherford states in editor's Jason Mcbride and Alana Wilcox's work uTOpia – Towards A New Toronto, We shop in practical, matter-of-fact constructions that have a makeshift quality about them; we can almost see the wrecking ball waiting in the wings. Everywhere there is the presence of demolition and construction, the sense that what surrounds us is not the product of careful planning, of a contract between the generations, but rather the caprice of chance and private interest. Through not openly embracing its immediate surroundings, agglomerations including the Richmond Hill big-box commercial centre further avoid any meaningful connection and or long-term commitment to their residential community. The result is a temporary planned suburban obsolescence, permitting a future relocation of commercial amenities toward more financially lucrative settings at the expense of the local context. And this lack of commitment to genuine place making is often at the root of modern day suburban dissatisfaction.

Fig 1.9 Images and aerial view of Richmond Hill big-box stores

1.4 Return on to the City-Centre

Despite the near century long assault on the practice of higher-density dwelling, a renewed interest in returning onto Toronto's urban centres has become apparent. The advent of the high-rise condominium model within North American city centres has often represented an attempt to redirect such growth back into traditional urban contexts. A combination of conditions encouraged a change from a high-rise renting model to that of the user-owned structure in the late 1970's in Toronto and elsewhere. There is no denying that high-rise developments possess tremendous potential in restocking urban area populations, those previously inflicted with 20th century suburban migration. Such is the case in Vancouver, British Columbia's downtown district. There ultra sleek point tower high-rise condominiums stagger the downtown core, favouring cone of vision views of the North Shore Mountains for its residents. Under former chief planner Larry Beasley's 'Living First' policy aimed to increase the city center population, Vancouver's downtown had doubled in population over the past 20 years, rising from 40,000 to 80,000 residents.

However Vancouver downtown high-rise developments help to illustrate concerns over the balance of land uses within the broader goals of intensification. The success of Vancouver's 'Living First' policy have recently come into question as downtown residential development has begun to constrict other needs. As Lind Baker's January 2007 New York Times Column, The Zoning Policy That Worked Too Well states, city officials and businesses are concerned that downtown Vancouver may become a victim of its own success, as residential development will encroach on jobs and office space. Downtown Vancouver has struggled to maintain an appropriate balance of business and commercial amenity space in which its residents can shop and work. The risk is now present that downtown residents will be forced to commute to the suburban outskirts to access employment and commerce, thus defeating the very purpose for which Living First was created.

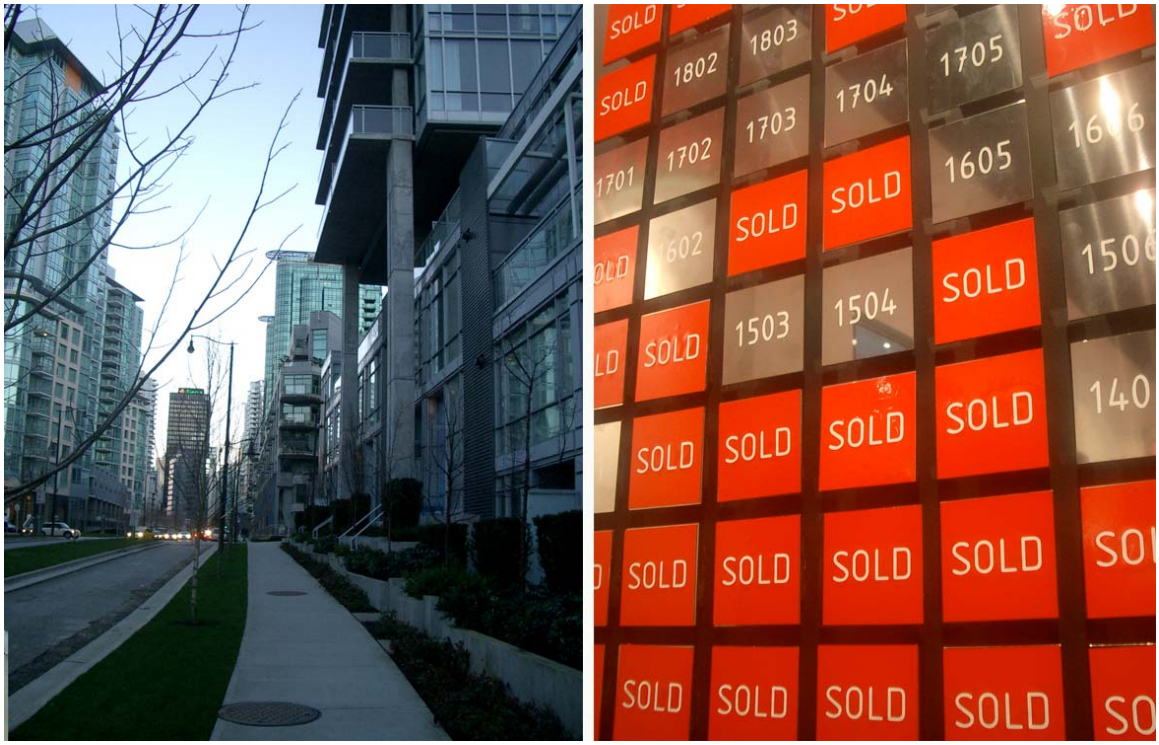


Fig. 1.10 images of downtown Vancouver residential district and a high-rise sales centre display

While it is clear that high-rise condominiums contain the potential to dramatically increase population densities, the Vancouver example raises questions about the ability of these models to gracefully plug into existing urban contexts. Similar concerns have been expressed within the GTA. One of Toronto's most prominent condominium centres is CityPlace, located on the former downtown railway lands. CityPlace, constructed by Concord Adex, verges on the largest residential development in the city, placing residents of 15 high-rise towers within a walking distance south-west of the city centre. While the seemingly overnight addition has attracted thousands of condo dwellers, as columnist Christopher Hume's November 2008 Toronto Star Column Final Verdict on CityPlace Will Take Years states, it is early still but what this place lacks is the sense that people actually live here. Hume continues to criticize City Place as a homogeneously planned, intensely manicured, and highly suburban in nature.

Hume points to City Place's other significant proximity to the Auto dominated Gardiner Expressway and Spadina Avenue intersection, significantly reducing pedestrian access to and from the site. 'One of the problems is that highway surrounds the site, so there are few ways into it. This means the layout will be reminiscent of the typical suburban subdivision with one entrance and many culs-de-sac'. While not yet

complete, City Place transmits an uncompromising and un-flexible finished quality to every surface, that which may not be supportive of Toronto's goals to promote mixed-use neighborhoods and to reduce auto dependency.

Numerous examples of Toronto condominium districts help demonstrate the complexity of successful intensification of existing urban fabric. Large city sections of Toronto's Bay Street, north of its financial district, saturated with large scale high-rise condominium developments has provided cause for concern. Such homogenous developments of similar characteristics have permanently altered the nature of existing city fabric. As editor Amie Silverwood's September 2008 Condo Business column Standing Tall But Not Aloof, discusses the Bay Street condition, 'condominiums feed on the liveliness of the community in their marketing to attract buyers but some large structures take up whole city blocks and have security stationed behind closed doors to keep the neighbourhood off the front steps. These buildings don't give anything back to the community in which they were built. Streets that invite too many of these towers can become urban ghost towns.' Silverwood continues to discuss how pedestrians flock to the paralleled commercially diverse Yonge street district but avoid Bay Street. E.R.A. architect Michael McClelland shares a similar perspective, quoted in Jenneth Kidd's July 2008 Toronto Column, On Yonge St., preservation by neglect, stating 'nobody walks up and down Bay Street, It's a sad environment, very soulless'. The resulting effect is that of a de-aggregation of land uses, a characteristic quite suburban in theory.

Such development is also commonly characterized as gentrification, adding densification yet failing to provide urban-minded intensification. As Mason White's contribution in the Design Exchange's Publication Ourtopias – Cities and the role of design, states, the condominium building establishes a complex cruise-ship-like social mix of mine and ours. Condominium urbanity is very different from the less predictable sidewalk-bound version of the city. Condominiums produce petri-dish urbanity. It is contained, controlled, and always room temperature. Once urbanism is invited to the condo interior, it is tamed and becomes more sterilized and homogeneous. Its homogeneity is generated from the unwritten laws of economy, producing a generic modern atmosphere. What has become apparent through experience is that the very cosmopolitan qualities that initially attract condominium development proves to be a delicate commodity, that which can be easily smothered through over use.

The damage that high-rise condominium developments can inflict upon urban centres preferences an ordinary approach over that of the imaginative. As David Kaufman states

in Toronto – A City Becoming, New districts that are springing up on Toronto's downtown 'brownlands' are vast aggregates of condominium towers and stacked townhouses, urban in density but suburban in character because of their numbing homogeneity. Surely developers seek a proven pattern of construction to emulate, but such emulation has driven concerns over repetitiveness, comparable to the un-describable and unmemorable characteristics of the suburban model. Such a label is not desirable for a city-centre that banks on the image of fostering diverse exchanges of ideas.

While the sum of these concerns have significantly impacted public perception for high-rise developments within urban settings and along avenues as an appropriate tool for intensification, the intrinsic liquidity of these units have reinforced their demand. Scaled down, often one bedroom one bathroom unit sizes coupled with historically easily accessible financing has made the purchase of dwelling units specifically in high-rise developments for the purpose of investment highly feasible in many North American cities. As author Trevor Boddy's January 2007 Globe And Mail Column Vancouver's year in housing exits in style with a ROAR, referring to the Vancouver condo market states, The demand for fee-simple boxes in space has been so hot since the mid-1990's that the condominium apartment started to resemble a generic commodity – an undifferentiated substance like refined zinc or hog bellies, ripe for speculation. Because condos sold and re-sold so easily through this period, there was little financial encouragement for developers to invest in alternative development models or dwelling spaces, more inclusive of family occupation rather than instant curb appeal. Investment and speculation has significantly fueled condominium development independent of a greater concern for quality community planning. High-rise developments have significantly added density to much of Toronto's existing urban centre, yet often at the expense of preserving mixed use communities, those integral in the success of Toronto's desired genuine intensification. This result has upheld community resistance and NIMBY'ism toward higher-density development along Toronto's Avenues.

However Change is upon us. Just as the Avenues Initiative of Toronto's Official Plan recognizes the value of Toronto's existing mixed-use higher-density urban avenues, recently so too has popular culture. A study of the evolution of our urban history illustrates a cyclical nature of our community acceptance toward such environments.

The two and three-storey masonry commercial structures erected before World War II tightly line Toronto's avenues, defined often a continuous commercial presence. Building code restrictions insisted on arterial structures to be of heavy masonry, as opposed to

less costly wood framing. It was common for shop owners to live above their store or to rent apartments for additional income. These buildings possess an everyday character, today viewed as historically significant, not for their intricate detail, but instead from their diverse nature and urban scale.

Commercial buildings constructed post World War II retained some of the character found in pre war structures, but have also evolved. These structures incorporate a set back condition for provision of a parking pad, recognizing the car. These two and three-storey masonry buildings are often larger in length, no longer an assembly of buildings but rather a continuously built form. These buildings continued to provide upstairs space for residential dwelling, but also provided space for offices.

In the 1960's and 1970's commercial buildings continued to change in form, retaining or increasing space for parking, but largely eliminating the presence of a residential component, choosing instead to include only office space above the ground floor. Above ground space was accessed through a lobby/corridor interior structure, instead of incremental private entrances. No longer was it economical or socially acceptable to merge living and working spaces. A modern design palette was employed often increasing the use of glazing and reducing heavy masonry.

In the 1980's and 1990's commercial buildings commonly eliminated any second storey component focusing strictly on commercial ground floor activity. Space for parking now occupied a majority of land. Often an attempt was made to differentiate from a strict modern appearance, referencing vernacular building forms.

Today newly constructed commercial buildings often look to return to the past, simulating pre World War II incremental avenues, with a return to multi storey spaces for retail, commercial and residential uses, and eliminating in-front parking. Clearly the evolution of commercial structures over the past century has come full circle and illustrates a renewed public acceptance of mixed-use higher-density building forms and further reinforces the distinct value of these urban conditions.

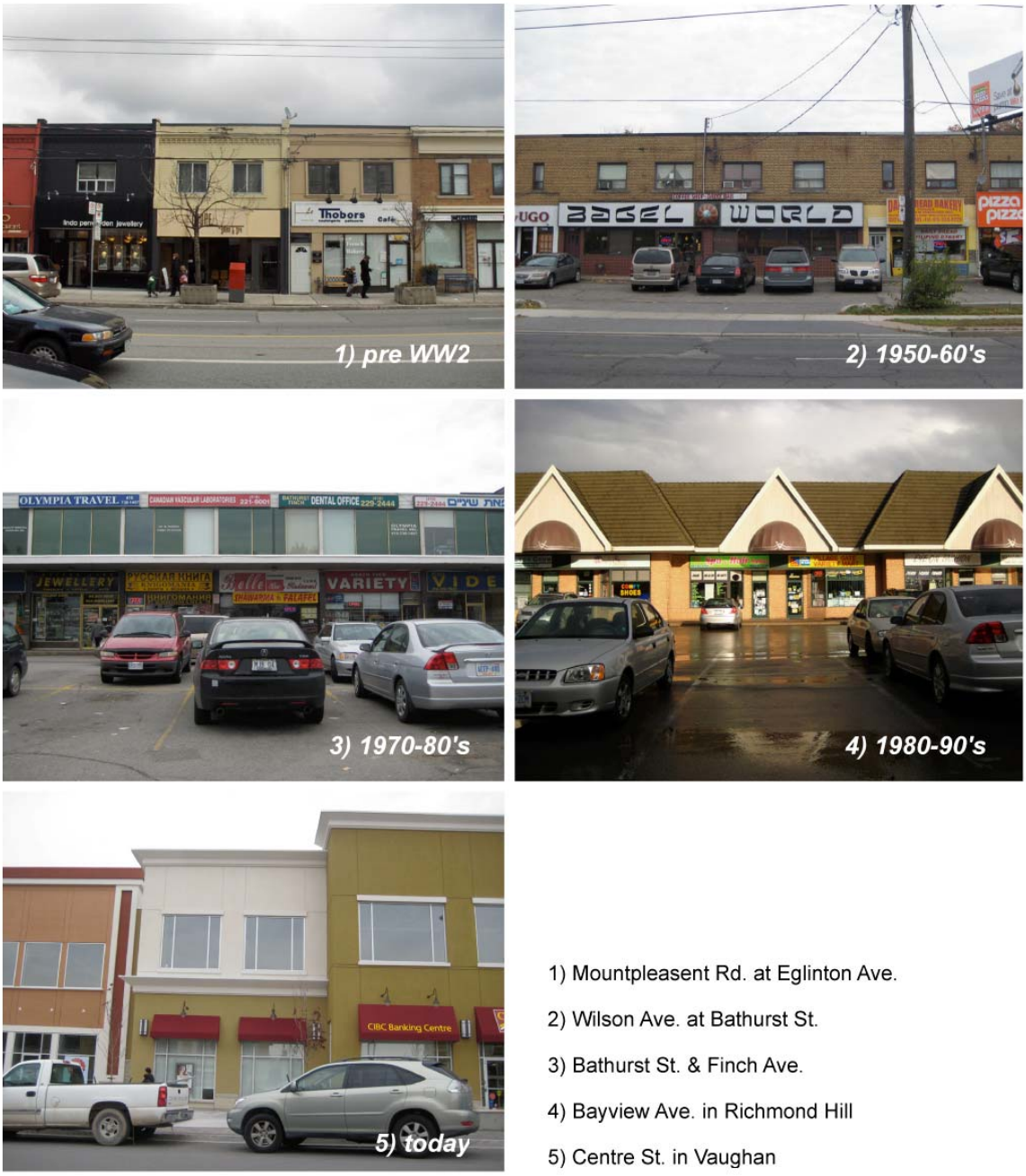


Fig. 1.11 Images displaying an evolution of local commercial structures

In fact, recent planning attempts to simulate the conditions of Toronto's organically shaped avenues has further highlighted the authentic and irreplaceable nature of Toronto's Avenues. Suburban East Markham's 'New Urbanism' inspired master-planned community Cornell makes specific attempts to cultivate a mixed-use pedestrian oriented community. Great effort is made to impersonate the traditional city centre avenue of times past in the creation of a "High Street" on Bur Oak Avenue, including the masking

of larger (built at once) structures behind a veil of smaller facades, differentiated in height and scale to appear chanced. Residential set backs are reduced bringing people closer to the street and further attempt is made to conceal the car, placing garages into rear lanes, in an ‘out of sight out of mind’ manner. Even the corner gas station is augmented to conceal its commercial generic image from the street. However Cornell’s streets, with population growth in the tens of thousands over the past decade, appears largely deserted, more reminiscent of a ghost town Hollywood set than that of a vibrant community. Currently automobile dependence remains a distinct characteristic of Cornell while vibrant commercial street life simply does not. Cornell helps to display that vibrant commercial avenues aren’t easily recreated or replaceable and are more than just skin deep.

Fig. 1.12 Images of Cornell mixed-use ‘high street’ and rear garage lane

02 The Contemporary Alternative

Contemporary alternative examples for formulating higher-density mixed-use models offer insight on how to promote such avenue development while mitigating community resistance in comparable contexts. These examples contain the potential to invigorate development within Toronto's already functioning avenues and adjacent low-rise neighborhoods in a manner consistent with the Official Plan.

2.1 Gentle Density of Vancouver

Despite Vancouver's high-rise point tower latent downtown peninsula, alternative areas of the urban south shore, those lined with traditional arterial network of avenues, have come to represent an all together urban identity for the city. Vancouver, much like Toronto has endeavored to limit unsustainable growth through their adoption of the 2008 Eco-Density Charter. The City has sought to encourage a form of "Gentle Density" to its existing neighborhoods in a manner inclusive of their unique character and scale. Such gentle density has incrementally appeared within C-2 commercially zoned avenues, areas that encourage increased mixed-used density within its existing commercial fabric. As Lance Berelowitz states in his work Dream City: Vancouver and the Global Imagination, The concept of "living over the shop" has caught on in a big way, whereas in many other North American Cities there is still widespread cultural and market resistance to this form of housing. C-2 zoning has succeeded in kick-starting development along infrastructure rich avenues, while preserving the avenue's commercial public realm and without disrupting the neighboring low rise communities.

Many Vancouver developments have embraced a far different building model than that of the high-rise form. Trafalgar Place located at West Broadway and Trafalgar Street in Kitsilano, is comprised of two rows of stacked town homes on top of mixed-use space, participating in the commercial continuity of the West Broadway. While partially masked as a traditional condominium from the street, vertical circulation provides residents access to semi-private above ground exterior space, where entrance to the dwelling units are provided. The project continues to take advantage of the rear lane condition, creating additional dwelling units, with lane access and egress. As the above ground exterior space is only accessible to residents, privacy and intimacy is better managed, adding a suburban quality to a very urban context. The creation of the courtyard reduces a dependence on the need for ideal or corner lot condition, inventing additional lighting

and exposure for it's living spaces. The project is a city on top of a city, adding density in a non-programmatically violent manner while preserving the conditions of the entire community.

Fig 2.1 Images of Trafalgar Place, top right street view, top right side view, bottom left courtyard view displaying stacked town-homes, bottom right plan view

The recently completed Roar_one project designed by Vancouver based research firm, Lang Wilson Practice in Architecture Culture (LWCAP), located at 4387 West Tenth Avenue in Vancouver, just west of Trafalgar Place shares similar strategies for aggressive yet gentle intensification on a much smaller scale. As Canadian Architect Magazine states, the ambition for the Roar_ one project was to create a qualitative paradigm shift for dense urban living and live-work culture. The project is positioned through innovation with regards to livability, flexibility, choice, sustainability, compactness and strategic spatial qualities. The mid block mixed-use project, located in Point Grey on West 10th Avenue contains 12 stacked mezzanine style family sized town homes on top of a commercial base, with an exterior above ground pedestrian right of

way. While the 12 dwelling units share demising walls, additional double height exterior space is carved out, providing increased ventilation and light and offering each unit access to private exterior space. Although these exterior spaces are not quite suburban backyards, they are far more than common high-rise balconies, providing residents access to the exterior setting in a private and individual manner, while maintaining increased density. Despite the project's inherent difficulty of its smaller sized mid block setting, Roar-one demonstrates an economically successful model for avenue infill development. The project made use of alternative industrially associated pre-cast concrete building components, avoiding more expensive flying form construction and providing spaces for an estimated $195 per square foot.

Through the successes of various C-2 zoning projects, Vancouver has created an affordable and responsible housing alternative for a growing population, now willing to reside along South Vancouver's amenity rich avenues. Furthermore it has provided a testing ground for a reinvented model for mid-rise urbanism.

Fig 2.2 Images of Roar_one courtesy of Canadian Architect, top left street view, top right section view, bottom left plan view, bottom right view of private exterior space

2.2 Plateau Mount-Royal, Montreal

The city of Montreal presents an additional successful alternative model for higher-density mixed-use living. Unlike Toronto or Vancouver, a denser existence and a reduced dependence on the automobile within the historically recognized Plateau Mount-Royal borough is not a chased after detail, but rather a long lasting tradition. The borough, located north east of the downtown, previously named the town of St Louis before its 1910 annexation, was completely built up by the 1930's with multiple-dwelling walk up duplexes and triplexes, providing identity and heritage to the city. As Isabelle Laterreur, Marlene Schwartz, Claude Laruin and Susan Bronson's paper, Montreal's Plateau Mount-Royal Borough: An Innovative Approach To Conserving And Enhancing An Historic Neighborhood states, 'a dozen institutional and civic nodes and several dynamic commercial streets contributed to the quality of life in the neighborhood.' The nearly eight kilometer square district currently houses over 100,100 residents, making it the most densely populated neighborhood in Canada. Automobile ownership is often viewed as a hindrance rather than an amenity, as numerous areas of commercial continuity provide connections of amenity to its residents.

As Bronson continues to discuss in Karen Mazurkewich's January 2008 National Post column, Appreciating Montreal, 1990's legislation made it possible to sub-divide duplexes and triplexes into condo apartments. Instead of a single owner, who would rent one or two of the other floors, now each apartment is owned individually and people are willing to invest. The Plateau's turn of the century supply of smaller walk-up, stacked flat modeled developments have provided a renewed ownership opportunity for a new generation of residents located within a well managed urban infrastructure-rich district. The often whole-floor dwelling units found in these walk-up structures has continued to provide quality well lit spaces appropriate not just for singles but for today's families. Just as in Vancouver's south shore, The Plateau district in Montreal provides a tempered alternative model for modestly and incrementally scaled mid-rise development. Furthermore, both models have managed to provide higher-density dwelling within an urban context, while continuing to ensure a higher measure of individual privacy for its residents.

Fig. 2.3 Images of typical Montreal stacked flats above, below map of Plateau Mont-Royal, courtesy Susan Bronson

In the past, Montreal's stacked-flats exterior and interior entrance-egress stairs contributed to limit of height. However today, modern advancements in vertical circulation can ease such restrictions, making elevator systems affordable for smaller footprint structures. Evidence of such an influence has appeared within Toronto's downtown centre, allowing for higher-density, stacked-flat development models. The

recently completed residential rental development at 294 Richmond Street East at Sherbourne Street rests on a lot commonly viewed as too small and overly obstructed for high-rise development. However the development embraces its southern exposure and corner condition, seamless infilling a six-floor “small tower” mid-rise development. The building assembles a mixture of single and multi-floor stacked dwelling units with two and four units per floor, accessed thru shared elevator and stair circulation, thus ensuring greater privacy and autonomy within each residents building zone. The potential for alternative partitioning of floors to provide whole or half floor units is clearly present. The development, although not officially located on an avenue is akin with Toronto’s avenue initiative, maintaining mixed-use commercial spaces at grade, and continues to plug into its surroundings without significantly altering them.

Fig. 2.4 Image and plan view of 294 Richmond Street East

The potential provision of an alternative menu for mid-rise models, including examples presented above, could promote a reinvented environment of developmental opportunity along Toronto’s avenues. The use of such models, those which can fit together as parts of a greater whole could then further serve in solidifying mid-rise urbanism as an attractive model for the creation of quality dwelling spaces within thriving urban environments.

2.3 Toronto's Local Potential

Such a menu could serve the broader goal of avenue intensification in directing new development toward areas rich in existing infrastructure. Therefore in the spirit of efficient use of existing infrastructure, why not then embrace Vancouver's metaphorical "city on top of a city" example literally. The use of these mid-rise models on top of or alongside Toronto's existing and functioning avenue structures could support the Avenue's Initiative, recognizing infrastructure, not only as power lines and pavement, but also as heritage and streetscapes. An "Adaptive Use" toward architecture has long been associated with a more sustainable approach toward global urban redevelopment. Toronto had been no exception embracing heritage-designated waterfront communities such as Liberty Village and The Distillery District, often adding residential density to former industrial structures. Adaptive reuses and additions have also appeared along Toronto's avenues, where constriction out of the roof has turned two storey structures into three. Yet this development has primarily represented a similar under-utilized intensification as found at 1400 Eglinton Avenue West, and contrary to the city's desired image for intensification. Notably this is one form of incremental development that the city does not promote, viewed as counterproductive to the organization of larger scaled density.

Fig 2.5 Sketch idea for the 'Adaptive-Reuse' of existing avenue structures

However changes to the Ontario Building code to permit more affordable and practical wood and or steel construction of increased height can be anticipated, in line with similar

to changes made to the British Columbia Building Code in 2009. The designation of a semi-combustible construction category, coupled with mandated residential sprinkler systems could allow for an adaptive reuse of Toronto's existing avenue structures, in collaboration with the city's desired increased density, Mid-Rise Urbanism. Further solutions for constructing quality dwelling units on top of Toronto's stock of avenue structures rests latent within their existing settings, as most buildings occupy between one third and one half of their property depth. The potential to add density, resting on top of existing avenue structures, but also resting on new foundations located behind can help to simplify construction and engineering for both aboveground dwelling and modest belowground parking. While reduced parking accommodations than that of the typical high-rise model has discouraged development in the past, it is appropriate for avenue developments, where existing public transportation is present or planned in conjunction with Toronto's 2009 "Transit City" 120 Kilometer light rail development. Additionally the incorporation of local offsite parking can further satisfy parking needs along Toronto's avenues. As stated in the city of Toronto's 2007 Proposed Parking Standards for Selected Commercial and Residential Uses, Toronto Parking Authority staffs are exploring ways in which the required parking for avenue developments might be provided in collective off-site facilities. Free from a dependence on potentially outdated definitions for ideal parking amenity, the potential for quality adaptive reuses of avenue structures can only increase.

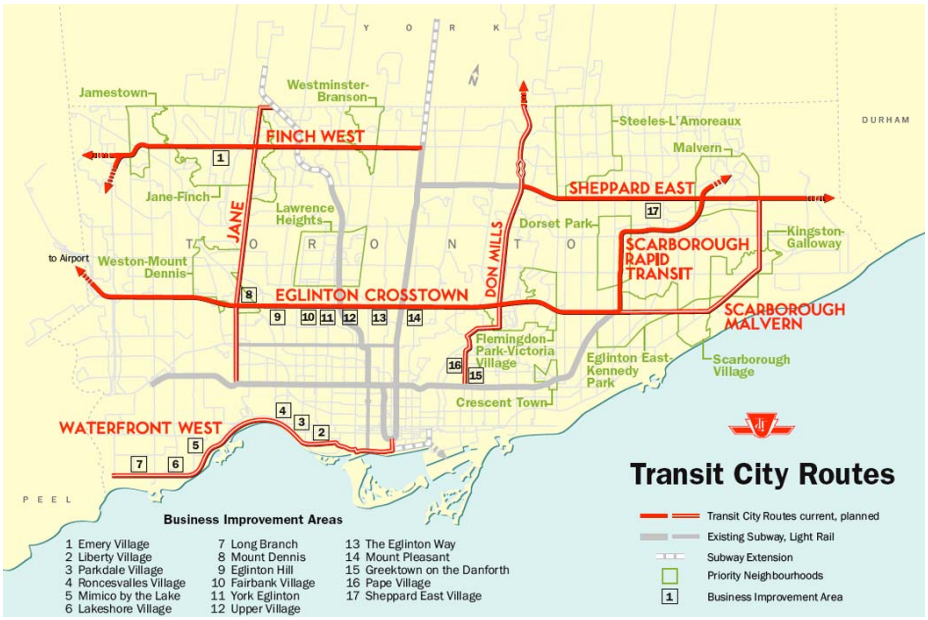


Fig. 2.6 Map of planned public transit routes, courtesy Toronto Transit Commission

03 The Design Exploration

3.1 Yonge-Lawrence Village

The north-south avenue on Yonge Street immediately north of Lawrence Avenue, also named the Yong- Lawrence Village (YLV) rests just inside Toronto's pre 1954 amalgamated boundary. The makeup of the neighborhood is that of both heritage and renewal, as pre World War Two suburban conditions have given way to a far more urban existence. Today the Yonge-Lawrence Village is a sought after community equipped with mature residential streets lined with a variety of two story single-detached and semi-attached dwellings. The quality of this modest and arguably ideal residential setting is only enhanced through the amenity of the commercial avenue within walking distance. There a variety of incremental two and three story structures cater to the public realm in the form of shops, restaurants, services and access to Toronto's regional public transportation. While the public avenue, bound by Lawrence Avenue to the south and Yonge Street's falling typography to the north, is a nightlife destination for some, the delicate balance of residential and commercial needs have been maintained. This infrastructure rich neighborhood represents the very conditions Toronto's official plan seeks to preserve.

However the Yonge Lawrence Village avenue also exhibits the same dilemma as other avenues in its failure to encourage the desired forms of intensification. The Village rests between two centres along Yonge street, the centre of Yonge and Eglinton to the south and the North York Civic Centre to the north. There, aggressive high-rise developments have expanded outward in area, adding significant urbanity often at the expense of their existing stable neighborhoods. Additionally one does not need to travel far from the Village to locate larger scale development. Encroaching on to the perimeters of the avenue rest modern commercial only structures anchoring a busier Yonge and Lawrence intersection to the south and big-box style Loblaws Grocery and vast parking to the north. The potential redevelopment of high-rise structures at its perimeter clearly suggests a potential for densification to take place along the avenue. This could potentially disrupt the balance of private and public uses, specifically toward the residential cusp.

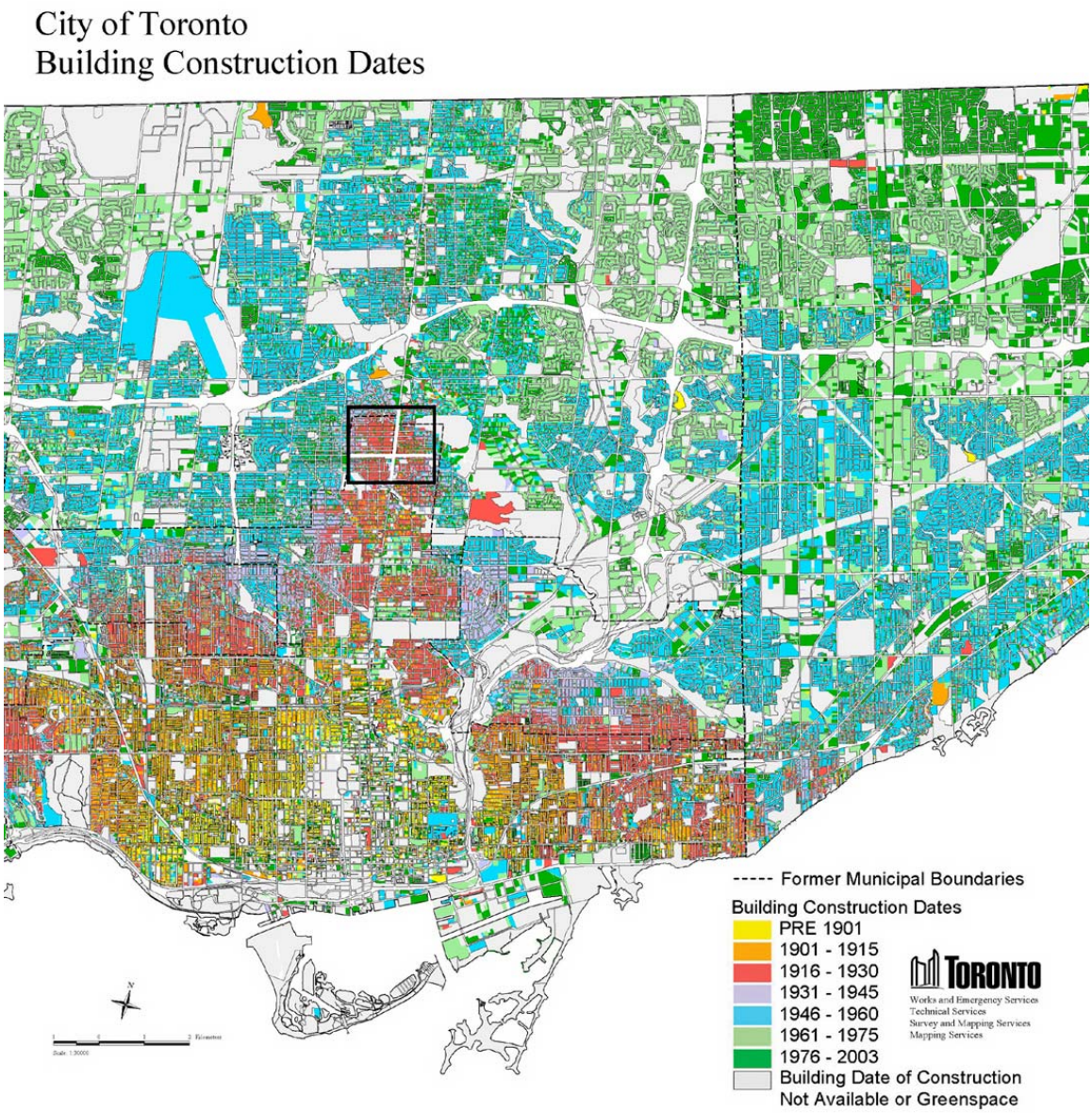


Fig. 3.1 Image highlighting Yonge-Lawrence Village, courtesy City of Toronto

Fig. 3.2 Images of the variety of structures found along the avenue and residential cusp

Fig. 3.3 Images of the variety of structures found along the avenue and residential cusp

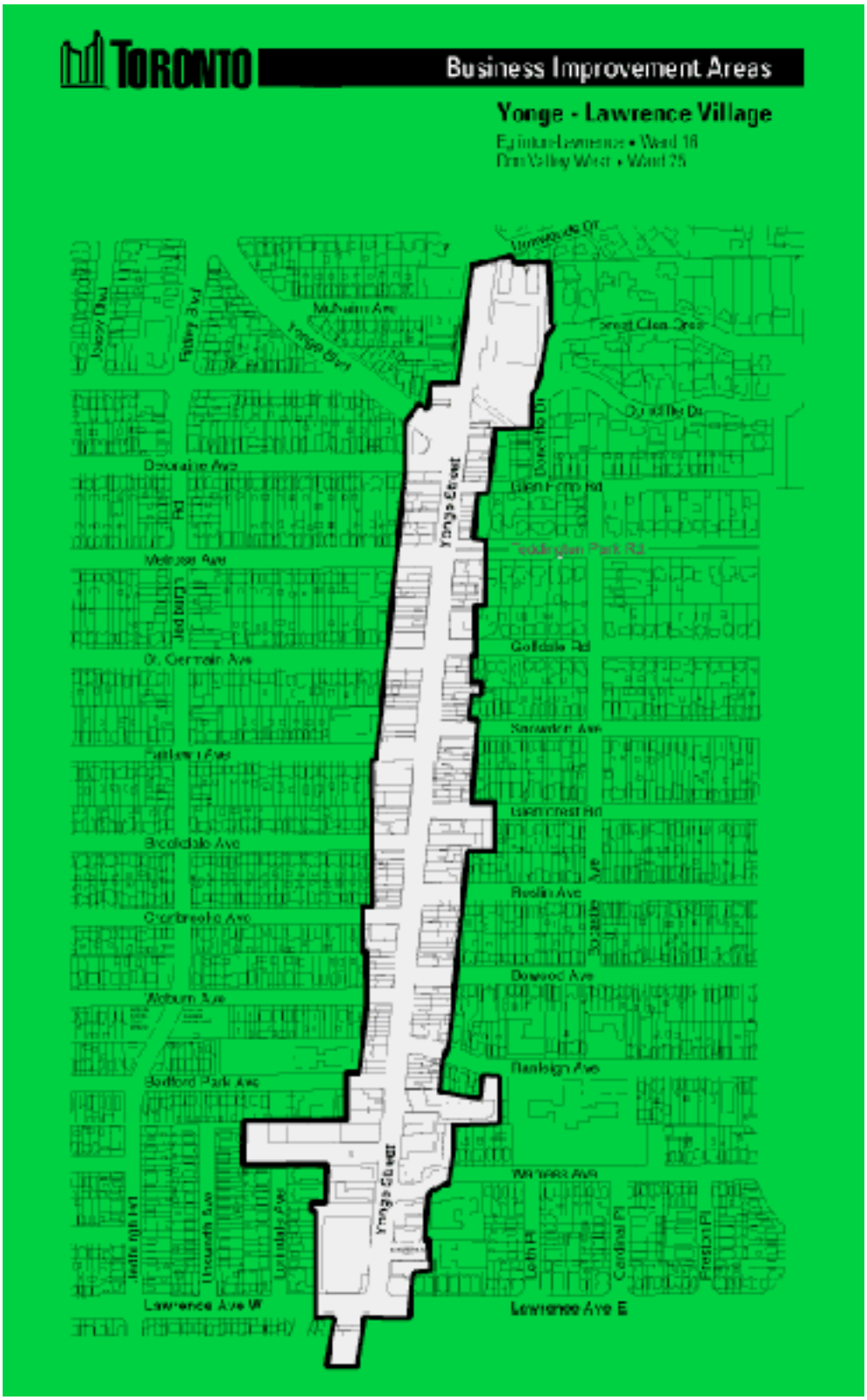


Fig. 3.4 Plan of Yonge-Lawrence Village, courtesy Yonge Lawrence-Village BIA

Fig. 3.5 arial image of the avenue, adjacent low -rise and potential high-rise communities

A common consensus among YLV avenue stakeholders is a desire someday to contribute their investment or business property into more lucrative and desirable redevelopments. Yet the inherent limitations within these properties have restricted the ease of traditional redevelopment models.

A contemporary account along the avenue illustrates that the majority of redevelopments have occurred on corner properties, those adjacent to east-west flanking streets. This includes 3381 Yonge Street located at the north-east corner of Yonge Street and Golfdale Road. While the four floor, 14 unit condominium development with commercial space at grade provides higher density dwelling units on the previously vacant lot, it fails to add the density and height encouraged within the city's vision for Mid-Rise Urbanism. Furthermore the makeup of the structure follows the traditional high-rise model, densely grouping one and two bedroom suites within a double loaded 'L' shaped corridor, a design move often placing emphasis on quantity over quality of spaces. Furthermore the development remains ordered by the automobile, providing rear parking at grade where community amenity space could have

been located. While such avenue development is viewed as an underinvestment in density, because of the structures dependence on its corner condition to provide increased day lighting, ironically this development model is rendered largely unpractical for mid-block sites of equal size.

Fig. 3.6 Front and rear view images of 3381 Yonge Street

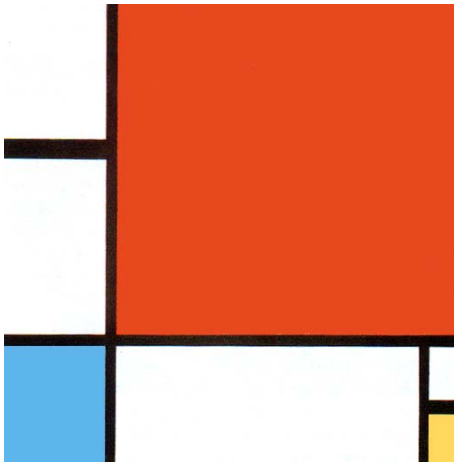
Mid block developments have also occurred along the YLV avenue, yet often in disregard for higher-density living. Such development includes the single commercial unit, located at 3409 Yonge street on the east side of Yonge Street between Golfdale Road and Teddington Park Avenue. A third storey has been added to the two-storey 1931 brick structure, visually separating it from its previous uniform grouped neighboring structures. The recent addition has provided a single two floor residential unit on top of the ground floor commercial space. The residential space, with the exception of small light wells, depends on its east and west exposure for day-lighting, as it rests at a zero lot line to its neighboring structures. This development too has come to represent an underinvestment in density, creating a dwelling space, hostile to its busy commercial environment. Such construction suggests an uncooperative attitude with regard to its setting, and that of a last resort for exploiting redevelopment. It is apparent that these development models fail to achieve the city's goals for quality intensification, threatening to maintain the reputation of avenues as poor environments for redevelopment.

Fig 3.7 front and rear view images of 3409 Yonge Street showing new façade and rear addition

Alternative ideas for intensification have been suggested to permit the acquisition of bordering residential lots, expanding avenue lot depths for provision of larger development. However these actions could potentially lead to further community disruption, predicating a decline in urban low-rise residential stability in the shadows of towering density. The need for an alternative plan for mid-rise development has perhaps never been greater.

> ‘The real question is, how do we make things happen now? What can the City do differently, (or better), to kick-start this process? What do architects, builders and the development community need in order to respond?’
>
> Robert Freedman, 2005

3.2 Inspiration



Piet Mondrian, a De Stijl movement, early 19th century modernist worked upon the principles of 'Dynamic Equilibrium', employing a balance of unequal yet equivalent opposing elements to further express a "mystical harmony of humanity" in the universe. Through his series of compositions, a streamlined palette of geometrical shapes, lines and primary colours come together to assemble a whole while allowing for individual interpretations. As author H. W. Janson and Anthony F. Janson discuss in their work, History of Art, Mondrian accommodated the philosophical concept of 'infinite complexity' imbedded within his work, ultimately realizing an abstract visual language of order, one that could be reproduced in contrasting applications. A similar approach could be applied toward the planning of Toronto's avenues, allowing for the generation of dynamic architectural responses to opposing conditions, in effort to create an urban equilibrium.

Above Figure 3.8 Image of Mondrian's Composition with Red Blue & Yellow, 1930, courtesy H.W. Janson History of Art

3.3 Proposed Guidelines

Inspired from the concept of 'Dynamic Equilibrium', I propose a set of alternative urban guidelines for quality avenue intensification. Such a plan can provide the needed feasibility for higher-density, mixed-use mid-rise developments, promoting a grouping of multiple narrow lots, yet a plan not contingent on the acquisition of entire or the majority of avenue blocks, and one not in need of ideal corner or deep lot conditions. The encouragement of development upon sites larger than single and often narrow existing lots, but also smaller than block long mega-structures, can better ensure a balance of increased density alongside the preservation of community character and scale.

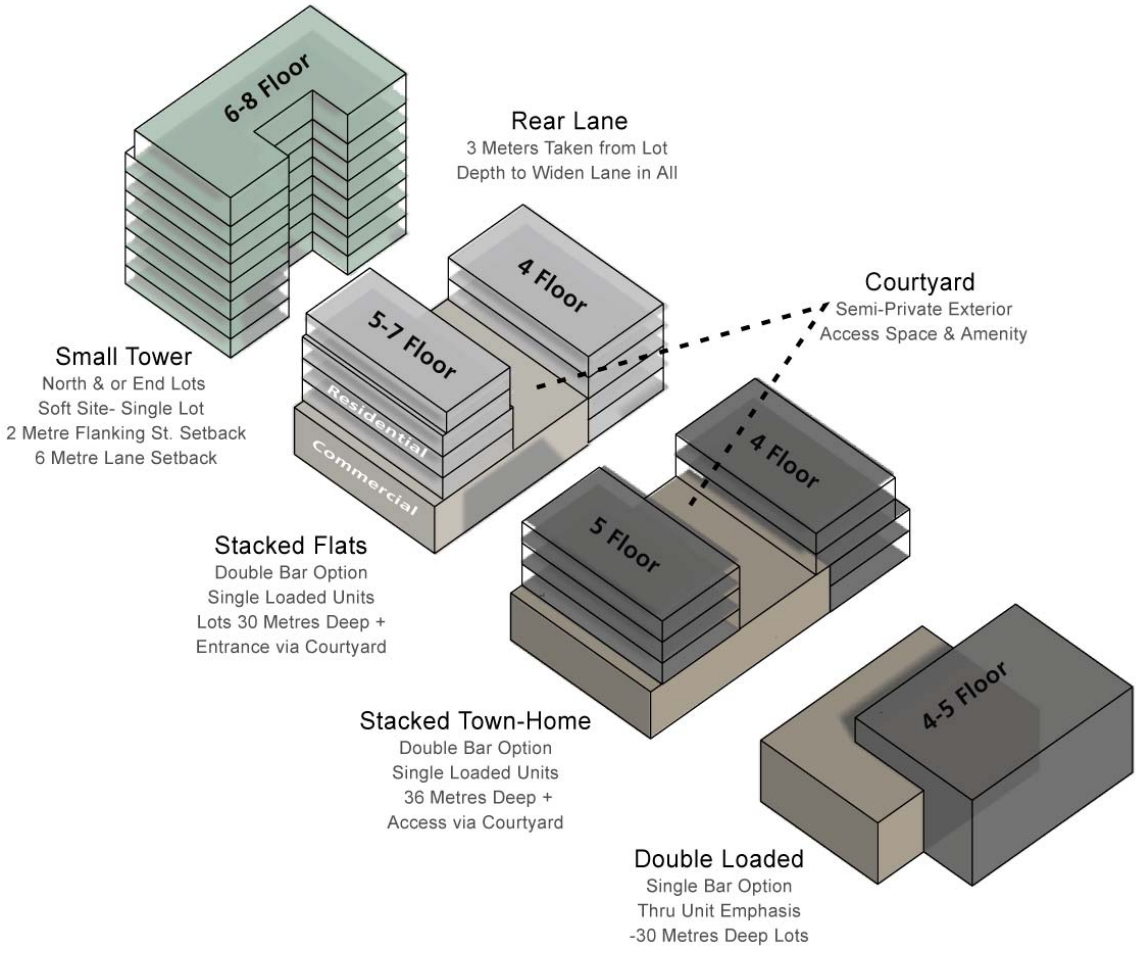
Informed by the discussed contemporary alternative developments, four proposed mid-rise building models are put forth, each responsive to varying avenue site conditions. A Stacked Town Home typology akin to the Vancouver model is created, assembling two bars of multi-floor single-family homes around an above ground, semi-private exterior courtyard, providing egress and amenity to its occupants.

A minor variation to the Stacked Town Home model is the stacked flat typology, where two building volumes contain single and/or multi-floor dwelling spaces again ordered around an exterior courtyard. However in contrast to the Stacked Town Home model, the Stacked Flat model does not solely depend on the courtyard for egress, making use of semi-private vertical circulation with access to the avenue below, a design element which permits a potential for increased height. Both Stacked Town Home and Stacked Flat models are deemed appropriate where lot depths are 30 metres or greater. The inclusion of the above ground exterior courtyard space can offer increased egress and amenity, uniting multiple developments, while setting in place a physical framework for future development to follow, independent of its redevelopment timeline.

On corner lot conditions, A Small Tower typology is provided, allowing for a single building volume of potentially increased height above that of the Stacked Flat. Although the massing of this model is not partitioned with an aboveground courtyard, it is planned in cooperation with such neighboring exterior spaces. The Small tower's massing is set back at courtyard joining points. In exchange, the Small Tower is permitted additional limiting distance onto the courtyard space, permitting some window openings for its dwelling spaces, where traditional infill developments would not. The Small Tower model will set back an additional 6 metres or greater at its rear and 2 metres or greater at the flanking street to accommodate existing low-rise neighborhoods. The potential for unit assembly within the model permits single and multi-floor units while allowing for

units to occupy portions of or entire floors, encouraging living spaces well exposed to day lighting. Living spaces are again accessed through shared vertical circulation.

For lot depths less than 30 metres, a Double Loaded building model is selected in effort to provide single loaded quality dwelling spaces where a courtyard space cannot be incorporated. The Double Loaded model shares similar characteristics as the previous alternative mid-rise models, providing stacked living spaces with hybrid through unit qualities, and continuing to gain additional exposure to potential neighboring courtyard spaces.



Mid-Rise Avenue Building Model Menu

Fig. 3.9

Each development model is deemed appropriate for lot widths of a modest grouping of three or four typically narrow lots and/or of 18-20 metres or greater and are reduced in footprint an additional three metres at the rear for the updating of the right of way. Additionally each model can be applied on top of an existing structure.

The potential incorporation of these models can promote a dynamic and incremental pattern along Toronto's irreplaceable streetscapes. As multiple developments of contrasting models can fit together, the potential also exists for single developments to contain facets of multiple models within its volume, adding a measure of adaptability within reproducible models. This mid-rise building menu does not limit the inclusion of future adaptations, so long as the potential to provide quality higher density mixed use dwelling spaces is present.

At the community scale, a zoning plan is created, informing the potential for future avenue intensification within each individual site condition. This diagram permits increased density without disrupting the character of low rise communities, encouraging a steady transition of massing towards avenue spaces. While interior commonly two-storey residential streets remain unchanged in scale, properties on the residential edge, those adjacent to the avenue structures are permitted to increase in density. An increase in height to three storeys and the transition toward multiple attached dwellings can reinvent previously less desirable end conditions, while further adding a visual and sound buffer between residential and commercial areas. Similar redevelopments have occurred at the end condition of inner suburban residential streets adjacent to avenues or busier traffic arteries and have been positively received in such a setting.

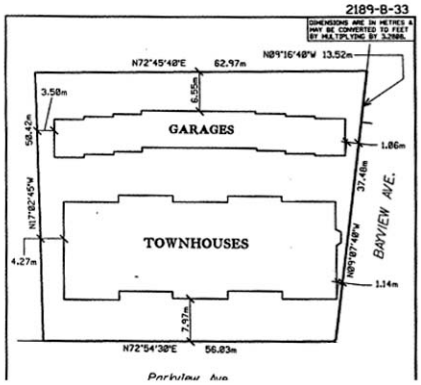
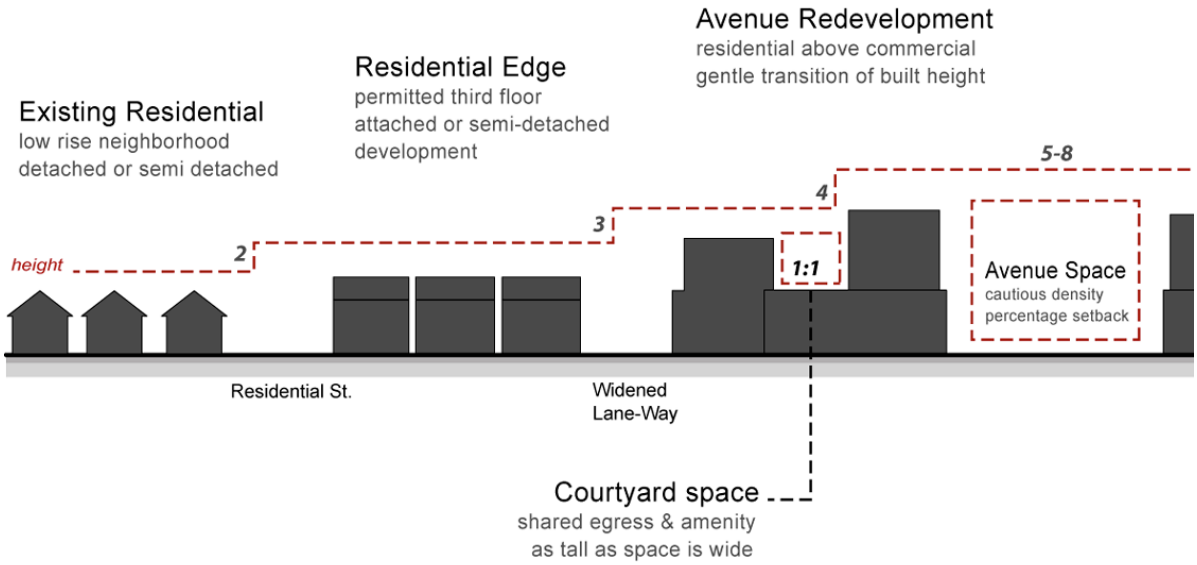


Fig. 3.10 Parkview Ave town-home development, by-law drawing, courtesy City of Toronto

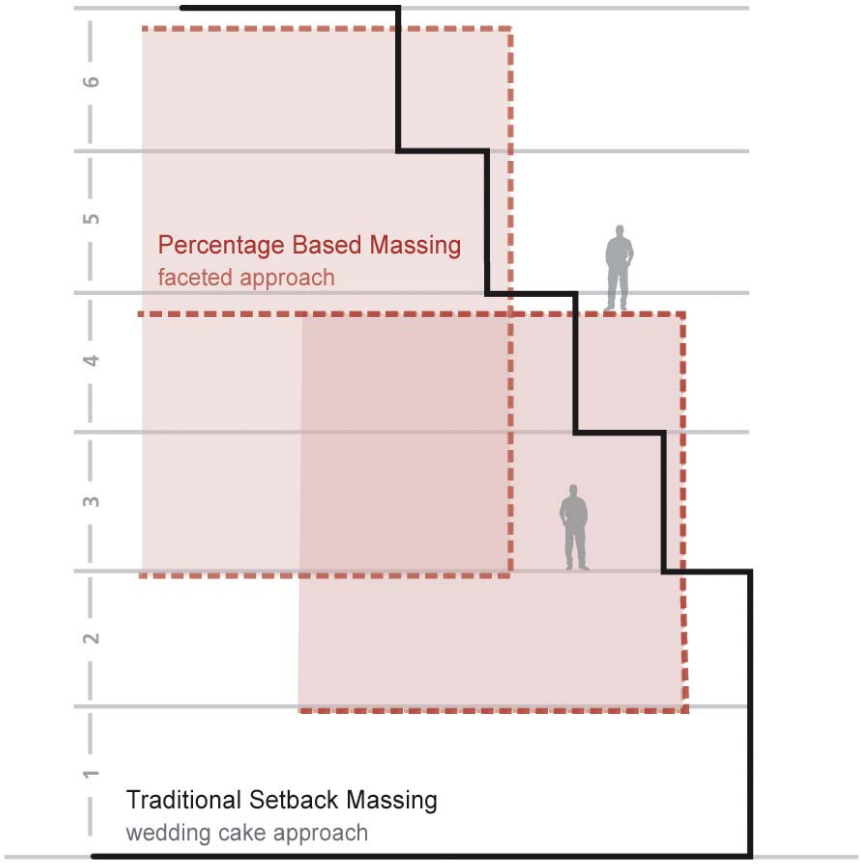
A gentle transition of height is maintained continuing toward avenue properties. The rear portions of avenue developments are permitted to increase to four floors in height. The street front portions of the avenue developments are then permitted to increase in height dependant on their lot depths, between five and eight floors tall. As deeper avenue sites contain the potential to house increased height only toward the avenue, a reduced visual impact upon its adjacent low-rise community is ensured. This plan further ensures the creation of quality scaled residential spaces, challenging the previously accepted 1:1 aspect ratio for the creation of Mid-Rise buildings to rise as tall as the street is wide. In its place, the 1:1 aspect ratio is applied to the exterior amenity courtyard spaces of the avenue developments. The alternative effect can further contribute to a dynamic irregular yet balanced avenue streetscapes, occupied with mid-rise structures of varying heights, responsive to their specific site conditions.



Community Zoning Diagram

Fig. 3.11

At the building scale, alternative massing is suggested, seeking to update the often restrictive, traditional setback diagrams. In place of the wedding cake style building massing, a percentage based massing is provided, allowing for a more abstract extrusion of building facets, additionally offering opportunity for the creation of larger intermittent private exterior amenity spaces. Such a plan can uphold the ideals of traditional massing in reducing the impact of shading, in permitting portions of building volumes to exceed previous envelope boundaries, in exchange for a reduction of volume elsewhere. Such characteristics can assist the design process, providing an opportunity for unique public and private space making in a manner free of complexity.



Percentage Massing Diagram

Fig. 3.12

3.4 Test Site

The YLV block bound by Teddington Park Road and Golfdale Road, on the east side of Yonge Street is chosen as a test site for the proposed urban guidelines. The same block containing both 3409 and 3381 Yonge Street developments further includes a variety of opposing lot conditions, potentially adverse to any one single development form or model. The north corner heritage site currently occupied by the one storey single-use TD Canada Trust bank branch can surely be categorized as a “soft site” where development conditions appear strong including a lot frontage grater than 60 feet. This site rests in contrast to the south corner where 3381 Yonge Street’s multiple individual ownership structure all but hinders future redevelopment and can be considered a hard site. Between the two, seven more narrow mid-block lots are separated only by a locally rare mid block laneway, otherwise tightly joined.

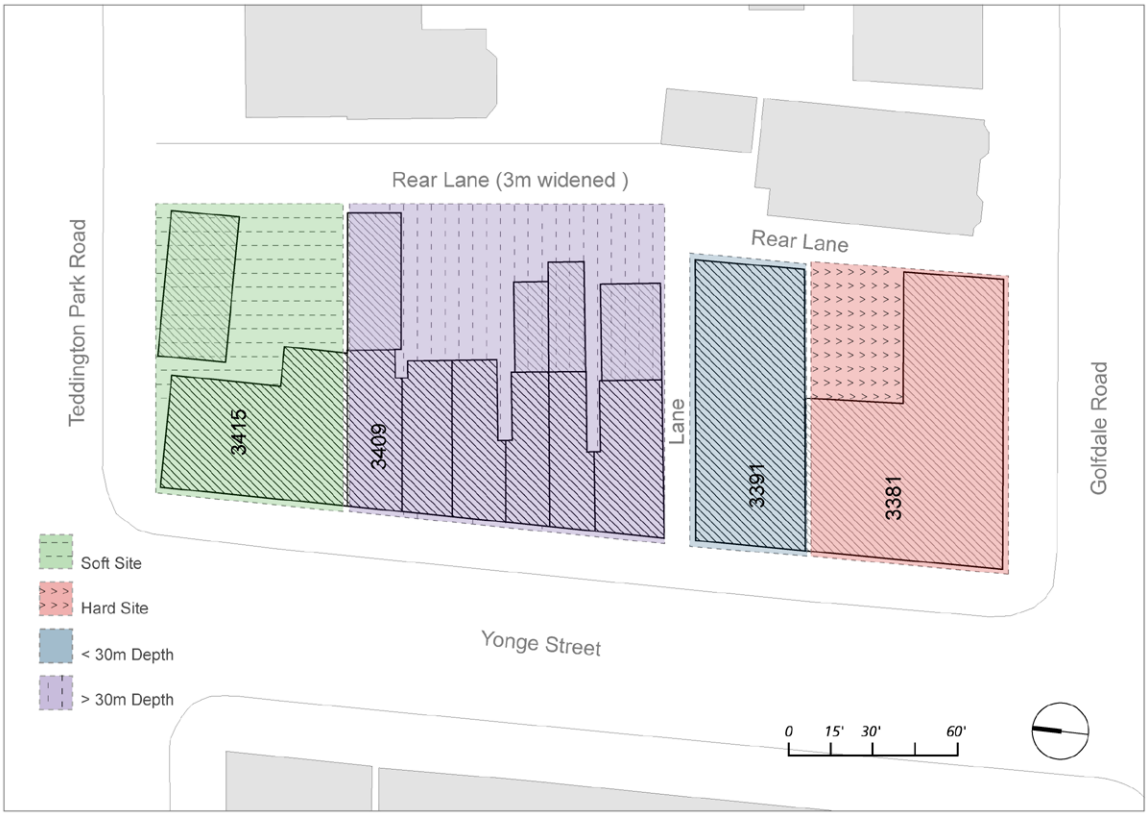


Fig. 3.13 Plan view of the block displaying various lot conditions

A City of Toronto 1968 photo displays 3391 Yonge Street, the southern most located mid-block structure in the forefront, then a modern black granite faced Danforth Radio electronic store. It rests adjacent to the then southern corner vacant lot where 3381

Yonge Street now stands. To its north a single Edwardian style six-unit brick structure is shown in its entirety, preceding recent changes to its northern unit. Further examination reveals contrasting lot conditions with 3391 Yonge Street's lot being approximately double its mid-block neighbors lot width, only with a reduced lot depth. Accompanied with a future widening of the rear right of way, 3391Yonge Street's developmental area would be less than 30 meters in depth, requiring an alternative development approach than that of its northern neighbors. While it is apparent that these structures are under-built in comparison with today's standards, it is also understandable that this block is a quality assembly of once proud structures, contributing irreplaceable character and urbanity on to the public avenue.

City of Toronto Archives, Series 648, s0648_fl0239_id0082

Fig. 3.14 Yonge street at and Golfdale Road,1968, courtesy City of Toronto archives

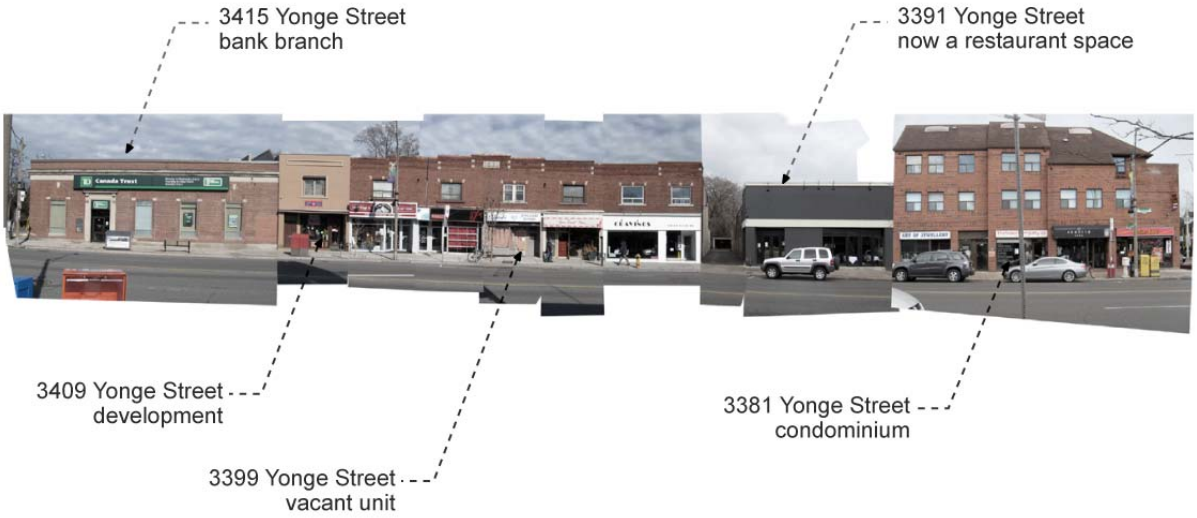


Figure 3.15 Yonge street (east side) at Teddington Park Rd and Golfdale Rd as it is today

The current commercial uses of the block offer a variety of restaurants and domestic conveniences, each competing for their share of business from the local patronage. Commercial vacancy is also present within the block, and throughout the avenue, as small businesses have struggled with a changing economy. An addition of residential densification onto the avenue can in turn support the vitality of local business, helping to preserve the commercial amenity and reducing a need to commute elsewhere to access commerce.

The low-rise residential neighborhood that tightly nestles against the block, partitioned only by the rear right of way will surely be impacted by additional avenue densification. It is perhaps at the rear where a gentle transition of massing is most required. An increase in width of avenue rear right of ways does not have to imply solely an increase traffic. In its place, improved rear pedestrian access and egress can help to activate the multifaceted potential within avenue intensification.

3.5 Design Project

Two separate developments are presented within the block, each mobilizing the existing lots with the exception of the existing southern corner, further incorporating the potential adaptive use of existing avenue structures. Created are mid-rise structures shaped in allowance with the alternative urban guidelines and models, seeking to demonstrate successful higher density, mixed-use intensification options.

Site Plan

Fig 3.16

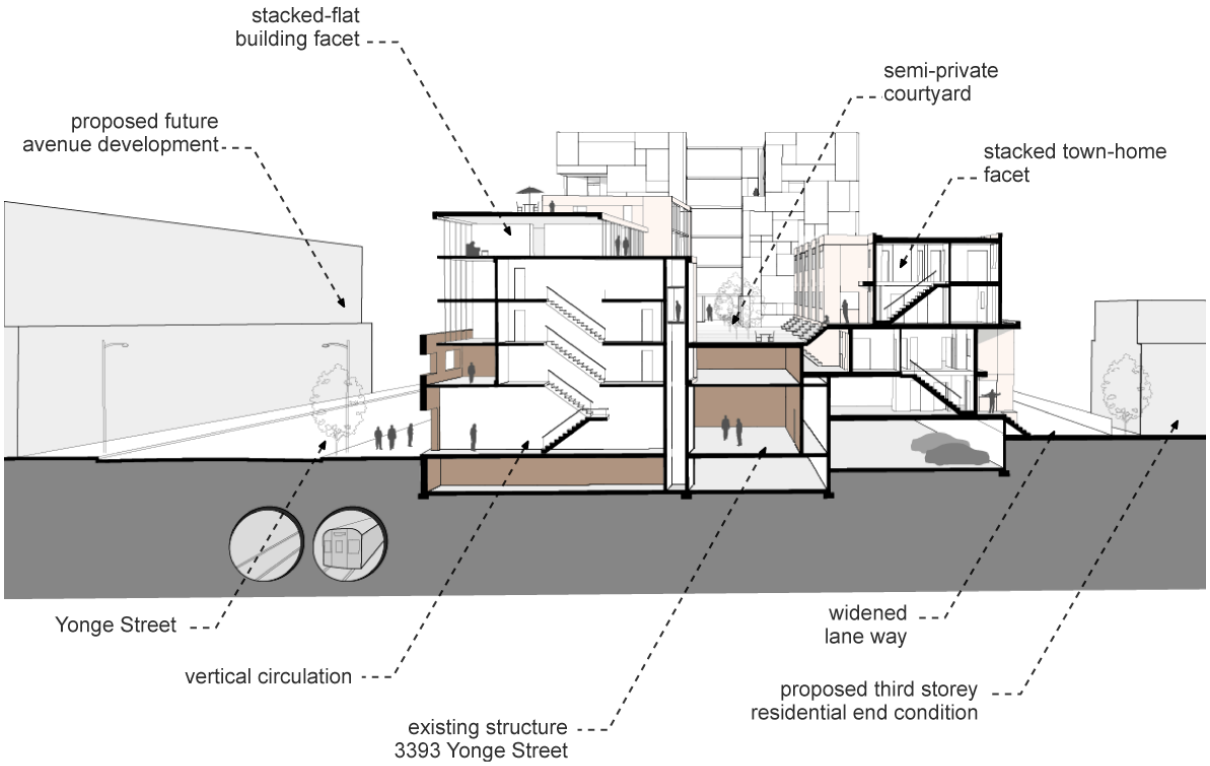
The first development consolidates the seven mid-block lots, forming a structure that oscillates between three development models where appropriate. Along the Yonge Street frontage, density is added on top of the existing 1931 Edwardian structure in the form of Stacked Flats. As the structural grid of the existing structure below is retained, the partitioning of living and vertical circulation spaces above is efficiently ordered, providing visual continuity between old and new. To the rear of the Stacked Flat portion,

a Stacked Town-Home facet is chosen, constructed on new foundations formed on rear vacant and/or unexcavated land, clear of existing structural restrictions. The modern day additions located in the rear of these lots are removed, including the addition at 3409 Yonge Street. The void created between the two building facets encloses a semi private exterior third floor courtyard, providing access to the adjacent third floor residential units and ensuring an intimate reprieve from the nearby public avenue below.

On the site of 3391 Yonge Street where lot depth is reduced, a Double Loaded model is used. The facet provides entirely new mixed used space, connecting a newly introduced and contrasting residential building fabric with the commercial ground plan, further providing opportunity for larger, double-height commercial space. The vertical circulation that services the Stacked Flats building facet is shared in the Double Loaded building component, as the structure extends across the mid-block lane above ground, reducing a dependence upon often-unvalued interior circulation spaces.

Within the multi-faceted structure a variety of unit sizes are created, with inherent potential for further variation. The courtyard condition helps maintain the emphasis of the creation of thru-unit spaces with quality day lighting. Furthermore, the consolidation of multiple narrow lots permits the creation of wider dwelling spaces above, spaces elongated in width and immersed in exterior exposure, in place of confining partition walls. Each unit contains access to one or both of the exterior courtyard and private exterior amenity spaces. Additionally a preference is placed on the creation of family sized spaces, containing two, three and four bedroom units, in contrast to the readily supply of one bedroom, one bathroom sized found in high-rise developments. These characteristics help to create suburban-like domesticity amidst urban contexts, inventing an identity unique to that of Mid-Rise Urbanism.

At grade, the reorganization that vertical circulation spaces inflict upon the existing commercial units, provides the opportunity for these spaces to upgrade in use. This can allow for a doubling up of units and the incorporation of second floor spaces, responding to a need for increased retail sizes of the 21st century. The contrast of these 20th century, conceptually solid stone and masonry structures with today's lighter glazed spaces is only enhanced through the use of percentage massing, cautiously contrasting old and new . The result is that of a seemingly random massing, yet one directly responsive to its individual site and program, further applying the urban concept of dynamic equilibrium within the scale of the building.

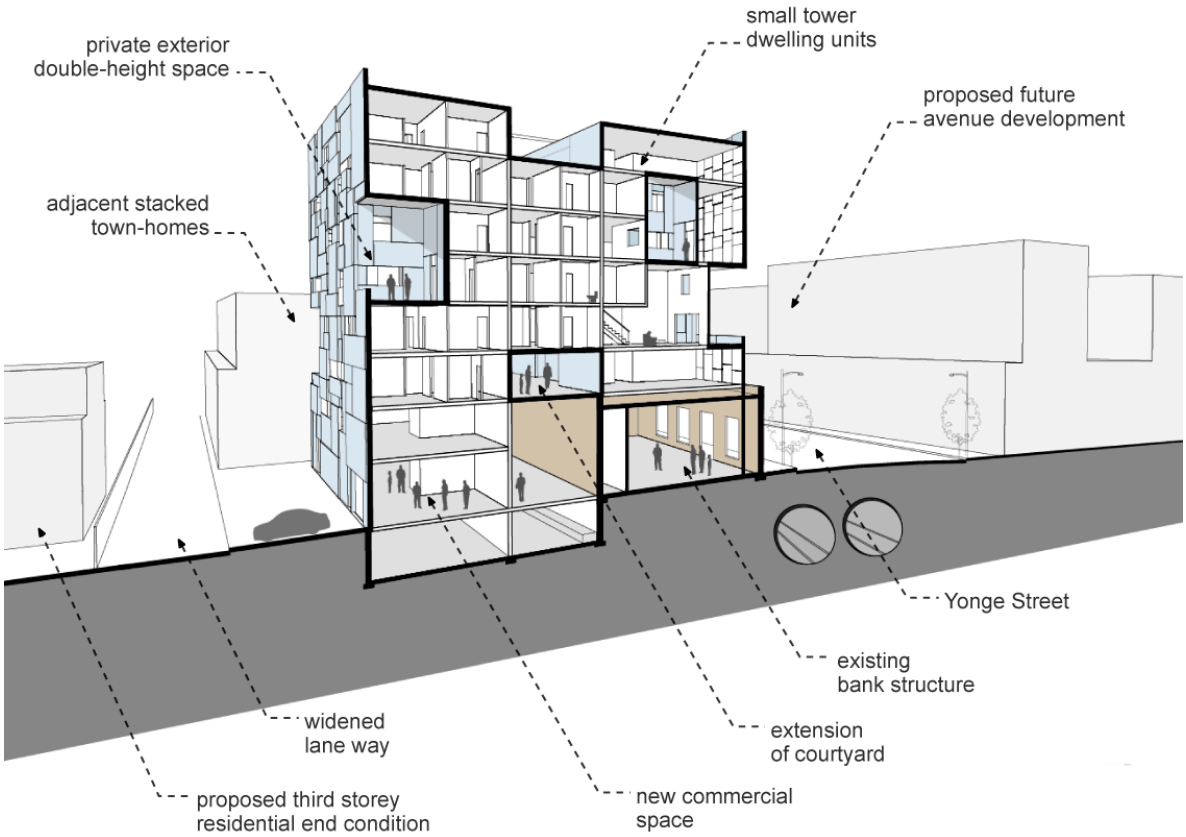


Section A

Fig 3.17

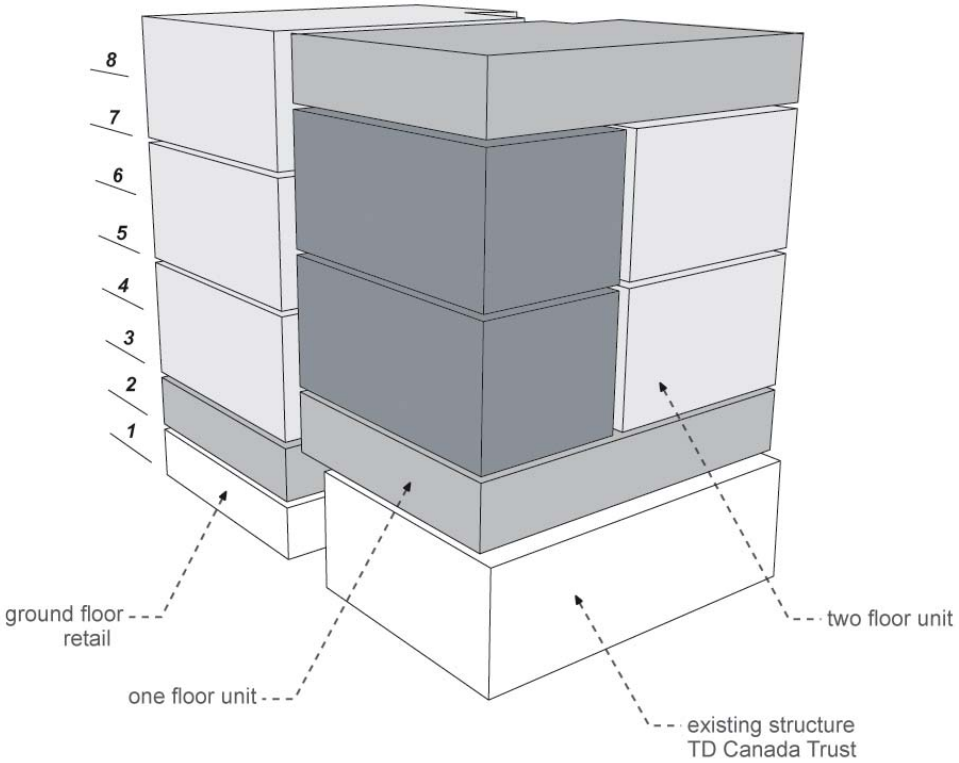
The second development occurring solely on the lot of existing bank structure, recognizes the autonomous developmental capability of such soft sites, while also recognizing the benefits found within a spatial alignment with its neighbors. A Small Tower development model is employed, providing massing that maximizes higher density within its smaller footprint. The development rises eight floors in height, while remaining inside the proposed urban zoning boundaries, reducing its rear lot coverage where surface parking is located. In contrast to traditional development, the structure does away with opaque demising walls, instead finding additional day lighting to the south, connecting with or anticipating a neighboring redevelopment to come. Within the structure, single and multi-floor family-sized spaces are shaped, all with access to private exterior, double height spaces enclosed within the building's massing. The capability of the structure to provide a variety of sized spaces, including semi-private floors, allows for thru units with multiple exterior exposures. This helps to add increased

gross floor space while reducing underprivileged zones within the building envelope. The potential offset of multi-floor units further reduces unit entrances within shared circulation spaces, increasing intimacy and potentially encouraging greater individual stewardship of common spaces. The resulting effect helps depict Mid-Rise Urbanism not just as buildings within a community, but also as cultivators of communities within buildings, reinforcing the spirit behind avenue intensification.



Section B

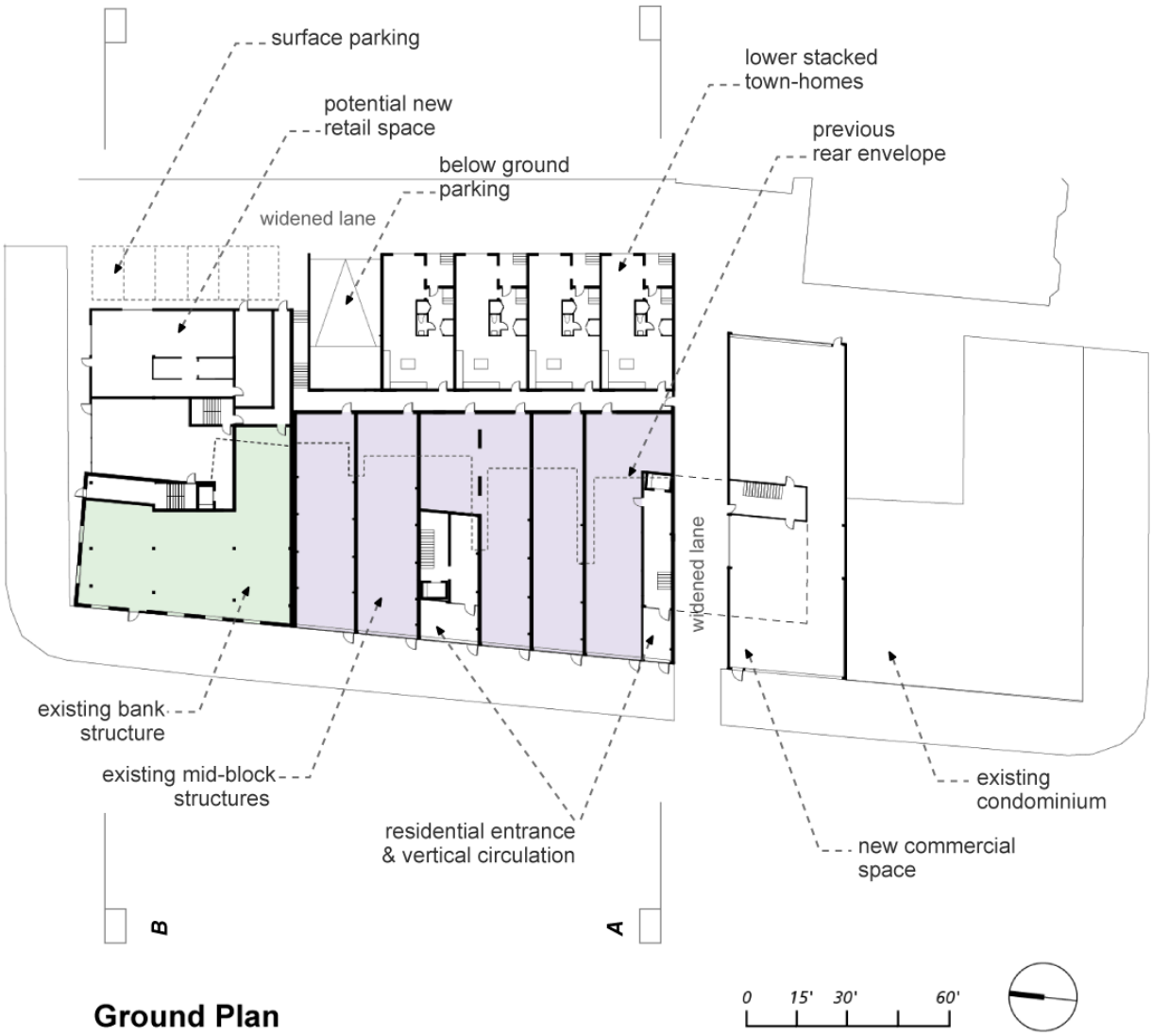
Fig. 3.18



Small Tower Multi-Unit Stagger Diagram

Fig 3.19

Both developments invest within the local character, recognizing existing avenue fabric as infrastructure worthy of expanding upon. The use of existing structures as foundations for redevelopment where appropriate can best ensure incremental avenue adaptations, while further avoiding destabilizing, clean-slate approaches. A reduction in parking can be supplemented off-site at the perimeters of the avenue where larger development cultivates, recognizing public transit as a viable and appropriate lifestyle alternative. The residual impact of each development reinvents avenues both literally and metaphorically as collaborative living organisms, as opposed to a formation of introverted monuments.



Ground Plan

Fig. 3.20

Courtyard Third Plan

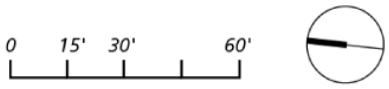
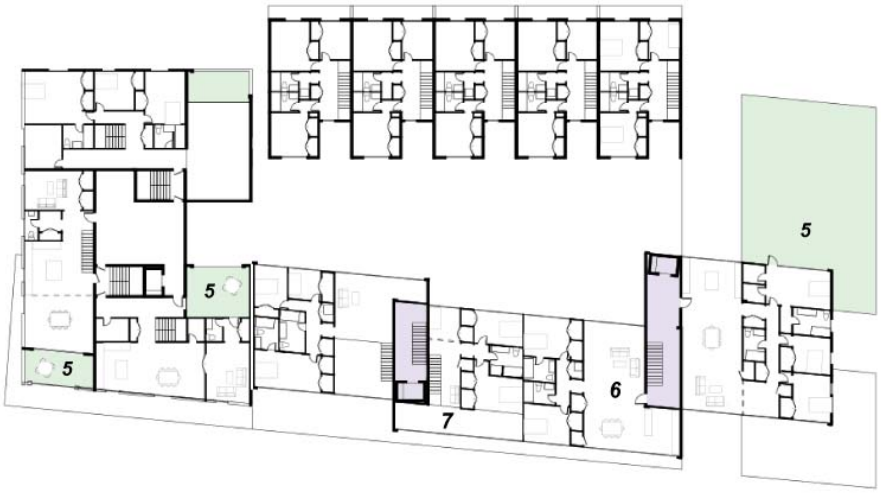


Fig. 3.21

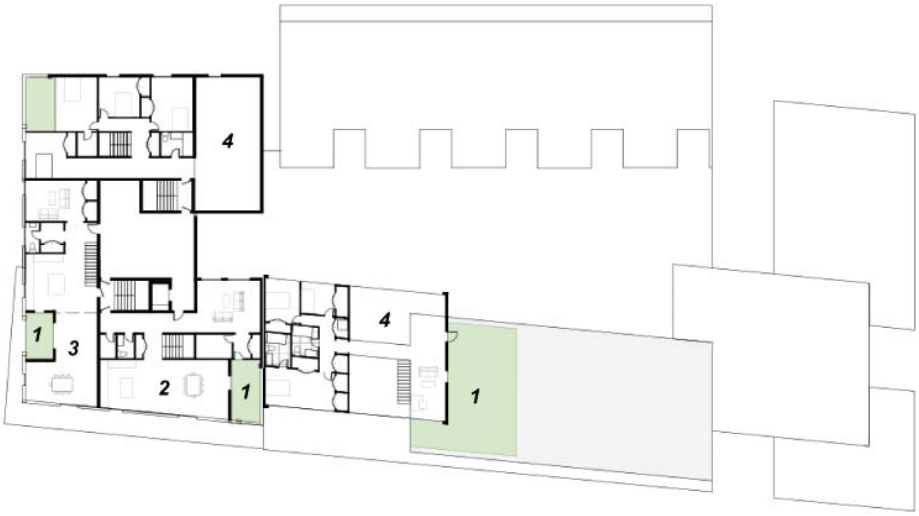


Fourth Plan

Second Plan

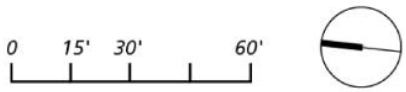
1 second floor retail ***2*** additional residential or retail space ***3*** lower town-home porch ***4*** open to below
5 private exterior space ***6*** single floor stacked flat unit ***7*** two floor stacked flat unit

Fig. 3.22



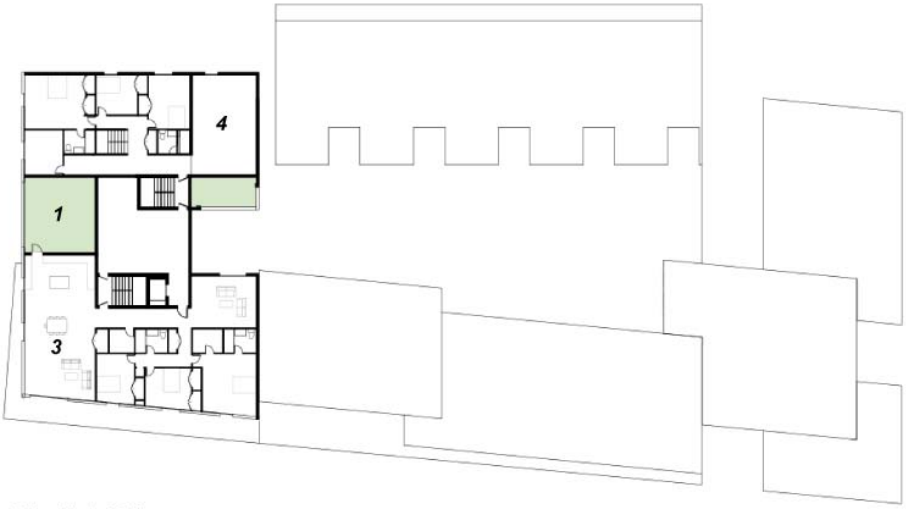
Sixth Plan

Fifth Plan

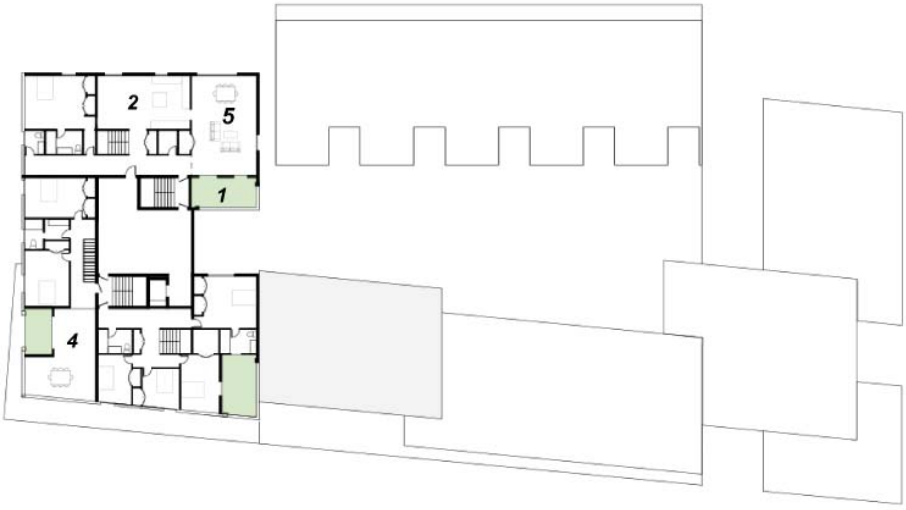


1 private exterior space ***2*** two floor small tower unit ***3*** double height space ***4*** open to below

Fig. 3.23



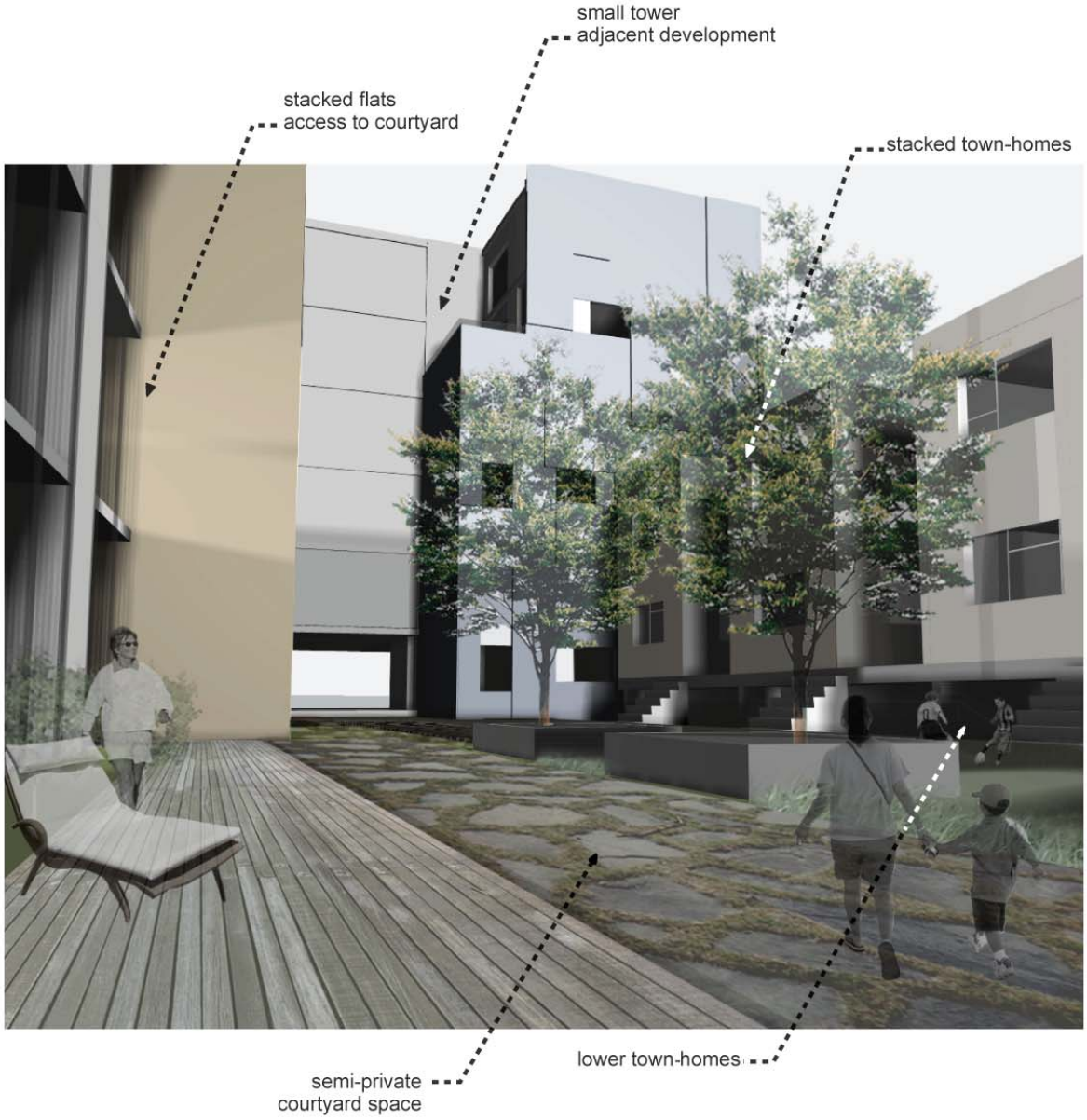
Eight Plan



Seventh Plan

1 private exterior space ***2*** two floor small tower unit ***3*** one floor small tower unit ***4*** open to below
5 double height space

Fig. 3.24



Courtyard View

Fig.3.25

Yonge Street View

Fig. 3.26

An external effect of such avenue intensification informed by the proposed alternative guidelines is that of an atmosphere of inclusively. This guidance can promote the greater mobilization of numerous sized avenue developments, instigated by a development community, equally numerous in scales. Such varieties in scale can work to reduce a monotony of form, directed not only by large corporations versed in the practice of repetition, but equally by the ingenuity of architectural services.

Conclusion

It is clear that the city of Toronto can no longer afford to expand in area as it has in the 20th century. However the influence of a suburban utopian way of life, manifested through political and cultural movement has equally endured. The direction of future populations and development toward the traditional urban areas alone cannot expunge a resistance toward higher-density, mixed-use communities. The feasibility of avenue intensification depends upon an investment in new strategies, those that provide desirable alternatives and those that can creatively make use of Toronto's existing infrastructure. Then a potential paradigm shift can occur, initiating development active in an appropriate sized, economically lucrative reinvention of the avenues, augmented in scale and intensity but not use. A re-branding of the avenues as that of foundations for community preservation, and those providing spaces appropriate for the greater lifecycle can best support the goals of Toronto's Official City Plan. Only then can Mid-Rise Urbanism succeed as an appropriate tool for avenue intensification.

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