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DRAFT BEST PRACTICES GUIDE FOR PLANNING CENTRES AND CORRIDORS

The Planning and Economic Development Committee recommends:

- 1. Receipt of the presentation by Karen Whitney, Manager, Planning and Infrastructure Integration, and Josh Reis, Planner;**
- 2. Receipt of the communication from Danielle Chin, Municipal Government Advisor, BILD, dated February 28, 2012; and**
- 3. Adoption of the recommendations contained in the following report dated February 1, 2012, from the Commissioner of Transportation and Community Planning with the addition of the word “public” in recommendation 1 so that it reads as follows:**

- 1. The Draft Best Practices Guide for Planning Centres and Corridors (“the Guide”), referenced as *Attachment 1*, serve as the basis for continued consultation with partners, including the public, local municipalities, and the development industry, in finalizing the Guide for the June 2012 meeting of the Planning and Economic Development Committee.**

1. RECOMMENDATIONS

It is recommended that:

1. The Draft Best Practices Guide for Planning Centres and Corridors (“the Guide”), referenced as *Attachment 1*, serve as the basis for continued consultation with partners, including the local municipalities and the development industry, in finalizing the Guide for the June 2012 meeting of the Planning and Economic Development Committee.
2. The Regional Clerk circulate this report to the Clerks and Planning Departments of each local municipality and to the Building Industry and Land Development Association, GTA Chapter (BILD).

2. PURPOSE

This report introduces a preliminary draft of the Best Practices Guide for Planning Centres and Corridors (“the Guide”), in order to receive feedback and to serve as the basis for continued consultation with our planning partners, including the local municipalities and the development industry. The Best Practices Guide, itself, is intended to serve as an information and discussion tool to support the ongoing planning and implementation of Centres and Corridors in the Region. It is not a Regional guideline, rather a compendium of relevant information, and examples of innovative projects, that would support Centres and Corridors intensification.

3. BACKGROUND

Centres and Corridors are the foundation of Regional and local urban structures, and are enhanced through continued knowledge-sharing to support innovation and implementation

The Regional Centres, followed by locally-designated Key Development Areas along the Regional Corridors, and other locally-designated areas, are the primary locations for high-density and mixed-used development across the Region. These locations are undergoing a continual evolution into the compact, vibrant, mixed-use and transit-supportive places they are planned to be; consistent with the Growth Plan for the Greater Golden Horseshoe – Places to Grow, the Metrolinx Regional Transportation Plan, and the in-force (1994) and new (2010) Regional Official Plan.

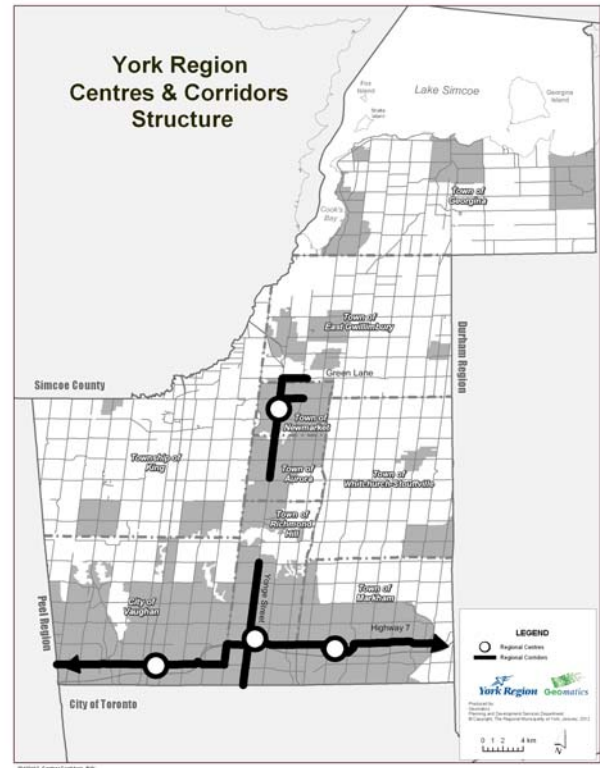
The continued growth and intensification of Centres and Corridors across the Region, as the foundation of the Regional and local urban structures, is supported not only through enhanced planning policies but through an open and progressive dialogue on how to achieve the vision for a sustainable Region. The draft Guide is positioned as a tool to help foster that dialogue, and to continue the positive city-building momentum across the Region.

The Best Practices Guide acknowledges York Region's historic growth patterns, and provides information to support modern city-building under the new (2010) Regional Official Plan, and through local Official Plans

The 300-year history of community building in York Region, and which serves as a solid foundation for continued city-building, is acknowledged in the Best Practices Guide. The beginnings of an urbanizing and transit-oriented Region are rooted in a historical pattern of development radiating along, and concentrated at the intersections of, transportation spines such as Yonge Street where stage coach and later streetcar services provided community links for the pioneering residents and merchants in early settlements such as Thornhill and Aurora.

Our emerging city-building for Centres and Corridors, building on York Region's historical growth patterns, was established through the first Regional Official Plan (ROP) in 1994, and has been refined through enhanced policies in the approved 2010 ROP. The current policies for Centres and Corridors (Section 5.4) provide a renewed emphasis on city-building, by establishing, for example:

- Minimum density requirements for Regional Centres and Key Development Areas with planned subway stations.
- Comprehensive design and standards for new communities and buildings that reduce resource and energy use, and that promote transit-use and active transportation such as cycling.
- Housing affordability requirements.
- Tools, such as Section 37 of the *Planning Act* (i.e. providing community benefits in exchange for additional height and density), to support planning implementation.
- Guidance for local centres and corridors, integrated in the Regional system.



4. ANALYSIS AND OPTIONS

The Best Practices Guide consolidates information and illustrates approaches to support continued dialogue and innovation with our planning partners, and draws on a range of approaches from across Canada, North America and the world

Our continued and collaborative city-building experiences, in partnership with our local municipalities and the development industry, is providing us with new knowledge to refine and improve our planning and development approaches. A range of specific city-building components, including public realm and a range of housing options, has been identified through our experience, as a starting point for further discussion with key partners.

The Best Practices Guide, building on the progressive City Building policies for Centres and Corridors in the 2010 Regional Official Plan (Section 5.4), outlines examples from a variety of jurisdictions and settings, within important areas of progress related to Centres and Corridors development. These areas include:

Public Realm

An attractive and vibrant public realm – comprising streets, pathways, parks, squares and other public spaces – is an important element for creating successful urban communities where people live, work, shop, play and travel. The Best Practices Guide shows a range of public places from a wide variety of locations and contexts, and projects that highlight mixed use developments and promote a diversity of uses (including offices) to enhance public interactions.

Parking

The supply and design of parking impacts the form and quality of high-density communities. The Best Practices Guide surveys a range of approaches for reducing parking, and designing parking structures to fit within high-density urban environments.

Parkland Acquisition

Municipal requirements for land and/or financial contributions for parkland as a condition of development approvals, as legislated in the *Planning Act*, has been identified by the land development industry as a barrier to the delivery high-density development. The Best Practices Guide outlines alternative standards, from a range of jurisdictions, for parkland acquisition that aim to strike a balance between development costs and the public requirement for accessible active and passive recreation areas.

Providing Compact Urban Community Facilities and Services

While community facilities, such as schools, are essential requirements for achieving complete and healthy neighbourhoods, standards for these facilities in high-density areas need to reflect, and be integrated with, a compact built environment. The Best Practices

Guide shows, for example, how schools in other jurisdictions have been constructed in a less land-intensive format, and/or have been integrated into other buildings.

Legislative Tools

The Best Practices Guide acknowledges that a range of municipal implementation tools, made available through various pieces of Provincial legislation (e.g. Planning Act, Municipal Act), can assist in the implementation of intensified development. A range of existing tools are profiled in the Guide, including the use of grants and the streamlining of development approval processes.

Financial Tools

Recognizing that there are significant costs and revenues associated with achieving successful city-building, the Best Practices Guide surveys a range of municipal tools and partnership models from across North America. The highlighted case studies are examples of how municipal financial strategies can assist in directing high-quality development to strategic growth areas, while ensuring municipal cost-recovery for infrastructure and services maintaining a growth pays for growth principle.

Environmental Sustainability

While compact and mixed-used development, by its very form, is a step towards environmental sustainability there are a number of design and construction innovations to lessen impacts. The Best Practices Guide highlights a range of local, regional, national and international in-practice and emerging approaches to improving water quality and managing water quantity, and increasing energy efficiency. The final Guide will also incorporate an additional sub-section on waste management approaches, including 3-stream solutions for high-density buildings, and new collection technologies (e.g. vacuum systems).

Next Steps

Regional staff will continue to refine the Best Practices Guide, adding ideas and examples of innovative approaches to each of the above subject areas through continued consultation with, and input from, our partners including the local municipalities and the development industry. A version of the Guide will be presented to the Planning and Economic Development Committee in June 2012 for endorsement and for posting to the Regional website. Following this process, the Best Practices Guide would “live on-line”, with the intent of providing on-going updates with innovative ideas for developing our Centres and Corridors, ensuring the document remains relevant and thought provoking over time.

Link to Key Council-approved Plans

The planning and implementation of the Regional Centres and Regional Corridors is fundamental to achieving a range of Regional priorities; as set out in the 2011 to 2015 Strategic Plan, Regional Official Plan, and Vision 2051.

“Focusing Growth along Regional Centres and Corridors” is one of the seven Strategic Priority Areas within the 2011 to 2015 Strategic Plan, while directing and supporting development to the Regional Centres and Regional Corridors is a major thrust of the City Building policies of the Regional Official Plan (Section 5.4), and is critical to achieving the Region’s 40 per cent intensification target. At a high level, the Regional Centres and Regional Corridors will contribute to, and serve to advance, all eight goal areas of Vision 2051, including “Livable Cities and Complete Communities,” “Appropriate Housing for All Ages and Stages,” and “Interconnected Systems for Mobility.”

5. FINANCIAL IMPLICATIONS

Costs and revenues associated with development in Centres and Corridors are important considerations for both the public and private sectors

The research, consultation and production of the Best Practices Guide is being conducted with in-house staff and resources within the Transportation and Community Planning Department. As such, there are no direct financial implications associated with this report.

The Best Practices Guide is an “abstract” of ideas and progressive concepts being proposed by the Region, local municipalities and national and international community.

The Best Practices Guide acts as a background document for an ongoing forum for Centres and Corridors in the Region. Intensification within the Centres and Corridors provides opportunities to achieve certain efficiencies in the significant Regional investments being made in rapid (e.g. subway/BRT) and conventional (e.g. YRT/Viva) transit, enhanced streetscaping, pedestrian and cycling connectivity, water and waste water capacity, and the delivery of community facilities and services.

6. LOCAL MUNICIPAL IMPACT

The local municipalities are important partners in achieving intensification targets, and are responsible for planning implementation through local planning instruments

The local municipalities have a critical role in the planning and development of a system of Centres and Corridors within the Region. The Regional Official Plan policies are implemented, largely, through local official plans, secondary plans and related zoning by-laws and site plan control processes. The Best Practices Guide, therefore, can provide helpful information to support local planning discussions and implementation.

Local municipalities have provided some initial input into the draft Guide, and will continue to be involved in its refinement and finalization. The various approaches

profiled in the Best Practices Guide, including some specific case studies, have been included based on the initial feedback received from our local planning partners.

7. CONCLUSION

A best practices guide, that highlights innovative approaches in development intensification across a wide range of issues and settings, can provide useful information to support the ongoing planning and implementation of Centres and Corridors. The document can be used as a tool to facilitate city-building across the Region to further enhance actions to plan and develop the Centres and Corridors, and assist in reducing the need, overall, for urban expansions into agricultural lands. The Best Practices Guide will also highlight many of the ideas and concepts that the Region and local municipalities have imitated and are progressing well.

While not a policy or a guideline, the Best Practices Guide has the potential to become an important discussion and education piece for the Region and our planning partners in moving forward together in building the Centres and Corridors. As such, the Best Practices Guide will “live on-line” so that it can provide an initial base of useful knowledge and evolve, over time, with contributions to reflect new and emerging approaches, and be readily-available to a wide variety of users including the development industry and the public at large. It is proposed in this report that the draft version of the Best Practices Guide be further refined in consultation with the local municipalities, and that a complete version be presented to the Planning and Economic Development Committee and Regional Council in June 2012 for endorsement and launch on-line.

For more information on this report, please contact Karen Whitney, Manager of Planning and Infrastructure Integration, at Ext.1505.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause was included in the agenda for the February 29, 2012, Committee meeting.)



Draft Best Practices Guide for Planning Centres and Corridors

Presentation to Planning and Economic
Development Committee

Karen Whitney and Josh Reis
February 29, 2012

Planning and Economic Development Committee / February 29, 2012

Overview

1. Background
2. Best Practices Guide
 - i. Purpose
 - ii. Key Focus Areas
 - iii. Case Studies
3. Next Steps



Planning and Economic Development Committee / February 29, 2012

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Background

1. Has a critical role in the Region's Growth Management Strategy
2. Essential component of City Building
3. "Centres & Corridors" – a primary focus for investment and program delivery (eg. transit)
4. A "Strategic Priority Area" of the Corporate Strategic Plan



A repository of innovative ideas and experiences

Purpose of the Best Practices Guide

- ❑ A research and information tool to promote continued dialogue and exploration of new ideas with our partners
- ❑ A starting point for round table exploration of innovative ideas for building exciting urban places



Best Practices provides ideas and innovations for exploration

Implement through innovation

Best Practices Guide - Key Focus Areas

- ❑ Focuses on areas of implementation, which pose some of the greatest opportunities for innovation:
 - ❑ Public Realm
 - ❑ Parking
 - ❑ Parkland
 - ❑ Tools
 - ❑ Environmental Sustainability
- ❑ The Guide profiles innovative programs and projects across North America and Europe



Applied innovation – across the Region

Highlighted Case Studies

- ❑ Case studies in York Region-Centres and Corridors
- ❑ Showcase new approaches and innovative development across the Region



Applied innovation – across the Region

“The Beverly Hills” (Richmond Hill)

- ❑ Regional Corridor (Yonge St.)
- ❑ Stepped height/ built form
- ❑ Effectively used S. 37 for community benefits:
 - ❑ Affordable housing
 - ❑ Car-share
 - ❑ Fine grain road system
 - ❑ Community spaces
- ❑ Mixed use – main floor retail



Applied innovation – across the Region

“World on Yonge” (Markham)

- ❑ Regional Corridor (Yonge St.)
- ❑ Density of 3.85 FSI – Built form/Transit Oriented Development
- ❑ Mix of office and residential uses – office uses required in initial phase
- ❑ Height transition from 31 storeys to podium height next to neighbourhood



Applied innovation – across the Region

“Water Garden” (Vaughan)

- ❑ Regional Corridor (Yonge St.)
- ❑ Participant in the voluntary Sustainable Development Through LEED program:
 - ❑ Water conservation
 - ❑ Green roof
 - ❑ 3 stream waste management,
 - ❑ Energy efficiency
 - ❑ Heritage preservation
- ❑ Built form – Heritage District



Continue to consult

Next Steps

- ❑ “Draft” Best Practices Guide – for discussion
- ❑ Continue to consult with local municipalities and our other partners (including BILD)
 - ❑ Round table discussions with stakeholders
 - ❑ Further review/research to add to the “Best Practices” Guide



Propose that the guide will live online

A New Approach

The Guide will be digital and updated regularly with new content (after approval by Council) -

“A living document for innovation”



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It is recommended that:

- ❑ The “Draft” Best Practices Guide for Planning Centres and Corridors serve as the basis for continued consultation with partners, including local municipalities and the development industry. The Guide to be finalized for the June 2012 meeting of PEDC.
- ❑ The Regional Clerk circulate this report to the Clerks and Planning Departments of each local municipality and to the Building Industry and Land Development Association, GTA Chapter (BILD).



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February 28, 2012

Mr. Bruce Macgregor
 Chief Administrative Officer
 The Regional Municipality of York
 York Region Administration Building
 17250 Yonge Street, 4th Floor
 Newmarket, ON
 L3Y 6Z1

Dear Mr. Macgregor,

**RE: February 29, 2012 Planning and Economic Development Committee
 Staff Report: Draft Best Practices Guide for Planning Centres and Corridors**

The Building Industry and Land Development Association (BILD) is in receipt of the Staff Report for the Draft Best Practices Guide for Planning Centres and Corridors and we offer the following comments in advance of the February 29th Planning and Economic Development Committee meeting.

As noted in the Report, staff have recommended continued consultation with relevant stakeholders, including our industry, and that the report be circulated to BILD. We greatly appreciate the recommendations of staff in an effort to build transparency and certainty. The members of the BILD York Chapter and the BILD Parkland Dedication Working Group are heavily entrenched in the themes of this guide that being: the public realm, parking, parkland acquisition, providing compact urban community facilities and services, legislative tools, financial tools and environmental sustainability.

We are extremely pleased to see that Region has acknowledged our concerns for the adherence to parkland dedication requirements. As the report indicates, Municipal requirements for land and/or financial contributions for parkland as a condition of development approvals, as legislated in the *Planning Act*, has been identified by the land development industry as a barrier to the delivery high-density development.

We support and appreciate that the Best Practices Guide outlines alternative standards from a range of jurisdictions, for parkland acquisition that aim to strike a balance between development costs and the public requirement for accessible active and passive recreation areas.

Our members would be pleased to discuss this draft guide with you in further detail and we encourage staff to attend an upcoming BILD York Chapter meeting at a date that is mutually acceptable. Therefore, we support the recommendations of staff and encourage Council to endorse them.

We trust that you will take these comments into consideration and as an affected and interested stakeholder, we look forward to our continued consultation. If you have any questions or concerns, please don't hesitate to contact the undersigned.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Danielle Chin', with a stylized flourish at the end.

Danielle Chin MCIP RPP
Municipal Government Advisor

CC: *Michael Pozzebun, York Chapter Chair*
Paula Tenuta, Vice President, Policy & Government Relations, BILD
BILD York Chapter Members



best practices guide for planning

CENTRES + CORRIDORS



Draft
February 29, 2012

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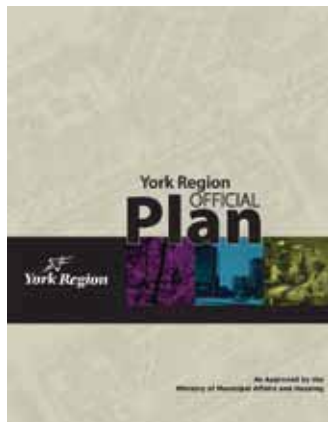
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Introduction

YORK REGIONAL INTENSIFICATION TARGETS

- 40% of new development within the built-up area by 2015
- Minimum density of 2.5 FSI in Regional Centres - equivalent to 450 people and jobs per hectare



This guide aims to bring attention to what sustainable city-building means, and how it can be accomplished in York Region through an approach to Centres and Corridors implementation, that involves:

- Setting the vision
- Establishing a policy framework
- Removing barriers through innovation
- Monitoring and measuring success
- Building partnerships

City-building through compact and mixed-use development, and supported through the delivery of transportation, water and waste water infrastructure and human services, are steps being taken by York Region to enhance the social, environmental and economic well-being of our communities. Accommodating and directing growth in this manner is a planning policy direction of the 2010 Regional Official Plan, through progressive policies for Regional Centres and Regional Corridors, and for other intensification areas across the Region. Further, directing and supporting intensification is a key objective of the 2011 to 2015 Strategic Plan, through the Strategic Priority Area "Focus Growth Along Regional Centres and Corridors."

This guide is intended to be a resource tool for a range of city-builders, including planners and designers, developers, development consultants, and residents; to assist in understanding approaches to city-building in their communities. This document is not intended to be a policy or a guideline, but rather a compendium of good innovations and practices.

Together, through all levels of government, related agencies and partners, business, and all residents – we can begin to build the communities of tomorrow, today.

A Vision for Highway 7

Highway 7, West of Jane, Looking West, Vaughan Corporate Centre



1 Existing Conditions



2 Bus Rapid Transit (BRT) Streetcar Improvements



3 Street Related Development (SRD) Pedestrian Amenities



4 Light Rail Transit (LRT) Transit Supportive Development (TSD) Connection to TTC

June 25, 2002

Prepared by Sterling Finlayson Architects for York Region Planning & Development Services Department

City Building in York Region

The system of Centres and Corridors in the Region is the foundation of the urban structure that is evolving to serve the living, working, transportation, shopping, recreation, and cultural needs of our growing and diversifying communities. The way we grow and accommodate the needs of today and tomorrow is evolving by:

Growing up, not out.

- Making better use of land through infill and intensification
- Integrating development with transit, and other infrastructure investments
- Setting minimum density requirements in primary and strategic intensification areas

Mixing land uses together, instead of separating them.

- Opportunities to live/work/shop in same area
- Creating active streets
- "24/7" communities

Providing travel alternatives to the automobile.

- Expanding our pedestrian, cycling and transit network.
- Transportation Demand Management (TDM) measures, like ride-sharing and transit-pass incentive programs
- Encouraging cycling by providing shower and locker facilities to employees
- Building and expanding the pedestrian, cycling and transit network



Source: City of Malmö, Sweden



Source: City of New York



Creating a beautiful and welcoming public realm, by renewing our approach to streetscaping and open-air meeting places.

- Active streets
- Place-making, including “outdoor rooms”
- Vibrant places through economic and cultural activity
- Municipal investments and partnerships to create a high-quality and cohesive streetscape

Encouraging efficiency and sustainability through the planning process.

- Providing incentives for projects that are energy efficient, above Ontario building code standards
- LEED certification for municipal buildings
- Making better use of water and using waste water infrastructure more efficiently
- Protecting sources of drinking water

Where we've been...where we're heading

The civilizations and cities of antiquity, and even the first-generation settlements of the Greater Golden Horseshoe, are built around dense, mixed-use and vibrant cores. Yonge Street in York Region, for example, has for over 300-years served as a key transportation and growth spine. While our focus is on the future – towards accommodating an additional 500,000 residents and 300,000 jobs within York Region by 2031 – we can learn from and build on the many successful city-building practices from the past.

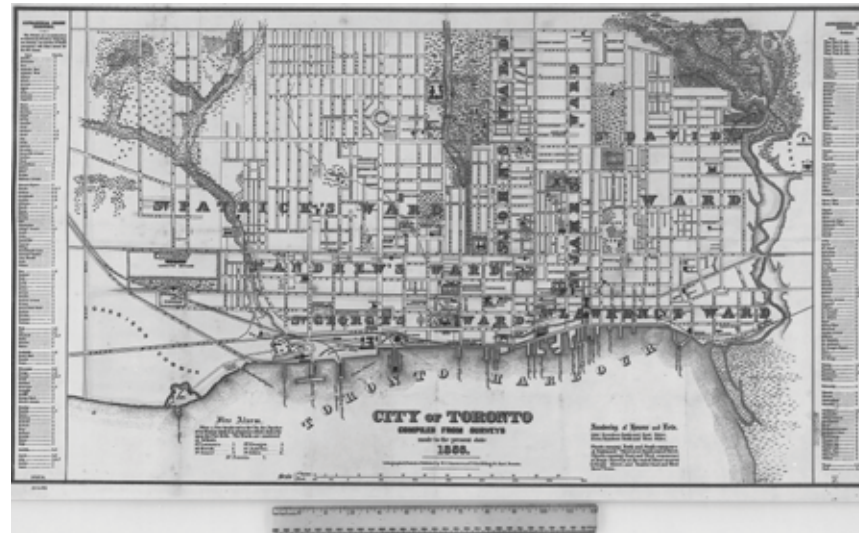
There are new challenges, too, facing the City-Regions of today: looking for ways to enhance the opportunities and remove the barriers to building the compact, mixed-use, well-designed and accessible urban communities, and revitalizing the suburban landscape.

Yonge Street, Thornhill, c. 1900



Source: Image courtesy of the City of Vaughan Archives, City Clerks Office

City of Toronto Street Grid, 1866



Source: City of Toronto, archives

Achieving Centres and Corridors Integrates Approaches for:

- Promoting the design and construction of beautiful and lasting buildings and public spaces, including streets, sidewalks and parks
- Making community design and construction more sustainable, by using energy more efficiently and anticipating the changing needs of future generations
- Identifying and achieving standards for schools, parking, and land acquisitions for parks and infrastructure, that are more compatible with a compact urban environment
- Finding innovative funding models and tools to support public and private sector investments in city-building
- Delivering new housing that is affordable to the majority of residents, and that meets a range of needs, and household types and sizes

The following sections of the guide shows how these city-building goals and actions can be implemented, by drawing on local, national and international examples and experiences.

CENTRES AND CORRIDORS INNOVATIONS AND BEST PRACTICES

Public Realm

Urbanist Jan Gehl describes public space – what is often called the “public realm” – in three ways or dimensions: meeting place, market place, and as a place for connections and travel. Within these spaces everyday life is experienced, and our individual and collective quality of life can be most positively impacted.

Markham Centre Urban Park, Markham

Markham Centre, one of the Region’s four Regional Centres, will have at its heart a new urban park to serve as a focus of civic activity within the Centre, and the Town as a whole. The 4-acre park is currently under construction and will accommodate year-round events for up to 7,000 people, and offer a range of amenities for residents and visitors. A key feature of the park is its environmentally-sustainable design, which will improve stormwater management and quality through integration with the natural features of the surrounding river valley.



Urban Park, Markham Centre

Key Elements of Best Practices

- Great places often need a “champion” and partnerships to make them a reality.
- Integrate a variety of objectives in a project – from environmental sustainability to civic pride.
- Make spaces flexible to allow for a variety of activities to happen year-round.
- Streets that balance mobility and attractive design become “places”.
- Be creative when it comes to under-used parking spaces and other open spaces – what else could they become, if even for a short time?



Luisenplatz, Darmstadt, Germany

Luisenplatz, Darmstadt, Germany

Luisenplatz is the civic, cultural and transportation hub of the mid-size city of Darmstadt, Germany. It is an open air pedestrian plaza built around the landmark, Ludwigsäule (Ludwig’s Column), and serves as the city’s transit hub. While there is no formal sitting or recreation areas, the plaza can easily transform to hold markets, festivals and concerts. There is no physical separation of uses or users, which allows the free yet safe flow of pedestrians and transit vehicles.

Campus Martius, Detroit, Michigan

Campus Martius is the historic heart of Detroit, Michigan. But for years leading up to its rejuvenation in 1999 to celebrate the city's 300th anniversary, Campus Martius was little more than a 2-acre concrete traffic island in the downtown – not a natural or accessible meeting place for Detroiters. The square was transformed through a makeover that incorporated the best civic amenities into the redesign – a fountain that doubles as an ice rink in the winter, landscaping, outdoor seating areas, and public art. The space was transformed from an open space to a meeting place, and a symbol of both Detroit's history and its future.



Vibrant Streets

In an urban environment, streets present a barrier to the movement of people and goods through space. Over time streets have grown wider and traffic speeds have increased, creating a strong division of space. However, streets represent some of the largest public spaces available within an urban environment.

Streets within built-up urban areas have their roots in history as a work place devoted to buying, selling and trading. In the mid-1950's, streets were primarily dominated by the transportation of people and goods, and pedestrians were relegated to narrow spaces on either side of the roadway. Entering into the 21st century, within the urban environment, streets have become multi-functional places where people play, shop, eat, walk and drive.

Build a Better Block – Dallas

Launched by the community, and spearheaded by a group called "Go Oak Cliff", the community donated materials (pots, plants, chairs, tables, paint, ect.) to transform an underutilized urban block.

Project for Public Spaces Placemaking through Complete Streets

The US-based Project for Public Spaces (PPS) is a nonprofit planning, design and educational organization aimed at helping people create and sustain public spaces that build stronger communities. PPS takes a "Placemaking" approach in transforming public spaces, like auto-oriented streets and under-used shopping plazas, into vital places that highlight local assets, spur rejuvenation and serve common needs.

A key project and public engagement tool used by PPS in creating and improving great public spaces is their Complete Streets concept, which serves as a menu for all the ingredients that transform streets into multi-functional spaces of public activity and high design quality. Key elements include street rights-of-way that accommodate all modes of transportation, with an emphasis on the "active modes" of walking and cycling, and outdoor activities like sidewalk cafes and parkettes that create life on the street.



Source: Project for Public Spaces

South Yonge Street Corridor Streetscape Master Plan, York Region

The “main street” of York Region, Yonge Street, functions both as a historic corridor along which the Region’s first settlements were founded, and as the key connector to a renewed future through continued mixed-use and higher density intensification through the introduction of a subway. The transformative power of transit investment and continued growth, which builds on the street’s important cultural and historic significance, presents a place-making opportunity like no other within the Region. The Region is in the process of completing a Streetscape Master Plan for the future subway corridor segment of Yonge Street to identify a vision and implementation strategy for placemaking as intensification opportunities emerge with the introduction of subway services, as well as steps to take in the interim.

Yonge Street (at Clark Avenue) today...



Source: Google Maps

... And with the opening of the subway



Source: York Region, Prepared by EDA Collaborative

This illustration brings to life those elements that make for a “complete street” - addressing a range of elements with a focus on buildings, mobility, streetscape and accessibility. The illustration was jointly developed by the Toronto-based firm of Sweeny Sterling Finlayson & Co and the Toronto Centre for Active Transportation. Other tools and approaches for improving the mobility, design, and sustainability of streets can be found through the website of the Toronto Centre for Active Transportation at <http://tcat.ca/>.



A Buildings

- A1 Preserved heritage buildings
- A2 Step-backs create pedestrian comfort
- A3 Architectural features at corners
- A4 Green roofs manage storm water
- A5 Continuous street wall of buildings
- A6 Articulated street facades add detail
- A7 Outdoor living & amenity space
- A8 Canopies and overhangs provide shelter
- A9 Large windows bring life to the street
- A10 Rooftops generate power & reflect heat
- A11 Articulated entrances and windows
- A12 Active uses to animate the street

B Mobility

- B1 Lay-bys for drop-off and parking
- B2 Integrate public transit in mixed traffic
- B3 Bike lanes through intersections
- B4 Safe transit shelters in wide medians
- B5 Signed, demarcated bike lanes
- B6 Secure bike storage and Velib or Bixi type bike rental station
- B7 Transit shelters with integrated digital info board, mobility hub and WiFi
- B8 Dedicated lanes for rapid public transit with signal priority
- B9 Dedicated bike lanes and bike boxes
- B10 Electric cars stations and bike parking

C Streetscape

- C1 Continuous, native species, street trees
- C2 Consolidated garbage, recycling, & newspaper boxes
- C3 Rainwater irrigated planters with salt-resistant species
- C4 Quality benches and street furniture
- C5 Porous paving materials
- C6 Integrated seating with street lights
- C7 Underground utility lines
- C8 Highly visible traffic lights (LED)
- C9 Slow-speed curb radii
- C10 Bollards to protect pedestrians
- C11 Lighting that renders natural colours
- C12 Cafes and restaurants at corners
- C13 Integrate public art and furniture
- C14 Minimize traffic lanes width
- C15 Integrate signage and public art

D Accessibility

- D1 Accessible raised sidewalks with bump outs at crosswalks
- D2 Audible transit signals timed for demographics and accessibility
- D3 Continuous pedestrian paths with high-contrast crosswalks
- D4 Signal priority for pedestrians and cyclists
- D5 Accessible curb-cuts
- D6 Accessible sidewalks allow freedom of movement for all

Parking Management

The availability and design of vehicle parking is a significant factor shaping both transportation and land use planning. Parking management is a key element in successfully implementing development intensification in the right locations. The amount and location of parking within new development is critical for successful city-building. An oversupply of parking located between the street and building entrances, on the other hand, leads to the inefficient use of land due to the over-sizing of parking lots, driving up housing and development costs. An oversupply of parking also reinforces travel behaviours that favour driving, since there will be a parking space at each personal destination and buildings are spaced too far apart to walk between comfortably. Effective management aims to find the proper balance in both the quantity and the quality of parking. With York Region's population now exceeding one million residents, better parking management is increasingly important.

Key Elements of Best Practices

- Take parking to the next level with structured or underground facilities.
- Pay for public parking with a cash-in-lieu-of-parking requirement.
- Reduced minimum parking requirements – maximum parking rates
- Aim for a high level of urban design for parking structures – great building design needs great parking space design
- Park the responsibility with a system of municipal parking authorities.

Parking Management, Policies, York Region Official Plan 2010

The Regional Municipality of York

Policies:

5.2.10 Require parking management policies for

- reduced parking standards – set maximum reflecting walking distance to transit
- shared parking requirements
- on-street parking
- preferential locations for carpooling/car share space and bike storage
- design of surface parking to support redevelopment and retrofitting

Regional Centres:

5.4.26 Long term parking management

- system of municipal parking authorities and/or shared public parking facilities
- cash-in-lieu of parking
- planning for structured or underground parking facilities



Markham Parking Structure built in phases

Yonge-Eglinton Centre: reduced parking standards, City of Toronto

As part of the City of Toronto's focused review for the Yonge-Eglinton Centre area, the minimum parking requirements have been significantly reduced to reflect the high level of pedestrian accessibility in the neighbourhood and the proximity to existing and planned rapid transit lines. The reduced minimum parking requirements proposed are:

Condominium housing units:

- Bachelor: minimum 0.3 spaces per unit
- One-bedroom: 0.5
- Two-bedroom: 0.8
- Three-bedroom: 1.0
- Visitor (minimum and maximum): 0.1

Non-residential: 1.0 spaces per 300 square metres

Rental housing:

- Bachelor: 0.2
- One-bedroom: 0.4
- Two-bedroom: 0.6
- Three-bedroom: 0.8
- Visitor (minimum and maximum): 0.1



Shared Parking Structure: Downtown Chicago
(Greenway Self Park by HOK)

North York Centre Parking Policy: maximum parking standards, City of Toronto

The City of Toronto's North York Official Plan sets a maximum parking requirement for rapid transit adjacent developments using an equation that scales the number of parking spaces permitted based on the distance from the centroid of the parking floor plate to the entrance of the rapid transit station; the closer the development is to the station, the lower the maximum permitted parking becomes.

A maximum and minimum parking standard are applied to all developments within the North York Centre. Immediately next to subway station entrance the maximum parking rate is 0.9 spaces per 100m² of commercial area, which increases to 1.4 spaces per 100m² at 500 metre from the station entrance. A maximum residential rate of 1.2 spaces per unit is applied to projects with direct access to rapid transit vs. 1.4 spaces per unit in all other areas of the centre.

Autostadt Car Towers, Wolfsburg, Germany

Two 48 metre high, fully automated high-rise stacks temporarily store and then deliver 600 vehicles per day from the neighbouring Volkswagen plant. The new cars are rolled over from the production line using a robotic-pallet system mounted on rails. The cars are loaded into and fetched from the towers using two “car shuttles” or lifts per tower, each servicing 180° of the silo. This system could be adopted to serve parking needs of high density urban areas, in a manner that conserves space and contributes to the design quality of the built environment

For further information on the car towers, go to:

<http://www.autostadt.de/en/explore-the-autostadt/autotuerme-cartowers.html>



Autostadt Car Tower, Wolfsburg, Germany

Stratified Parking Arrangements

A stratified parking arrangement is one where a parking facility is located above or underneath a municipal property such as a street right-of-way or a public park. This arrangement is often pursued in circumstances where there are land and/or design constraints to providing on-site parking facilities. This approach, where appropriate and feasible, can increase the efficiency of land through a flexible approach to parking design and land ownership. Legal agreements among the participating parties, in the form of stratified title agreements or encroachment agreements, would be required to permit such a parking configuration.

Examples of stratified parking arrangements include:

- The **City of Toronto**, where the underground garage for the 51-storey Bay-Adelaide Centre extends beneath a public park and the municipal right-of-way for Temperance Street.
- The **Town of Markham**, where the underground garage for a high rise condominium by Times Group Inc. in Markham Centre extends beneath an urban park.
- The **City of Mississauga**, where the development agreement between the City and a major City Centre developer accommodates the creation of future municipal rights-of-way for new public streets above a large underground parking garage built by the developer.

Key Elements of Best Practices

- Establish a fixed cash-in-lieu value per unit or provide a cap on the amount that will be taken
- Adjust parkland dedication rates according to density (e.g. high, medium, low density)
- Allow for the reduction of cash-in-lieu payments if redevelopments achieve certain sustainability criteria

Planning Act, s. 42 -**Conveyance of Land for Park Purposes**

Local municipalities may request up to:

- 2% of land proposed for commercial or industrial uses;
- AND
- 5% of land proposed for residential or other uses; or
- 1 ha of land for every 300 dwelling units proposed

Best Practice**Density-Specific Conveyance Rates, City of Hamilton**

Density	Conveyance Rate
<20 units/ha	5%
20-75 units/ha	1 ha/300 dwelling units; except for street townhouse dwellings, which is at 0.6 ha/300 dwellings
75-120 units/ha	0.6ha/300 dwellings units
>120 units/ha	0.5ha/300 dwelling units

Parkland Acquisition

Municipal parkland conveyance standards can act as a barrier to higher density development within York Region's Centres and Corridors. Currently, the Centres and Corridors are located within municipalities that have adopted the maximum conveyance standards allowed under the Planning Act. As a result, the requirements for land conveyances, or their cash equivalent, could amount to an area or cash-value that is greater than the actual site itself and deter developers from pursuing higher density projects.



Richmond Hill Centre Concept

Place caps on land conveyance/cash-in-lieu payments

In response to concerns expressed by developers regarding the use of the maximum alternative rate for high density developments, the Town of Richmond Hill recently passed an interim by-law that establishes a fixed cash-in-lieu rate of \$10,000/dwelling unit. Other municipalities who have placed caps on land and/or cash payments include the cities of Toronto and Ottawa. The City of Ottawa has placed a 10% cap on parkland/cash-in-lieu dedications for apartment-type developments that exceed 18 units/ha.

Introduce Density-Specific Rates

The cities of Toronto, Ottawa, Waterloo, and Hamilton have established density thresholds (e.g. high, medium, low density) for residential developments and have applied different parkland dedication rates to each threshold. In a report to Council, City of Waterloo staff recommended that a reduced rate for high-density developments will avoid parkland over-dedication by such developments.

Reduce cash-in-lieu payments if redevelopments meet certain sustainability criteria

Under the Planning Act, municipalities may reduce cash-in-lieu payments required for redevelopments if the proposal meets certain sustainability criteria. Municipalities must specify the criteria in the Official Plan as well as the cash value equivalent of each criterion. It should be noted that this tool applies only to redevelopments where land is not available for conveyance. Although there has been little uptake on this tool by municipalities, and it is unknown at this time whether the cost of fulfilling sustainability criteria will be less than the value of cash-in-lieu of parkland payments, this tool could be explored further because of its additional sustainability benefits.

A Range and Mix of Housing

Securing Social Housing Through Density Bonusing

Density bonusing, permitted through Section 37 of the *Planning Act*, allows buildings to exceed zoning height and density maximums in exchange for community benefits. This planning tool is effective in more intensively developed areas, such as regional centres and corridors, where additional revenue-generating space is in demand and policies support more compact development. Municipalities can establish affordable housing as a priority discussion item during Section 37 negotiations with developers.



Great Land Development, Richmond Hill

In 2010, Great Land received approval to build 948 apartment units along the Yonge Street Regional corridor near Sixteenth Ave. Through negotiations, the Town of Richmond Hill secured 4 social housing dwellings. Great Land will transfer the ownership of all units (approximately 600 sq.ft. each) to the Region once they are built and their condominium fees will be waived in perpetuity.

Key Elements of Best Practices

- Engage in public private partnerships to deliver affordable units
- Experiment with innovative financing and project management models
- Use planning tools and offer incentives to attract investments in affordable housing projects
- Subsidize land acquisition and building costs with reserve funds

Offering Conditional Grants Equal to Development Charges

In York Region, non-profit groups building affordable rental housing can apply for grants equal to Regional development charges payable on the development. Eligible organizations must enter into an agreement with York Region that outlines terms and conditions related to affordable rents, length of agreement, eligibility occupying and unit assignment.

Grants for this program are taken from the Social Housing Reserve Fund. Between 2003 and 2010, the program helped create 299 affordable rental units across the Region. This grant is an attractive financial incentive for bringing affordable rental housing to high growth intensification nodes and corridors served by frequent transit service.

Public-Private Partnership in Building Construction and Operation

York Region has partnered with the development industry to deliver new affordable housing units. In 2009, through the Request for Proposal process, a builder was selected to construct affordable housing in Richmond Hill. Upon building completion, Housing York will retain ownership of all units and continue to operate the building.

Essex Avenue Affordable Housing, Richmond Hill

The proposed 140 unit apartment is located close to the Yonge Street Regional corridor, near Major Mackenzie Dr. and Essex Ave. It comprises housing for seniors, families and non-senior singles with affordable rental options.

Project funding came from the federal, provincial and regional governments.

Regional staff partnered with the builder on the building's interior and engineering designs. This ensures all units in the development meet Housing York's operational requirements and standards.



Promote Development Models for Intrinsically Affordable Housing

Options for Homes, a private Toronto-based organization, created a unique funding and development model to build intrinsically affordable apartment without government assistance.

Cost savings are achieved through:

- A “no frills” approach to construction and marketing
- Having future buyers co-operatively govern project financing and development
- Selling homes at cost to buyers, taking a second mortgage based on market and at cost price differential

A “No Frills” Approach

The project excludes costly development components such as media campaigns, model suites, real estate commissions and luxurious amenities (such as swimming pools, fitness centres).

A Partnership Approach

Options for Homes secures lands and development approvals, select builders and prepare preliminary plans. Future unit buyers organize project financing and construction. Upon building completion and condominium registration, the units can be purchased at cost.

The Financial Model

The difference between market value and at-cost purchase price is applied to a second mortgage that appreciates with market value. Purchasers do not make payments on the second mortgage until they sell the unit. A portion of the second mortgage repayment will go towards future affordable housing projects initiated by Options for Homes. This approach prevents speculation of homes and maintains affordability of homes immediately after construction.

Success To Date

Since 2000, there were 2,021 units built in the Greater Toronto Area and 170 units in Kitchener. Municipal development fee credits and loans made some projects financially feasible.



Old Kennedy Village, Markham

This Options for Homes project comprised 140 stacked townhouses at Old Kennedy Road and Steeles Avenue, a local and growing node. The residential units ranged in size from 685 to 1,110 sq.ft.

Residents in this development have good access to local and regional transit service.

Establishing Regional and Local Community Improvement Plans

A Community Improvement Plan (CIP) is a useful planning tool for municipalities to develop, redevelop, rehabilitate and maintain targeted areas. Permitted through Section 28 of the Planning Act, CIPs give municipalities the power to acquire land, issue grants or loans within by-law designated CIP project areas for community improvement purposes.

York Region can establish and adopt CIPs dealing with prescribed matters such as affordable housing. Specifically, the Region can designate centres and corridors as CIP areas through by-laws, then purchase and consolidate lands, and provide grants and loans to simulate affordable housing construction.

Region of Waterloo Reurbanization Community Improvement Plan

This is a planning tool to implement Waterloo's vision for sustainable, compact, mixed-use and transit-integrated communities. The CIP gives Waterloo Region the power to purchase and assemble lands for redevelopment along their transit corridor (CIP project area). Land assembly can facilitate forms of reurbanization such as affordable housing.



Reduce Planning and Development Fees for Affordable Housing

Under the Planning Act, municipalities may reduce or waive planning application processing fees for affordable housing developments.

The following planning and development fees may be waived for affordable housing projects:

- Official plan and zoning bylaw amendment
- Variance application fees
- Development permit application and approval fees
- Building and demolition permit fees

Fee Exemptions for Non-profit Housing, City of Toronto

The City waives building permit and planning application fees for non-profit housing. Eligible projects must meet a set of criteria related to land ownership and leasing status, rents charged, occupant's household income requirements, etc. The St. Clair multi-faith affordable housing project, pictured here, benefited from this program.



Establish an Affordable Housing Fund

Regional and local municipalities can establish reserve funds to acquire lands for affordable housing projects. In Centres and Corridors, the funds can be used to make early purchases while land is still relatively affordable. Land can then be resold to developers with conditions for building affordable units.



City of Charlotte Land Acquisition Fund, North Carolina

The City first established an acquisition fund to purchase land near light rail transit stations for mixed-income housing. With the subsequent acquisition of a 17 acres land parcel, the City issued an RFP to developers for affordable housing to be built on site. A total of 80 affordable units were created alongside 820 market units, retail space, a hotel and community park.

<http://www.bryanmorales.com/scaleybark.html>

Link to document:

<http://www.drcog.org/documents/090122RealizingPotential.pdf>

Reduce Parking Requirements

Research shows parking elements can drive the budget for high-rise housing projects, which then impacts sale price. For affordable units in centres and corridors, access to high-order transit service and other active travel options may reduce the need for parking spaces. Municipalities may consider reducing the parking requirements (i.e. setting parking maximums instead of minimums) for affordable housing projects located in priority intensification areas.



San Francisco's Mission Bay Affordable Housing

The City introduced minimum parking requirements (equivalent to 1 parking space per unit) in this development area. Requirements for fewer parking spaces translate to a saving of \$132,000 in development cost. Many commuting options are available for local residents and workers, including commuter rail, light rail, street car and bus service. Car share spaces are also available for the affordable housing building occupants and visitors.

Key Elements of Best Practices

- Build upwards, not outwards
- Promote joint-use facilities
- Support design and construction innovations with grant allocation
- Combine facilities with existing and planned amenities

Providing Compact Urban Community Facilities and Services

The availability of community facilities and services including schools, emergency services, parks and recreation opportunities are essential for the creation of a complete, self-sufficient and liveable community. These facilities are important in high-density mixed-used environments in order to serve a large number of people with a broad range of needs in addition, the built form that these facilities take, is another key consideration; given the importance of creating people-oriented and attractive places, and using land more efficiently in high-density urban communities.

Build Up Rather Than Out

Vertically integrating, or stacking, community facilities in densely developed urban settings is a common approach for maximizing limited land availability for schools, libraries and other important services. Amenity spaces for these buildings, which are traditionally located outside at ground level, become integrated inside or on rooftops to conserve space (e.g. rooftop parks, recreation areas, etc.).

Bill Crothers Secondary School, Markham

This 4-storey school building is situated in a compact, mixed-use community well-served by public transit. Bill Crothers has indoor and outdoor sports facilities, a performance hall, computer labs etc. School facilitates serve the staff and student body as well as residents in surrounding communities. The LEED certified school building incorporates a range of sustainable design elements and technologies that reduce water and energy consumption.

**Frank Sinatra School of the Arts, New York City**

Located in the heart of New York City, the Frank Sinatra public high school for visual and performing arts serves about 1,000 students. The 5-storey school building includes concert halls, a gymnasium, galleries, a cafeteria and classrooms. Its rooftop courtyard provides space for outdoor gathering and concerts. To use space efficiently, parking is located in the school's underground garage.



Support Joint-Use Facilities

Joint-use facilities are increasingly popular in compact urban settings. Pairing school facilities and community amenities, on the same site, promotes an efficient use of space and cost savings in building construction and operations. The successful development and implementation of joint-use facilities requires a strong partnership between stakeholders, based on a set of shared principles, detailing the coordination of financing, construction and operation of the facility.



Mount Pleasant Village School, Brampton

Mount Pleasant Village is a public elementary school within a transit-oriented compact suburban community. The school facility is joined with the local public library and municipal office spaces. Costs for constructing, operating and maintaining the building will be shared by the local government and school board.

Link

http://www.watson-econ.ca/files/wright%20walsh%20cugini%20-%20Nov_4_MPV_schoolboard_pres%20%5BCompatibility%20Mode%5D.pdf

<http://www.brampton.ca/en/Business/planning-development/Documents/CD/OS/Master%20Plan%20PHASE%201.pdf>

http://citiesandschools.berkeley.edu/reports/Partnerships_JU_Aug2010.pdf

Wellesley Community Centre, Toronto

The Wellesley Community Center is located in one of the city's densest neighbourhoods – St. Jamestown. This 50,000 sq.ft. public facility combines community centre, public library and daycare uses. Design is oriented to the street; library and gymnasium activities can be viewed at street-level through large windows. The building also has a covered outdoor play area on its rooftop.



Combine School and Parkland where Possible

Typical school sites require outdoor space and amenities, for use by staff and students, for recreational purposes. Combining school sites and municipal parkland provides the outdoor space requirements of the school population while promoting an efficient use of community space within a high density urban environment.



Stratford Hall, Vancouver

The private education facility is located in the heart of Vancouver, minutes from the skytrain station. Large urban parks nearby provides outdoor gathering and activity space for students.

District Grants to Offset Compact School Construction Premiums

California's state government introduced the Space-Saver Program to assist new and expanding schools in compact urban environments with site acquisition and school construction. The program allows school districts to apply for funds to build multi-storey schools in conjunction with existing commercial, park and other uses.

School districts applying for the state grant need to identify appropriate sites in the city for school construction and outline school design requirements that meet the program criteria. Grants issued are capped at a certain amount for all qualified projects. The Mendez Intermediate School in Santa Ana received this grant to assist with construction.

Mendez Intermediate School, Santa Ana, California

The school is situated on joint-use land with the local shopping centre. While a playing field sits atop the shopping centre parking complex, there is no connection between school and shopping mall. To efficiently use space, classrooms, workspace and other school facilities are lined up along three parallel linear building blocks connected by stairs and corridors.



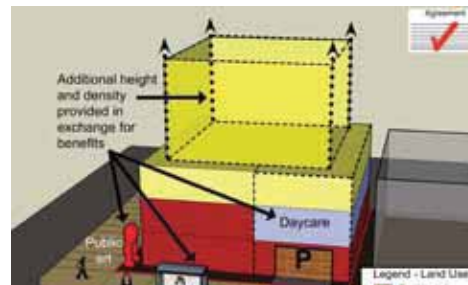
Legislative Tools

The implementation of compact, mixed-used and well-designed development is supported by a range of Provincial legislative and regulatory tools. The suite of planning-related tools - ranging from financial to administrative to design - are available to municipalities to assist desirable development forms consistent with the Provincial Policy Statement and Places to Grow - The Growth Plan for the Greater Golden Horseshoe.

Planning Act Tools to Support Centres and Corridors

Increased Height and Density – Section 37

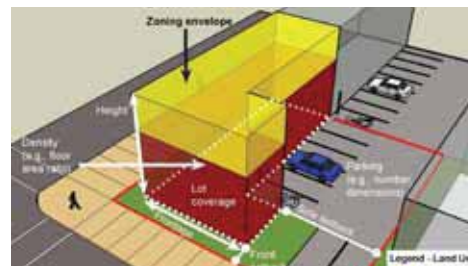
Municipalities may exchange additional building height and density for specified facilities, services or matters set out in a by-law. Matters that pertain to achieving vibrant centres and corridors may include public realm improvements to enhance the appearance of an area (e.g., public art, building façade improvements, public realm upgrades and transit-corridor treescaping).



Ministry of Municipal Affairs and Housing

Zoning By-Laws – Section 34

Through zoning by-laws, good design can be achieved through provisions that regulate the built environment, including use, location, size (including density, height, and setbacks), character and off-street parking requirements. Zoning by-laws can also promote efficient land use patterns by allowing a greater mix of uses in specified areas and by regulating minimum heights, densities and lot sizes for more compact built form along centres and corridors.



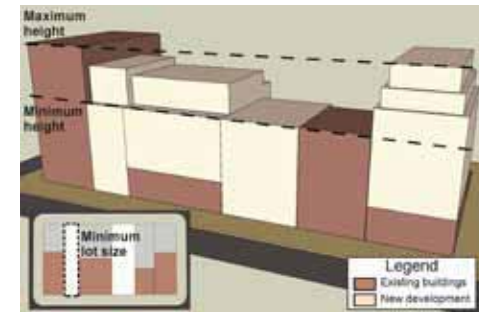
Ministry of Municipal Affairs and Housing

Key Elements Best Practices

- Enable all implementation tools (e.g., Zoning and Section 37 By-laws and Community Improvement Plans) available in the Planning Act through official plan policies
- Make use of instruments available under the Municipal Act (e.g., establishment of a Business Improvement Area) to support “place making”
- Capitalize on Site Plan Control for exterior building and boulevard design elements that promote “complete streets”
- Incent intensification, transit-supportive and sustainable development proposals through planning and municipal tools (e.g., grants, waiving fees) and other creative programs

Minimum and Maximum Standards – Subsection 34(3)

Municipalities can promote intensification through zoning by-laws that establish minimum and maximum building heights and densities and minimum lot area. Regulation of heights and densities for more compact and intensified built environments can result in better use of infrastructure and nearby services and facilities in centres and corridors.



Ministry of Municipal Affairs and Housing

Site Plan Control – Subsection 41(4)

Site plan control can regulate external building design, site and boulevard matters such as character, scale, appearance and sustainable streetscape design. Design elements that support compact and more intensified forms of development in centres and corridors may include sidewalks and bicycle lanes that is incorporated into a fine-grained street grid. Other matters that can be addressed through site plan control is built form that is massed, designed and oriented to people and creates active streets.



Ministry of Municipal Affairs and Housing

Parkland Dedication – Subsection 42(6.2)

Where on-site parkland dedication cannot be accommodated, municipalities may reduce their cash-in-lieu requirements in exchange for sustainability features. Examples of sustainable features that could be incorporated into centres and corridors may include green and white roofs, permeable surfaces, greening for shade and cooling, and water efficiency and conservation measures.



Ministry of Municipal Affairs and Housing

Development Permit System (DPS) - Section 70.2 and O. Reg. 608/06

The DPS is a streamlining tool that combines zoning, site plan control and minor variance into a single-application process. More compact and denser forms of development are achievable through the establishment of minimum and maximum height, density and lot sizes, while conditions for a development permit may require sustainability elements (e.g., green building requirements) and transit-supportive features (e.g., street furniture and landscaping) to support development in centres and corridors.



Ministry of Municipal Affairs and Housing

Financial Tools

There are a range and variety of financial tools available to municipalities to provide for the required infrastructure and services to support development intensification. These tools include development charges, the tax levy and potential tools such as tax increment financing. Used separately, or in combination, these instruments can be used by municipalities to contribute to the financing of significant capital investments required to support intensification in Centres and Corridors, including rapid transit and enhanced community facilities.

Development Charges

The *Development Charges Act*, in Ontario, provides municipalities with flexibility in applying development charge levies to new developments. This flexibility includes providing exemptions from development charges, through municipal development charge by-laws that provide:

- full or partial exemptions for specified types of development (e.g. office), under Section 5(1)
- exemptions from charges in specific areas of a municipality (e.g. downtown), under Section 2(7)

Development Charge Zones, City of Ottawa

The **City of Ottawa** has a differentiated development charge structure, depending on the area of the city being developed. For example, the charge on a 2+ bedroom apartment located beyond the greenbelt is almost double that of a 2+ bedroom apartment inside the greenbelt. This has the affect of supporting intensification, on a broad scale, by adjusting charges within the city to reflect the varying costs and availability of municipal infrastructure and services.

From Case Study report by the CMHC, go to:

<http://www.cmhc-schl.gc.ca/en/inpr/su/sucopl/upload/Exemption-from-Planning-and-Development-Fees-Ottawa-Ont.pdf>

For information on the City of Ottawa website, go to:

http://www.ottawa.ca/business/development_charges/index_en.html



Exemptions and deferrals of taxes, fees and charges

In addition to grants and/or exemptions provided through Community Improvement Plans under Section 28 of the Planning Act, municipalities may also provide other incentives to facilitate intensification in strategic areas.

- The downtown of **London, Ontario** is exempt from residential development charges to spur residential growth within the downtown.
- The **City of Saskatoon**, to spur rental housing in the downtown core, offers a phased property tax exemption over a five-year period (e.g. 100% exemption in the first year, 80% in the second, etc.).
- The **City of Ottawa**, between 2004 and 2011 exempted residential development in the downtown core from development charges, building permit and planning application fees, and the requirement to pay for parkland. Over 6,000 new housing units were created under the program. The program was discontinued in 2011 after the

city had achieved its goal of creating more housing in the downtown core. The City of Ottawa currently exempts residential apartments within up to 600 metres of a transitway station from 50% of the roads portion of the city development charge.

- The **York Region** Development Charge By-law contains provisions to assist high density residential and commercial development by providing the option to defer the payment of development charges for the earlier of up to 18 months after building permit issuance or condominium registration.

Area- or project-specific property taxes

- The **Region of Waterloo** in June 2011 established a 1.2% tax increase annually for seven years for properties within the Region's urban transit area to contribute to the funding of the Region's \$253-million share of a new light rapid transit line to open in 2017. The tax was premised on the principle that the delivery of light rail transit would generate development activity and property values at a rate greater than the tax increase to fund the project.

http://rapidtransit.region.waterloo.on.ca/pdfs/2011_June_15_Recommended_RT_Imp_Option_Report.pdf

A Penny Tax, various Municipalities in the United States

While currently not used by municipalities in Canada, local sales taxes are becoming an increasing source of local government revenue in the United States. Often referred to as a "Penny Tax", an additional tax in the range of one to a few cents is added to the sales tax within a municipality to finance local projects and services – often large infrastructure projects.

- Often decided on through a referendum, with future tax revenue assigned to specific projects
- Taxes are often cancelled once specific projects are completed

For more information on the Penny Tax, and other innovations in municipal finance, see the January 2011 report prepared by the Canada West Foundation, *"New Tools for New Times: Innovative Infrastructure Financing, Funding, and Diversity."*



Tax Increment Financing (TIF)

With the passage of the Tax Increment Financing Act, 2006, the Province of Ontario signalled its intention to assist municipalities to deliver shared intensification objectives using a new and innovative financing tool. While TIF does not necessarily represent a new source of municipal revenue, it can provide for a new means of managing municipal debt. Once enacted, a TIF could enable municipalities to capture a portion of the property taxes from new development in a designated TIF district, as well as a portion of assessment increases on those properties resulting from proximity to new infrastructure such as rapid transit.

An enabling regulation does not yet exist which provides for TIF in Ontario. As a result, the benefits and features of a TIF program are not known. However, a TIF could work in conjunction with development charges or other tax levy options to meet municipal debt obligations while realizing shared development goals.

Environmental Sustainability

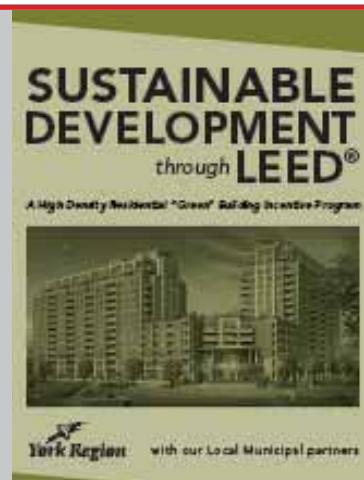
Sustainable communities balance human activities with environmental protection and management practices. In centres and corridors where substantial population and employment growth are occurring, there are many opportunities to integrate sustainable site and building design elements with development, to minimize environmental impacts.

York Region's Sustainable Development Through LEED Incentive Program

The Region offers servicing allocation bonuses to water and energy efficient high density residential developments in regional/local centres and corridors. To be eligible, the proposed projects must satisfy program criteria and achieve water conservation, waste management, and other sustainable design and construction targets. This program uses Leadership in Energy and Environmental Design (LEED) New Construction certification as a tool to confirm integration of sustainable features in new developments.

For more information on this incentive program, please visit:

http://www.york.ca/NR/rdonlyres/hfjygggn7hl3nzkf7wi3sfcdcjnmpka6bjeni5klvuh63cmbae2i2nnqrlay66zgvi2xlf/LEED_Implementation_Guide_2010.pdf



Key Elements of Best Practices

- Consider environmental sustainability in all development decisions
- Maximize water efficiency by managing quantity of consumption and improving quality
- Re-absorb surface runoff with stormwater control practices
- Harness renewable energy to fuel building operations
- Promote green buildings with incentive programs

Toronto Green Development Standards

The City of Toronto developed performance standards with complementary guidelines to promote sustainable site and building design in new public and corporate structures. The standards contain both mandatory and voluntary measures for new grade-related and high-rise residential, commercial, industrial, and institutional developments. Developments achieving voluntary measures are eligible for municipal incentives, such as fee reductions.

For more information, please visit:

<http://www.toronto.ca/planning/environment/greendevlopment.htm>



Water Conservation: Reduce, Re-direct and Recycle

New developments along centres and corridors can play a key role in optimizing water efficiency by integrating water conservation practices. Innovative designs and technologies can be integrated to reduce water consumption, reuse and redirect runoff.

Water Efficient Fixtures

Installing water-saving features and appliances (such as low flow shower heads and lavatory faucets, high efficiency toilets and water efficient dishwashers and clothes washers) is a simple and effective way of reducing indoor water use. There is a growing trend to integrate water efficient fixtures in newly built low, medium and high rise structures.

For more information on innovative water conservation initiatives, please visit: <http://www.waterfortomorrow.ca/en/>

Managing Stormwater Runoff

In compact urban settings where a majority of land is covered by impervious materials, new development projects could benefit from innovative stormwater control solutions. Creative designs and advanced technologies for landscaped areas, rooftops, parking areas and subsurface infrastructure in new developments can help regulate and redirect runoff from impermeable surface and pavements.

- **Rainwater Harvesting**

Rainwater harvesting is the process of collecting, redirecting and storing rainfall for use as water supply. It can effectively reduce rainwater runoff, particularly in densely populated urban areas, and conserve potable water.

Harvested rainwater can be used for outdoor irrigation. Changes to the Ontario Building Code in 2006 now permit the use of rainwater for toilet and urinal flushing.

For more information, please visit:

http://www.sustainabletechnologies.ca/Portals/_Rainbow/Documents/Rainwater%20Harvesting.pdf

SAS Corporate Office (Downtown Toronto)

The LEED certified SAS Canada office features a comprehensive rainwater harvesting system. It collects, stores and filters rainwater from the structure's inverted rooftop and above-ground terraces. Unfiltered water is used for irrigation on site. Filtered water is distributed by a pressurized tank system to toilets and urinals in the building.

Link: http://www.sas.com/news/sascom/2010q1/feature_green.html



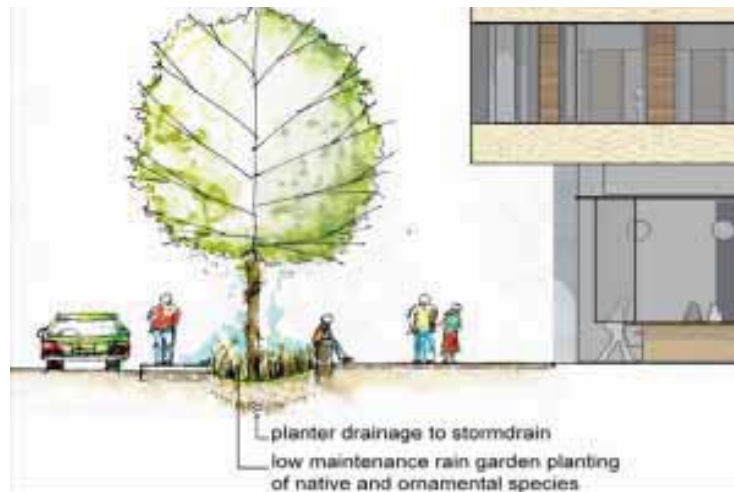
- **Rain Gardens**

Rain gardens are landscape elements designed to filter stormwater runoff through “bioretention”: a process that removes contaminants and sediments from rainwater. Populated with native plants, perennials, grass, shrubs and small trees, these gardens are strategically placed in curved areas near pathways and buildings to capture pavement and roof runoff. This form of stormwater control is suitable for developments in compact urban environments and lower density subdivisions.

Rain Gardens at The Atrium (Victoria, B.C.)

This 7-storey corporate office features the City’s first street-level rain garden, receiving rainwater from the site and adjacent streets. Equipped with a green roof and other sustainable features, the building will target LEED Gold certification.

Link: <http://www.mdidesign.ca/design-projects/the-atrium/>

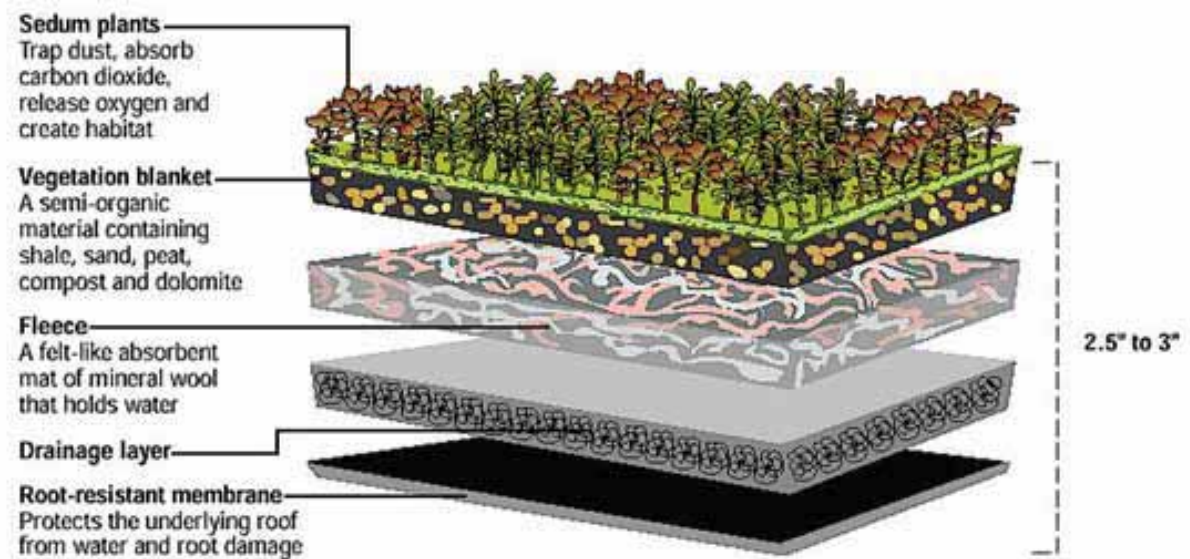


- **Green Roofs**

Green roofs are vegetated roofs with layers of plants, growing medium, filter fabric, drainage, and waterproof membrane atop conventional rooftops. It can minimize stormwater run-off from the roof surface and form part of the building's rainwater collection system. In compact urban environments, green roofs can also reduce urban heat island effects and provide natural insulation to cool and heat the building all year around.

For more information, please visit:

http://www.sustainabletechnologies.ca/Portals/_Rainbow/Documents/Green%20Roofs.pdf



Tribeca Green (New York City)

Situated in lower Manhattan, Tribeca is a LEED Gold certified rental apartment building equipped with a range of green design features, including a rooftop garden. It is irrigated with harvested rainwater and recycled greywater from apartment toilets. Photovoltaic panels on the rooftop combined with high-performance insulation, increases the building's energy efficiency.



• Bioswales

Bioswales are vegetated ditches designed to collect and filter rainwater runoff. Swales are commonly located next to roads and sidewalks. Sediments from the runoff are naturally filtered through plant root systems before they infiltrate native soil. Swale systems require larger pervious surfaces, and should be introduced to larger urban parcels and/or installed across smaller sites to function efficiently.

For more information, please visit:

http://www.sustainabletechnologies.ca/Portals/_Rainbow/Documents/Enhanced%20Grass%20Swales.pdf

• Permeable Pavement

Permeable pavement is a hard surface layer applied to parking areas, sidewalks, driveways, etc. that allows rainfall to infiltrate into an underlying subsurface reservoir, before draining into native soils. Permeable paving is best used in areas with low traffic flow and limited exposure to de-icing salts and other road or walkway contaminants.

For more information, please visit:

http://www.sustainabletechnologies.ca/Portals/_Rainbow/Documents/Permeable%20Pavement.pdf



Bloor Gladstone Public Library (Toronto)

The 12,000 sq.ft. historic library in downtown Toronto underwent extensive renovations in 2009. The refurbished building includes pervious paving on all exit paths, green roofs, water conservation technologies and newly planted shrubs and trees on the site.

**• Infiltration Chamber**

Infiltration chambers are used to facilitate the absorption of runoff from roofs, parking lots, walkways and roads into underlying native soil. They are modular tubes commonly installed under parking or landscape areas on development sites that will not interfere with pre-existing underground infrastructure. The chambers typically have open bottoms, perforated side walls, and granular stone reservoirs to facilitate infiltration.

For more information, please visit: http://www.sustainabletechnologies.ca/Portals/_Rainbow/Documents/Soakaways%20Infiltratn%20Trenches%20Chambers.pdf



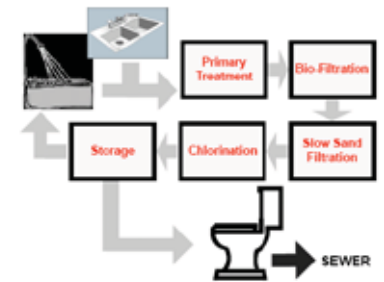
Grey-water Recycling

Grey-water recycling involves using water from domestic activities such as bathing and laundry for non-potable uses including toilet flushing and irrigation. Health concerns related to grey-water recycling can be addressed through proper storage, treatment, and regular water quality monitoring.

Quayside Village (West Vancouver)

In this 20-unit co-housing apartment complex, greywater from household activities is collected and recycled for toilet flushing. The water recycling system consists of a septic tank to remove solids and grease, a biofilter, slow sand filter, ozone generator and contact tank. Since its operation, the system has been reconfigured to strengthen performance and improve water quality.

Link: http://www.cmhc-schl.gc.ca/en/inpr/su/waho/waho_007.cfm



Quayside Village Greywater Reuse Treatment Process Flow

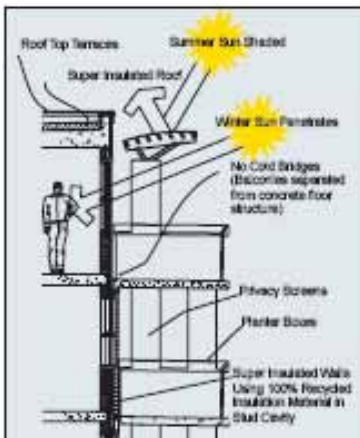
Energy Conservation: Harnessing Renewable Sources

Buildings account for about one-third of Canada's total energy consumption, and roughly half of its electricity use. Applying energy-saving designs and technologies to our built environment can reap great benefits from an environmental and cost saving perspective.

A number of developments in growth areas have incorporated green design and construction techniques to conserve energy, reduce demand, and utilize renewable solar and geothermal heat sources. Starting in January 2012, the Ontario Building Code also sets higher standards for energy efficiency in newly constructed houses and larger buildings.

Passive Solar Design

Passive solar design optimizes the use of sunlight for heating, cooling, lighting and ventilating buildings. Air flow occurs by natural means without the need for mechanical or electrical systems to aid energy transfer. Passive solar design elements can take different forms, including operable south-facing windows, thermal mass (i.e. dense wall materials) to absorb, store and redistribute heat, and thermal chimneys to direct air movement. Design integration in buildings depends on factors such as the site's solar exposure, vegetation, terrain, and wind patterns.



Passive Solar Design

Conservation Co-operative (Ottawa)

This 4-storey affordable housing development applies passive solar building designs to collect, store, distribute solar gains for heating. To capture and store solar gains, the building relies on its orientation, insulated balconies (sunscreens, fin-walls, structural separation to eliminate thermal bridging) and thick wall and roof insulation.

Link: <http://www.conscoop.ottawa.on.ca/CS2-CAN.pdf>



Photovoltaic (PV) Systems

In addition to capturing and utilizing solar power through passive means, active solar devices such as photovoltaic (PV) systems can also convert sunlight into electricity. This system, when integrated into tall buildings, typically consists of solar collectors or panels, and a power generation facility. In compact urban areas, solar panels are commonly installed on rooftops and or platforms with maximum sunlight exposure.

Sunny Apartment (Ningbo, China)

This 5-storey sustainable apartment integrates solar energy technologies and is located in an urban centre 300 km south of Shanghai. The building is equipped with a solar collector system that turns sunlight into electrical energy for heating water and ventilating the building. Photovoltaic panels are mounted on slanted balcony walls to capture sunlight, while the photovoltaic power generation facility sits on the rooftop.



Reflective Roofing Materials

Reflective roofing materials, also known as “white roofs” or “cool roofs”, can better reflect incoming solar radiation and emit radiant energy to the atmosphere than darker roofs. This process can reduce heat transfer to buildings; thereby reducing air pollution and greenhouse gas emission, and contributing to better human health and comfort.



An example of a “cool roof”

Geothermal Energy

Geothermal heat is a renewable energy source that comes naturally from the ground. Heat exchange occurs via heat pumps when there is a temperature difference between the air within the building and the ground. This process will help heat and cool indoor building spaces.

Richmond Hill Performing Arts Centre (Richmond Hill)

The Richmond Hill Performing Arts Centre is located along the Yonge Street Regional Corridor. The 43,000 sq.ft. multi-use facility building space is heated and cooled with ground source heat pumps, drawing from geothermal sources.



Ironstone Condominium (Burlington)

Located in Burlington's uptown core, this 16-storey apartment building is harnessing both solar and geothermal energy. The geothermal pump, operated by solar panels, will transfer water up and down the tower via pipes in the ground to regulate the building's temperature. The solar panels on site also pre-heat the hot water tanks and support the electrical needs of the structure's geothermal system.

Link: <http://www.ironstonecondominiums.com/PR/CF%20Davies%20Smith%20Ironstone.pdf>



Moving Forward

Intensification Case Studies - York Region

The Beverley Hills - Great Lands Corporation, Town of Richmond Hill

The Beverley Hills is an approved development proposal located in the south east quadrant of the intersection of Yonge Street and 16th Avenue in the Town of Richmond Hill. The property has been redesignated from “Special Commercial Area” to “Mixed Use Area” and “Parks and Open Spaces” and permits four towers being 11, 11, 20 and 24 storeys in height. Once built, this high density, mixed-use, infill development will be pedestrian and transit friendly. This site is located within one of the Town’s Key Development Areas.

A fundamental element of the proposal was that the height of one tower would be allowed to exceed the maximum allowed height of 20 storeys by 4 storeys because the Town would be able to implement the “bonusing” provisions of s.37 of the Planning Act. These bonusing provisions would result in the following community benefits being made available:

- (a) Four residential units within the development will be conveyed, at no cost, to York Region for assisted housing.
- (b) A 1,076 square foot room located within the development will be conveyed to the Town for community space purposes, at no cost to the Town.
- (c) A new east-west street as a private road will be incorporated in the development.
- (d) Four car-share spaces within the development will be available through a carshare



Source: Great Lands Corporation

PROJECT DATA	
Site Area	191,664 sq. ft. (4.4 acres)
Retail/Office/ Commercial Areas	16,791 sq. ft.
Residential Unit Count	948 units
Floor Space Index (FSI)	3.9
Transit	Regional bus service including proposed Bus Rapid Transit and proposed Yonge Street Subway extension

PROJECT DATA	
Site Area	433,101 sq.ft. (9.94 acres)
Retail/Office/ Commercial Areas	1, 667, 440 sq.ft.
Residential Unit Count	1, 300 units
Floor Space Index (FSI)	3.85
Transit	TTC, VIVA and the GO Train

World on Yonge – Liberty Development, Town of Markham

World on Yonge is a newly planned community that is under construction, located on the east side of Yonge Street, north of Steeles Avenue in the Town of Markham. The area was formerly a low-density commercial site. As it is located on a previously developed site, the new development contributes to both urban infill and site remediation.

Once complete, the development will have a diverse mix of uses and transit-supportive densities. The area offers retail stores, offices, a boutique hotel and condominiums. Conditions of development approval require the office component to be constructed in the first phase, prior to the release of additional residential development in future phases. It is in close proximity to 400-series highways and Highway 7, as well as nearby access to the TTC, VIVA and the GO Train.

World on Yonge is also working towards pursuing green initiatives by targeting for LEED silver, and including energy and water conservation opportunities as well as green roof technologies. Occupants of the area are required to meet the project's sustainable goals.



Source: Liberty Development Corporation



Source: Liberty Development Corporation

WaterGarden – Minto Group, City of Vaughan

Minto Group is developing a 5-storey mixed-use commercial and residential condominium having a step-up to a 6th-storey along Yonge Street located on west side of Yonge Street, north of Arnold Avenue in Old Thornhill, within the City of Vaughan. The property has frontage on Yonge Street and was re-designated “General Commercial” to “Mixed Residential/Commercial”. Once built, this development would respect this historical community with the retention and reuse of other heritage buildings on site. This development would also contribute to the housing mix in this portion of the Yonge Street corridor by providing several unit sizes. The streetscape will be enhanced through a more inviting public realm design, and ground floor retail within the building.

Targeting LEED Silver certification, this mixed-use building features a green roof, a rainwater harvesting system for irrigation, water efficient fixtures, and a three-stream garbage, recycling and organic waste management system. This project also received water and wastewater allocation credits from York Region’s Sustainable Development through LEED Incentive Program.



Source: Minto Group



PROJECT DATA	
Site Area	10021.00 sq.m.
Retail/Office/ Commercial Areas	725 sq. m. (plus 227 sq.m. existing heritage house on site devoted to commercial uses)
Residential Unit Count	218 units
Floor Space Index (FSI)	TBD
Transit	Regional Rapid Transit, Future Yonge Street subway