

## Report to Planning and Environment Committee

**To:** Chair and Members  
Planning and Environment Committee  
**From:** Gregg Barrett, Director, Planning and Development  
**Subject:** ReThink Zoning – Update Report and Background Papers  
**Date:** June 21, 2021

## Recommendation

That, on the recommendation of the Director, Planning and Development, the following report **BE RECEIVED** for information.

## Executive Summary

ReThink Zoning is the process of delivering a new Comprehensive Zoning By-Law that will implement The London Plan and contribute to achieving its vision for London to develop as an exciting, exceptional and connected city. The purpose of this report is to introduce the Background Papers (Appendix A) that have been prepared and provide an update for the next steps in the project.

## Linkage to the Corporate Strategic Plan

The preparation of the new Zoning By-law contributes to implementing the Strategic Plan through multiple facets. ReThink Zoning will contribute to Building a Sustainable City by ensuring London's growth and development is well planned and sustainable, while ensuring a strong and healthy environment. Strengthening Our Community will be addressed by ensuring new development in the City fits and enhances the surrounding context, and employs innovative regulations to facilitate affordable housing. ReThink Zoning will develop a zoning approach that delivers certainty and flexibility that will foster Growing Our Economy by creating a supportive environment where businesses and development can thrive. Leading in Public Service will be a key component for ReThink Zoning as it offers opportunities for residents to be informed and participate in local government decision-making.

## Analysis

### 1.0 Background Information

The London Plan was approved by Municipal Council in June of 2016 as the City's new official plan, and provides a vision for how London will evolve over the next twenty years. ReThink Zoning is the process of preparing a new Comprehensive Zoning By-law for London to implement the vision, key objectives and policies of The London Plan.

When The London Plan was being developed through the ReThink London engagement process, a community conversation took place around the type of city Londoners want. ReThink Zoning will continue that conversation, and shifts the question from: 'what kind of city we want London to become?' to 'how we will strive to get there?' The London Plan provides direction on many zoning matters, and ReThink Zoning will be the exercise to prepare the new zoning by-law that will fully implement that vision and direction.

ReThink Zoning is a major project that will have a lasting impact on how London will be shaped to meet the vision established in The London Plan. Background research and analysis has been conducted over the last year to choose an approach and direction for the zoning by-law, and now moving into a new phase of the project where we begin to conduct more detailed and technical analysis and start drafting the by-law. Background Papers have been prepared to document learnings and considerations for the next project phase.

## **1.1 Community Engagement**

As part of work completed to date, the initial project schedule had identified that broad public engagement would begin in the spring of 2020; however, due to the COVID-19 pandemic, the engagement program was deferred. This report marks the beginning of the community engagement, which will utilize the Background Papers to both inform the community and begin the conversation of ReThink Zoning.

The Background Papers provide detailed information on a variety of zoning topics for this project that the public and development industry are able to review. Focused questions within the papers provide prompts for thoughts and comments, as an alternative to inviting feedback broadly. More formalized community engagement will occur in the next phase of the project.

## **1.2 Previous Reports Related to this Matter**

### *November 30, 2020 – ReThink Zoning Phase One Update*

This report brought forward an update on the development of the engagement strategy and an update of the overall project status. The report was initially scheduled for June, 2020 and was adapted to address limitations with consultation as influenced by COVID-19.

### *May 13, 2019 – ReThink Zoning Terms of Reference Report to Planning and Environment Committee*

Based on feedback from engagement, updated terms of reference were presented to the Planning and Environment Committee that identify opportunities for meaningful public and stakeholder engagement throughout the process. The Terms of Reference were approved during the May 21 meeting of Council and include a detailed overview of the project goals, work plan, and deliverables.

### *August 13, 2018 – ReThink Zoning Terms of Reference Report to Planning and Environment Committee*

City Council received a draft Terms of Reference in August 2018 and gave direction to staff to circulate the draft to key stakeholders and to allow for public comments about the project. Staff then held meetings with a variety of stakeholders, and in each meeting the need for public and stakeholder engagement was identified as key to the project's success. Advisory Committees were also circulated the terms of reference and asked to provide comments.

## **2.0 Background Papers**

A series of five (5) Background Papers have been prepared to document the research and considerations undertaken as part of work to date, and are included in Appendix A to this Report. These Background Papers are based on the topics of:

- 1 – What is ReThink Zoning?
- 2 - Zoning for Use
- 3 - Zoning for Intensity
- 4 - Zoning for Form
- 5 - Municipal Case Studies

### **2.1 Background Paper - What is ReThink Zoning?**

The first Background Paper provides an overview of the function, relevance and role of zoning, as well as the various ways the community can get involved in the Rethink Zoning process. Zoning is highlighted as an important tool that allows us to set rules for development on individual properties, to direct what types of buildings and activities are permitted (use), how much building or activity is permitted (intensity), and where and how those building should be situated or designed (form).



The first Background Paper explores alignment of the current Zoning By-law Z.-1 with the 1989 Official Plan, and how it implements the ‘use-based’ planning approach. The differences between The London Plan approach and the 1989 Official Plan are described, as well as the eventual differences the new Comprehensive Zoning By-law will have from the existing by-law.

The first Background Paper also identifies the importance of community engagement in the ReThink Zoning project, as public and stakeholder engagement is a key component for creating a successful zoning by-law. Consultation will be broad and far-reaching to include: the general public, focused stakeholders, community-based organizations, industry professionals, development organizations, and all other interested parties.

While the ongoing COVID-19 situation has necessitated changes to the standard types of engagement, new tools can be used as an opportunity to better connect with the public and achieve the engagement outcomes and goals. As a result of social distancing measures and event closures in response to COVID-19, engagement options are primarily through online sources. The release of the Background Papers will provide an overview of the various research and considerations explored in the early stage of the ReThink Zoning project and provide an avenue for feedback.

## **2.2 Background Paper – Zoning for Use**

The Background Paper – Zoning for Use addresses the role of ‘use’ in zoning, and provides an overview of how land use is approached in the current Zoning By-law No. Z.-1 and through The London Plan. This Background Paper explores the traditional focus on land use in zoning, as well as the relationship between use and other aspects of zoning like intensity and form.

The current zoning approach is reviewed in the Background Paper – Zoning for Use, as well as the way uses are interpreted and implemented. The London Plan takes a different approach to land uses than the 1989 Official Plan as it provides broader direction for land use. Through ReThink Zoning, we will review how general or specific the uses should be, and how uses are integrated with intensity and form. These are important considerations to determine how flexible, specific or diverse uses should be and to address how activities change over time.

Various approaches to use are explored and suggested for the consideration of ReThink Zoning in the next phases of the project. Approaches are intended to increase the clarity and usability of the zoning by-law and minimize redundancy and duplication. The Background Paper – Zoning for Use describes five (5) possible approaches to use as follows:

Possible Approach #1 – Utilize Use Families: Group similar uses together as a family of uses as an alternative to listing separate and individual uses.

Possible Approach #2 – Fewer and Broader Uses: Be less prescriptive in defined uses and employ other regulations for distinction.

Possible Approach #3 – Explore Building Typologies as an Alternative to Use: Balance use with other zoning regulations to better categorize built forms.

Possible Approach #4 – Apply performance standards to uses in zones: Utilize specific criteria that defines when a use may be permitted in certain zones.

The various approaches for use provide some options for consideration as we move closer towards drafting a new zoning by-law for London. Land use is an important part of the planning equation that must be considered to achieve great places and spaces throughout London in line with the vision of The London Plan.

## **2.3 Background Paper – Zoning for Intensity**

The London Plan calls for a city structure that is focused “inward and upward” and directs growth to a series of nodes and corridors through infill and intensification. The

Background Paper – Zoning for Intensity will explore how intensity can be best managed and utilized in the new zoning by-law, and how regulations can be developed and applied to the place types.

Zoning for intensity requires careful consideration to encourage intensification and redevelopment in the locations identified by The London Plan, while ensuring that the impacts of greater intensity are managed and mitigated. The possible approaches identified in the Background Paper – Zoning for Intensity could provide for zoning regulations that help to achieve the city building objectives described by The London Plan. The Background Paper – Zoning for Intensity describes five (5) possible approaches to intensity as follows:

Possible Approach #1 – Regulate Intensity Through the Zone: Separate the regulations for intensity from the defined uses to allow for distinction based on intensity where the use is the same.

Possible Approach #2 – Regulate Intensity Through Performance Standards: Allow for different levels of intensity in select locations based on certain criteria.

Possible Approach #3 – Link Zone Classes to Intensity Variations: Create different zone variations with uses linked to intensity regulations.

Possible Approach #4 – Add to the Existing Regulations: Broaden the use of intensity (and form) regulations that moderate intensity to provide more certainty.

Possible Approach #5 – Allow As-of-Right Maximum Heights where Regulations are Met: Utilize planning permissions to allow greater heights and densities as-of-right in certain areas of the City where intensity is promoted and desired.

The intensity aspects of zoning address the overall questions of: how much and how big? The London Plan promotes intensification to the nodes and corridors, and the ReThink Zoning process will explore how intensity can best be managed to achieve the Plan's vision.

## **2.4 Background Paper – Zoning for Form**

Built form is an important element to be addressed in the zoning by-law as it directs how our City will look and feel, and in many cases, function. The Background Paper – Zoning for Form includes considerations for how aspects like the massing, location, and design of buildings, and the layout, design and features of development sites may be approached in zoning.

As we shift from the 1989 Official Plan to The London Plan, one of the most significant and important differences in terms of planning approach is the balancing of form considerations in the development process. Instead of determining the range of permitted uses and then considering which form regulations should apply, The London Plan looks at places more holistically and gives direction for built form with equal emphasis to the range of uses and intensities that may be permitted.

Providing strong form regulations may allow for greater as-of-right zoning permissions by providing more assurance for how the impacts of the built form could be mitigated. This is especially valuable for The London Plan, which seeks to direct a significant amount of the City's growth toward intensification, and especially in nodes and corridors.

The nine (9) considerations for possible approaches identified in the Background Paper – Zoning for Form may provide for zoning regulations that help to achieve the City Building and Design objectives described by The London Plan.

Possible Approach #1 – Regulate Building Orientation and Primary Entrances: Primary entrances and building orientation can play a major role in establishing an active street frontage and creating a welcoming pedestrian-oriented environment.

Possible Approach #2 – Regulate Ground Floor Activities: The requirement for active frontages and ground floor uses assists in creating a vibrant pedestrian environment along the street.

Possible Approach #3 – Regulate Fenestration and Transparency: The use of windows and transparent glass on buildings is an effective way to increase passive surveillance and create comfortable pedestrian-oriented environments.

Possible Approach #4 – Regulate the Form of Parking: Appropriately located and designed parking areas can ensure that the visual impact and presence on the public realm is minimized.

Possible Approach #5 – Provide Landscape Screening Requirements: Regulate the use and extent of landscape strips in strategic locations to preserve privacy and soften the transition between different built forms and place types.

Possible Approach #6 – Consider the use of an Angular Plane: An angular plane is a tool that is used to determine appropriate heights in an interface location between lower and higher built forms.

Possible Approach #7 – Consider tower regulations for High-rise forms: Regulating the setbacks, step-backs, size, shape, and form of high-rise buildings can minimize shadow and wind impacts and create a comfortable pedestrian environment at the street level.

Possible Approach #8 – Consider tower separation regulations: Regulating tower separation can reduce wind and shadow impacts, minimize obstruction of views and reduce the perception of massing.

Possible Approach #9 – Consider the use of Overlays: Overlays can provide additional regulations to a specific context or geographic area.

The London Plan provides the opportunity to integrate elements of form together with use and intensity as a balanced approach within each Place Type. The considerations in the Background Paper – Zoning for Form relate to the various impacts and approaches of regulating form in zoning.

## **2.5 Background Paper – Municipal Case Studies**

A review of zoning by-laws for Ontario's 25 most populous municipalities was undertaken as part of the research for the background papers to identify best practices and capture innovative approaches. The Background Paper – Municipal Case Studies describes notable takeaways from select Ontario municipalities that can be considered for application in London.

Each municipality reviewed represents a unique way to implement their governing Official Plan(s) policies through zoning, and together these by-laws illustrate a diversity of ways to approach use, intensity and form regulations. This paper focuses on Ontario cities as they are subject to the same provincial planning framework as London, which includes the Planning Act and Provincial Policy Statement.

Seven (7) municipalities were selected as case studies which have recently had by-laws approved or drafts released. The case studies are explored in the Background Paper – Municipal Case Studies in detail, and specific examples from the case studies appear in the other background papers as well. The Ontario Municipal Case Studies include:

- City of Cambridge (Ongoing – Second Draft);
- Town of Newmarket Urban Centres Zoning By-law (2018);
- North Oakville (2009);
- Town of Oakville (2014);
- City of St. Catharines (2013);
- City of Vaughan (Ongoing – Third Draft); and,
- City of Waterloo (2018).

### **3.0 Community Planning Permit System**

The Rethink Zoning project is being undertaken for the purpose of preparing a new zoning by-law to implement the policies of the London Plan.

A CPPS is beyond the scope of the ReThink Zoning project for several reasons;

1. An official plan amendment process would be required to amend The London Plan to satisfy the legislation. Regulation 173/16 under the Planning Act, permits the enactment of a Community Planning Permit By-law for an area, if the applicable Official Plan:
  - (a) identifies the area as a proposed community planning permit area;
  - (b) sets out the scope of the authority that may be delegated and any limitations on the delegation, if the council intends to delegate any authority under the community planning permit by-law; and
  - (c) for each proposed community planning permit area identified under clause (a),
    - (i) contains a statement of the municipality's goals, objectives and policies in proposing a community planning permit system for the area,
    - (ii) sets out the types of criteria that may be included in the community planning permit by-law for determining whether any class of development or any use of land may be permitted by community planning permit, and
    - (iii) sets out the types of conditions that may be included in the community planning permit by-law in accordance with clause 4 (2) (i) and subsections 4 (4), (5) and (6).
2. The purpose of the ReThink Zoning project is to implement the policies of The London Plan by means of a "zoning by-law", as directed by Plan. Consequently, it would not be appropriate to consider possible official plan amendments to The London Plan through this project.
3. Undertaking a concurrent official plan amendment process concerning a CPPS would consume much additional time that would delay the implementation of the new "zoning by-law".

### **5.0 Project Status**

#### **5.1 Work Completed to Date**

Following the approval of the Terms of Reference for ReThink Zoning in May of 2019, consultants were retained shortly after to begin work on the project. Together with the preparation of the Background Papers, the work completed to date includes:

- A review of Ontario legislation and policy requirements for zoning;
- Summary of best practices from Ontario municipalities;
- Analysis of The London Plan's approach and compatibility of the available regulatory tools for achieving specific policy objectives;
- Analysis of the current Zoning By-law No. Z.-1 and the related planning processes, addressing what aspects of the by-law currently perform well and where are opportunities to improve the outcomes and processes;
- Investigating alternative approaches to regulating use, intensity and form;
- Creation of a sample zone template for a place type illustrating how each zone could be organized; and,
- A preliminary public engagement program to establish a framework for meaningful consultation with the public and stakeholders.

## 5.2 Next Steps

The next phase of the project will continue to build on the work completed to date, and will include the preparation of the new Comprehensive Zoning By-law. A number of notable project deliverables will include:

- Undertake broad public and stakeholder engagement;
- Prepare Discussion Papers on a variety of topics and place types;
- Create a detailed inventory and analysis of existing development patterns, trends and areas;
- Prepare a First Draft Zoning By-law;
- Refine and create a Second Draft By-law;
- Identify amendments to other City by-laws and documents; and,
- Create a final By-law for approval.

A Terms of Reference will be prepared for the next phase of ReThink Zoning which will identify the specific tasks, deliverables and timelines in more detail.

## Conclusion

The Background Papers provide a comprehensive overview of the background research and review that has been completed to date, and will form an important basis for the ReThink Zoning conversation. The papers outline possible approaches for regulating use, intensity and form that will be considered going forward for London's new Comprehensive Zoning By-law. A number of Ontario Municipal Case Studies were reviewed to determine best practices and innovative approaches recently undertaken in the Province. ReThink Zoning will continue to progress with the next project phase that will eventually deliver a new Comprehensive Zoning By-law for the City of London.

**Prepared by:**                                 **Sonia Wise, MCIP, RPP**  
**Senior Planner, Long Range Planning and Research**

**Reviewed by:**                                 **Justin Adema, MCIP, RPP**  
**Manager, Long Range Planning and Research**

**Submitted by:**                               **Gregg Barrett, AICP**  
**Director, Planning and Development**

**Recommended by:**                         **George Kotsifas, P.Eng.**  
**Deputy City Manager, Planning and Economic**  
**Development**

## Appendix A – Rethink Zoning Background Papers



# RETHINK ZONING

BACKGROUND PAPERS

**Part 1: What is ReThink Zoning?**

**Part 2: Zoning for Use**

**Part 3: Zoning for Intensity**

**Part 4: Zoning for Form**

**Part 5: Review of Ontario Municipalities**

June, 2021



London  
CANADA





# RETHINK ZONING

## BACKGROUND PAPERS

### Part 1: What is ReThink Zoning?

#### Introduction

ReThink Zoning is the process to prepare a new Comprehensive Zoning By-law that will conform with and implement the policies of The London Plan. Updating the approach to zoning in London is essential to achieving The London Plan's vision for growth over time. This discussion paper describes the link between zoning and official plans in Ontario, and to explain why the change in planning approach between the 1989 Official Plan and The London Plan requires us to also rethink zoning.





## How Zoning Works in Ontario

The authority for municipalities to regulate the development of privately owned land through zoning is derived from the Ontario *Planning Act*. Municipal planning is also guided by the Provincial Policy Statement, which provides direction on matters of provincial interest. The City's Official Plan – The London Plan, must conform with provincial laws and be consistent with the provincial policy direction as described in the Provincial Policy Statement (2020).

The London Plan sets out a vision and policies to manage and direct growth and to ensure that our city building initiatives align with provincial direction. Zoning is a regulatory tool that establishes the rules for development on individual properties. Zoning directs what types of buildings and activities are permitted (use), how much of a building or activity is permitted (intensity), and where and how those building should be situated or designed (form). All City by-laws, including zoning by-laws, must conform with the policies of the Official Plan.

Through the ReThink Zoning process, we will analyze zoning implementation tools and techniques to determine which are most appropriate to ensure the type of development envisioned by The London Plan in each Place Type is realized.

## Zoning By-law Z.-1 and the 1989 Official Plan

The current Zoning By-law (Z.-1) was prepared to implement the policies of the 1989 Official Plan, and it therefore reflects the planning approach that was taken in that Plan. The 1989 Official Plan focuses on land use, and Zoning By-law no. Z.-1 places a similar emphasis on regulating land use to achieve those objectives. Like most zoning by-laws throughout Ontario and Canada, Zoning By-law Z.-1 is characterized as use-based by-law that breaks the city into zones that are based on land use classifications such as: residential, commercial, and industrial. The current Zoning By-law Z.-1 then addresses intensity and built form for each use, however many of those regulations addressing intensity and built form have been added over time.

The new zoning by-law will have to conform with the new policies of The London Plan. ReThink Zoning will produce a by-law that will implement the policies and achieve the vision of The London Plan; in much the same way that Zoning By-law Z-1 implemented the policy direction of the 1989 Official Plan.



# The London Plan and ReThink Zoning

The London Plan was approved by Municipal Council in 2016 as the City's new official plan. It contains the policy framework that will guide growth and development in London for the next twenty years. The primary implementation tool to direct growth is the zoning by-law, which outlines the standards and regulations that apply for all types of development.

The London Plan is considerably different from its predecessor in terms of its planning approach and framework. The London Plan places greater emphasis on built form in its planning approach and includes policies that direct the use, intensity, and form of development. Instead of land use designations, the London Plan establishes a sense of place through different Place Types that apply to parts of the city and support a broader city structure plan.

The ReThink Zoning process will determine what zoning regulations are necessary to achieve this vision for London through development on individual parcels across the city. The London Plan provides direction on many zoning matters, and notably takes a balanced approach to how we plan for use, intensity, and form. Some key elements of The London Plan's Approach include:

- A mosaic of great places: where each place type has its own character, vision, and function in the city.
- Link development to mobility: where the street classification establishes use, intensity, and forms of development, and is part of creating distinct place types. This is evident in various place types, such as Rapid Transit Corridors, Urban Corridors, and Main Streets. The Neighbourhoods Place Type allows different use, intensity, and form based on the street classification.

- Flexibility and certainty: The Plan was designed with the intent of requiring fewer amendments. It allows for interpretation while ensuring reasonable expectations of what can be built.
- Context-sensitive approach: Tables are provided that show the potential uses, intensity of those uses, and forms with the various Place Types. The Plan also requires the application of evaluation criteria and other policies to ensure that development is compatible and fits within its context.
- Plan for sustainability: A considerable portion of our greenhouse gas emissions come from transportation and housing. The London Plan draws a link between how we build our city and how we move. Responding to the climate emergency is embedded throughout the Plan but especially in the Key Directions, City Structure, and Environmental Policies.

Since zoning is a fundamental tool to implement the Official Plan, the challenge for ReThink Zoning is to develop new regulations that further implement this new planning approach.

## Key questions for the general layout and approach of the Zoning By-law include:

- **How can the zoning by-law contribute to the City's response to key issues like housing affordability, climate change mitigation, or the regeneration of urban neighbourhoods?**
- **How should the new by-law manage change where The London Plan policies create new direction for development in an area?**
- **How can the new by-law provide flexibility to potentially lessen the need for amendments or reduce administrative processes?**

# Role of Zoning

Zoning is an important aspect of an individual piece of property, neighbourhoods and the overall city structure. Understanding how different zones work and what they regulate is important to understand how growth and development will occur in the City.

The zoning of a property provides the permissions for how it can be used, how much it can be developed, and what form it will take. Zoning can be broadly understood as a set of rules for land use and development, including such categories as: residential, commercial, or industrial. Zoning also addresses other aspects of building and site design such as parking requirements and building height. The illustration below identifies the many facets and features that zoning by-laws directly or indirectly regulate.

The ReThink Zoning project will be focused on creating new rules for these topics and implementing the London Plan. ReThink Zoning will revisit and reimagine how we've approached zoning for the past 25+ years. It is important that the public have meaningful opportunities to get involved in every step of the project and contribute their ideas to creating a new by-law. As part of the preparation of the Background Papers, consideration was given to new and best practices from other Ontario municipalities and what may be learned from them for London. Trends towards making zoning by-laws more user-friendly, and using plain language (where possible) as well as incorporating more illustrations and diagrams will be explored to ensure the new Zoning By-law can be better used and understood by a wider audience.

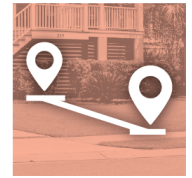
# List of Zoning Issues



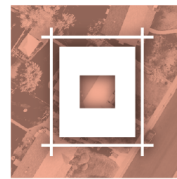
Height



Density



Setbacks



Lot Coverage



Uses



On-site Parking



Landscaped Area



Frontage



Building Design



Affordable Housing



Patios



Interface with Public Realm



Heritage Preservation



Intensification and Infill

*Illustrated list of Zoning issues and aspects of regulation*



# Is a Community Planning Permit System (CPPS) Being Considered?

The Rethink Zoning project is being undertaken for the purpose of preparing a new zoning by-law to implement the policies of the London Plan.

A CPPS is beyond the scope of the ReThink Zoning project for several reasons;

1. An official plan amendment process would be required to amend the London Plan to satisfy the legislation. Regulation 173/16 under the Planning Act, permits the enactment of a Community Planning Permit By-law for an area, if the applicable Official Plan:
  - a) identifies the area as a proposed community planning permit area;
  - b) sets out the scope of the authority that may be delegated and any limitations on the delegation, if the council intends to delegate any authority under the community planning permit by-law; and
- c) for each proposed community planning permit area identified under clause (a),
  - i) contains a statement of the municipality's goals, objectives and policies in proposing a community planning permit system for the area,
  - ii) sets out the types of criteria that may be included in the community planning permit by-law for determining whether any class of development or any use of land may be permitted by community planning permit, and
  - iii) sets out the types of conditions that may be included in the community planning permit by-law in accordance with clause 4 (2) (i) and subsections 4 (4), (5) and (6).
2. The purpose of the ReThink Zoning project is to implement the policies of the London Plan by means of a zoning by-law, as directed by the Plan. Consequently, it would not be appropriate to consider possible official plan amendments to the London Plan through this project.
3. Undertaking a concurrent official plan amendment process concerning a CPPS would consume much additional time that would delay the implementation of the new zoning by-law.



# Community Engagement

ReThink Zoning is the process to create the new Comprehensive Zoning By-law, that is an extension of the earlier ReThink London engagement process that resulted in The London Plan. London's current Zoning By-law Z.-1, was produced to implement the policies of the 1989 Official Plan, which is still partially in force until the London Plan appeal process is complete. The intent of ReThink Zoning is to work with the public and stakeholders to create regulations that conform with The London Plan's vision through the development of the new zoning by-law.

As an example, The London Plan contemplates intensification within neighbourhoods, and the question for ReThink Zoning is: how can this best be achieved through the regulations of the new zoning by-law? When considering our neighbourhoods, what are the regulations that support an appropriate transition to the new forms of development contemplated by the Plan?

Public and stakeholder engagement is a key component for creating a successful zoning by-law. Consultation will be broad and far-reaching to include the general public, focused stakeholders, community-based organizations, industry professionals, development organizations, and all other interested parties.

Initial consultation will be focused on providing background for the project and information on zoning. Later engagement will look at more detailed content for regulating use, intensity and form, applying regulations to new zones, and finally, applying these zones to specific areas and parcels throughout the city.

The spectrum of Public Participation reflects various ways the City will seek to engage on ReThink Zoning.



*The spectrum of Public Participation reflects various ways the City will seek to engage on ReThink Zoning.*

## Engagement Opportunities and Tools

ReThink Zoning will be an intensive and expansive look at the various zoning tools, techniques and approaches available for the City of London. The project will have numerous opportunities for public engagement and feedback to gather thoughts and comments on how people want their City to be regulated through zoning. Every effort will be made to provide a wide spectrum of consultation events, activities, methods, and techniques. In-person consultation will occur when it is safe and feasible to do so.

While the ongoing COVID-19 situation has necessitated changes to the types of engagement, new tools can be used as an opportunity to better connect with the public and achieve the engagement outcomes and goals. As a result of social distancing measures and event closures in response to COVID-19, the city has focused engagement options to primarily online sources. These sources include:

- **Get Involved Website** – This online engagement platform is used by the City of London for a variety of projects. The Get Involved Website ([getinvolved.london.ca/rethink-zoning](http://getinvolved.london.ca/rethink-zoning)) will act as a central hub of information for the project and will be updated regularly. There are eight tools to enable participation and allow users to engage in discussions, such as through surveys, quick polls, or upload pictures and ideas.
- **Social Media** – Broad, engaging content can be posted using the City's existing handles on Twitter, Facebook, and Instagram to draw the general public to the Get Involved project website. Posts can be visual, plain language and educational, which is key at this stage of the process.
- **Webinars** – This technique allows staff to conduct a virtual 'town hall' style meeting,

with a format that is conducive to in-depth educational sessions or panel discussions. A 'questions and answers' format can be used as well. The use of a moderator can ensure that sessions are timely and focused.

- **Video Conferencing** – Video conferencing technology allows us to hold meetings with stakeholders to discuss the project while in-person meetings are not possible. Staff will utilize software that can facilitate web conferencing without an account, allows for a meeting to be split up into separate sub sessions or breakout rooms, then return the meeting back together for group discussion. Other features can also allow users to share and collaborate on a whiteboard within a meeting. Meetings can be recorded and shared online for those unable to attend.

The techniques above lend themselves well to providing a common understanding of the key messages, themes and tools described in this report. The above list is not exhaustive, and staff are exploring additional tools such as radio discussions, interviews, and live streaming. Staff will monitor when in-person meetings will be available and provide opportunities accordingly.

Staff want to ensure that Londoners still have opportunities to provide input in a meaningful way and recognize that some Londoners face barriers to participating in public engagement. To help inform engagement throughout this project, please answer the following questions at [Getinvolved.London.ca/Rethink-Zoning](http://Getinvolved.London.ca/Rethink-Zoning):

- **Based on the themes in the discussion papers, are there key issues that are missing and should be addressed through the public consultation process?**
- **Consider the engagement tools listed above. What tools and techniques should we focus on to make it easier for you to participate?**



# RETHINK ZONING

## BACKGROUND PAPERS

### Part 2: Zoning for Use

#### Introduction

Along with intensity and form, land use is an important consideration of zoning, and has traditionally been the primary consideration of zoning. Land use defines the full range of activities that could occur on each property or within each building in the City. When someone asks, ‘what can I do on my property?’, it is the permitted and defined uses in the zoning by-law that answer that question.

A zoning by-law identifies a list of permitted uses for how each parcel of land can be used or developed. Uses typically fall into a few broad

categories of residential, commercial, industrial, and institutional. The way “uses” are defined, plays a role in how the by-law will be interpreted and implemented. In London, the current approach with the existing Zoning By-law Z.-1 uses land use as its main organizing principle and relies on defined uses to also regulate intensity in many cases, which has led to an extensive list of defined uses.

The London Plan takes a different approach to land use than the 1989 Official Plan, as it does not specifically list individual uses or variations of the broader use categories that may be permitted in a place type, but rather

Use	Intensity	Form	
		Site Layout	Building
<ul style="list-style-type: none"> <li>Residential</li> <li>Office</li> <li>Commercial</li> <li>Industrial</li> <li>Institutional</li> </ul>	<ul style="list-style-type: none"> <li>Height</li> <li>Gross floor area</li> <li>Coverage</li> <li>Floor plate area</li> <li>Density in units/ha</li> <li>Number of bedrooms</li> <li>Parking</li> <li>Floor area ratio</li> </ul>	<ul style="list-style-type: none"> <li>Parking</li> <li>Landscaping</li> <li>Vehicular access</li> <li>Orientation</li> <li>Setbacks</li> <li>Building location on site</li> </ul>	<ul style="list-style-type: none"> <li>Massing</li> <li>Step-backs</li> <li>Materials</li> <li>Architecture</li> <li>Fenestration</li> </ul>

*Examples of measures that may be used to implement place type policies*



identifies the use classification or family of uses that would be appropriate. The scale, intensity and form are then described in other policies to provide greater detail and guidance. Table 7 of The London Plan contains examples of measures that may be used to implement those policies.

It would be the zoning by-law that identifies the specific permitted uses by determining what is appropriate for the individual nature of the property (parcel) and its context.

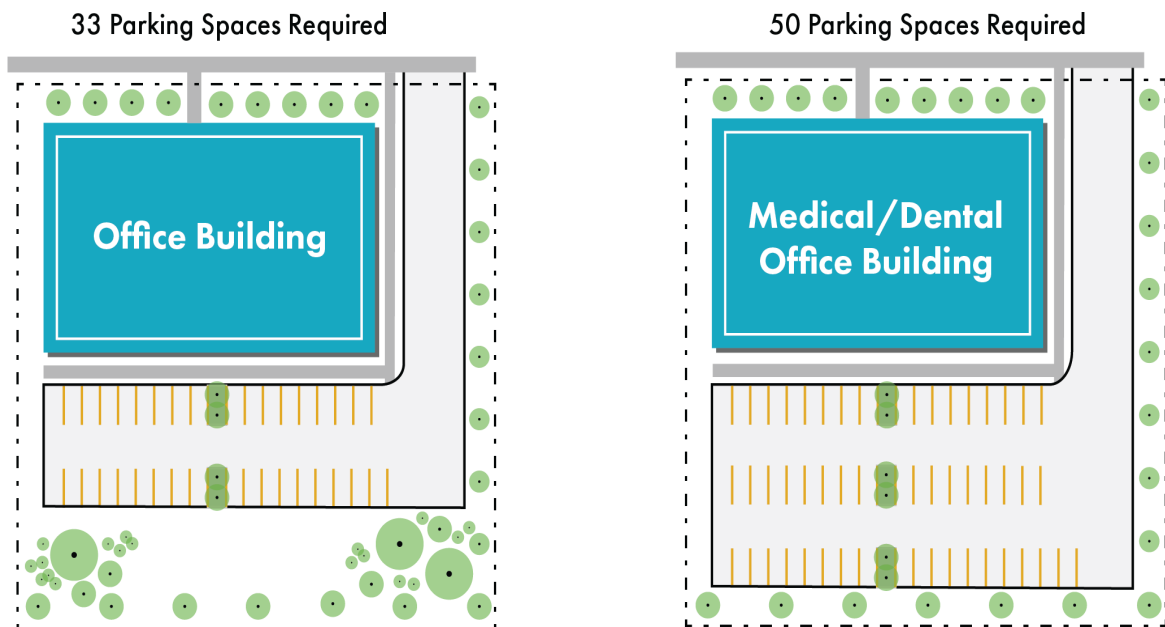
Within these use categories or families, there are a wide range of options for how specific uses can be identified and defined. This is a key part of any zoning by-law as the defined uses have been a cornerstone of traditional zoning methods, to the point where the approach utilized in the current zoning by-law is often called “use-based zoning.” Most of the remaining regulations that form part of the zoning by-law, such as parking, setbacks, building height, etc. all relate directly to the use. For example, the amount of parking required is determined by the permitted use. An office

building and a medical/dental office building of the same size will have different parking requirements, based on the use. As a result, the way uses are defined directly informs the activities, intensity, and design that can occur throughout a neighbourhood and on a given property.

Through ReThink Zoning, we will review how general or specific the uses should be, and how uses are integrated with intensity and form. These are important considerations to determine how flexible, specific, or diverse uses should be and to address how activities change over time.

### Key questions about Zoning for Use include:

- How specific should the definitions be for different land uses?
- What types of uses need to be defined in detail, and which can be regulated based on broader definitions?
- Are the current zoning definitions for land uses effective? Are there use definitions that should be changed?



*Example of different uses and parking requirements for the same size of building.*



# How The Current Zoning By-law Approaches Use

Like many zoning by-laws in Ontario, London's Zoning By-law Z.-1 is primarily structured around land use. The by-law contains approximately 300 distinct defined uses, and many have been added or changed over time. Defined uses are utilized as the primary way to regulate intensity and form, in fact most zones are labelled based on the range of permitted uses. In many cases, the same use has multiple definitions based on size or scale. One example of this is food stores, which may be defined as a convenience store (up to 300m<sup>2</sup>), food store (up to 2,000m<sup>2</sup>) grocery store (up to 3,000m<sup>2</sup>), or supermarket (no size limit) depending on the floor area or other form or intensity considerations. This approach has led to confusion regarding what constitutes a use to begin with. While this use-based approach can create certainty in terms of what can be built, it can also result in a large, unwieldy document and a need for frequent and complex amendment application processes.

Zoning By-law Z.-1 was developed to implement and conform to the 1989 Official Plan, which was explicit in identifying permitted uses based on land use designations. For example, the Auto-Oriented Commercial Corridor designation in the 1989 Official Plan identified a range of 26 possible specific permitted uses. The implementing zone in Z.-1 is the Arterial Commercial Zone, which contains five main zone variations that are differentiated primarily based on permitted use. The result is over 40 special provision zones that often duplicates permitted uses.



*Different scales of food stores all defined as separate uses in the current zoning by-law*

# How The London Plan Approaches Use

The London Plan considers Use, Intensity, and Form as a balanced approach in the planning review for new development. It is based on a planning approach that recognizes the importance of intensity and form in creating great places and spaces, while also understanding that land use is only one factor and should be considered in the same manner as intensity and form during the planning process.

For example, the Urban Corridor Place Type replaces the Auto-Oriented Commercial Corridor land use designation in many areas of the city, and it contains direction only for the broader use categories instead of listing all the variations individually. The London Plan approach then, for each Place Type, generally describes that a range of residential, retail, service, office, cultural, recreational, and institutional uses may be permitted. These “permitted use” policies provide direction for the permitted uses that broadly identify what is appropriate without specifically identifying each individual use like the 1989 Official Plan approach.

## Possible Zoning Approaches to Use

To advance a modern zoning by-law that implements the London Plan, we need to change the way we discuss and regulate land use. We need to find an approach that balances land use with intensity and form, to achieve the placemaking objectives of the Plan. Through our review of best practices and in discussion with zoning consultants retained to frame the concepts for ReThink Zoning, this section provides a summary of some possible approaches to consider in our approach to zoning for use.

### Possible Approach #1 – Utilize Use Families

One approach that can improve clarity for users of the Zoning By-law is to categorize permitted uses by families of similar uses. The current Zoning By-law categorizes zones by classifications based on the characteristics, and has the ability to adjust regulations based on zone class. This approach could be utilized for various use families which contain nested and associated uses. Here are examples of different uses within typical use categories or families.

Residential	Commercial	Industrial
Single-Detached Dwelling	Office	Light Industrial
Townhouse	Retail	Manufacturing
Apartment Building	Service Commercial	Business Park

*Examples of different uses within typical use categories or families*

Many recent Zoning By-laws in Ontario contain use families, including the Newmarket Urban Centres Zoning By-law, Draft Cambridge By-law, and the Draft Vaughan By-law. One strategy for London's new by-law may be to base the use family categories on those from The London Plan and from other Ontario by-laws. The application of use families can add clarity to how uses are regulated and reduce duplication where uses are listed. As most people generally understand the use families (categories) this baseline knowledge can improve the understanding of intent within the by-law.

## Possible Approach #2 – Fewer and Broader Uses

London's current zoning by-law has many uses that can overlap or add confusion for users trying to understand the appropriate use for a given proposal. An analysis of Z.-1's Definitions section reveals approximately 300 defined uses, 145 definitions for general or technical terms, and 35 definitions that include only references to other definitions.

One option that would simplify the by-law is to create more general definitions that capture several variations on the use, to reduce the total number of defined uses and allow more flexibility in how the by-law is applied. One example that is specifically defined and could be changed in the new zoning by-law, is that of a convenience store. It is defined as follows:

### **London – Zoning By-law Z.-1**

*Convenience Store means a retail store having a gross floor area of 300 square metres (3,229 square feet) or less, or as determined by the zone standards, where a variety of both household and grocery items are offered for sale primarily to serve the daily needs of people and may include the rental of videos, an automated banking machine and/or depots for such*

*items as film, laundry or dry cleaning and an area devoted to food preparation for consumption on or off the premises, provided the gross floor area for the sale of prepared food does not exceed 10% of the gross floor area, to a maximum of 30 square metres (323 square feet).*

Recent by-laws in Ontario do not explicitly define a convenience store but instead classify it under a more general definition for a retail store. Here's Oakville's definition as an example:

### **Oakville – Zoning By-law 2014-014**

*Retail Store means a premises in which goods, wares, merchandise, substances, articles or things are displayed, rented, or sold directly to the public.*

Here's another example from Newmarket:

### **Newmarket – Urban Centres Zoning By-law 2019-06**

*Retail Store means a premises in which goods and merchandise are offered or kept for retail sale or rental to the public. This definition shall not include any establishment otherwise defined in this By-law.*

Including a convenience store in the broader retail store definition groups it with other types of stores that have similar planning impacts, such as parking and noise. In the case of large-scale retail stores, use and intensity regulations would be included in the zone to manage impacts. This prevents the need for multiple retail store definitions as the use would be the same, but the levels of intensity and form would vary.

By grouping existing definitions into one retail store category, it could remove the need for up to 20 distinct definitions in the zoning by-law.



Existing By-law		Possible Approach in New By-law
<ul style="list-style-type: none"> <li>• Convenience Store</li> <li>• Bake Shop</li> <li>• Boutique</li> <li>• Antique Store</li> <li>• Home Decorating Store</li> <li>• Pet Shop</li> <li>• Home Appliance Store</li> <li>• Florist Shop</li> <li>• Gift Shop</li> <li>• Duplicating Shop</li> </ul>	<ul style="list-style-type: none"> <li>• Home Improvement Store</li> <li>• Convenience Service Establishment</li> <li>• Home Furnishing Store</li> <li>• Home and auto Supply Store</li> <li>• Convenience Business Service Establishment</li> <li>• Video Rental Establishment</li> <li>• Catalogue Store</li> <li>• Home Improvement and Furnishing Store</li> <li>• Bulk Beverage Store</li> <li>• Pharmacy</li> <li>• Retail Store</li> </ul>	<ul style="list-style-type: none"> <li>• Retail Store</li> </ul>

*Examples of defined retail uses*

In addition to reducing the length and complexity of the by-law, creating more simplified and general use definitions can also reduce inconsistencies, overlap or challenges based on interpretation for applicants. For example, in a by-law with many definitions, an applicant may want to change the type of goods sold in their retail store but may not be able to if there is a more specific definition that is not permitted by the zone. Even if the planning impacts are similar, they would have to go through a Zoning By-law Amendment process if the specific use is not listed within their zone. The photos below are of a florist shop and a bake shop which are defined separately in the Z.-1 Zoning By-law and are not interchangeable



*Examples of different types of retail uses*

uses, though they would have similar impacts and function. If a property is zoned to permit a florist shop only, then a zoning by-law amendment application would be required to add an additional use, for example – bake shop or change the type of goods sold at the shop, for example- bread.

The approach to group together definitions with similar impacts would regulate them through each zone rather than through definitions. Stand-alone definitions could be retained for uses that are more impactful such as noxious or sensitive uses. This approach can potentially reduce the definitions section by more than 50% and enhance flexibility for how properties are used.

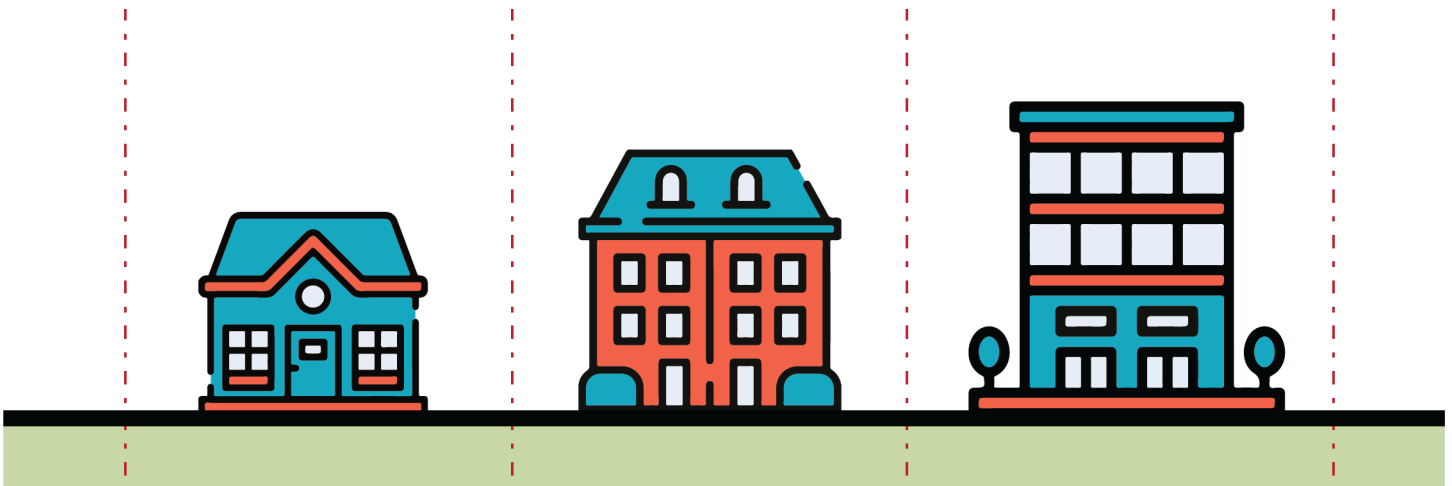


### Possible Approach #3 – Explore Building Typologies as an alternative to Use

Form-based codes are a zoning approach that have become popular in the United States. These codes place more emphasis on building form elements than on the uses within them. Form-based codes often have fewer, more generalized use definitions and include categories each with groups of uses. One approach that has been used in form-based codes and could be applied to implement The London Plan is to identify permitted types of building that may exist separate from the uses within them. For example, if the permitted use is a residential dwelling unit, then the building typologies could include single detached, semi-detached, duplex, converted dwellings, townhouses, stacked townhouses, fourplexes, low-rise apartment, and mixed-use buildings. In this example, the residential dwelling unit is the primary component, or use that is consistent in all the building typologies, and the building typology is differentiated based on the total number of residential dwelling units (intensity) and the building design (form).

The use of a dwelling unit would be the same in terms of the internal requirements (self-contained kitchen, bathroom and living spaces), and the overall function (human habitation), regardless of whether it occupied an entire building or was a unit located on the 10th floor of an apartment building. Other aspects related to intensity, scale and form would establish the different building typologies. For example, an apartment building typology is a collection of residential dwelling units in one building, and a reflection of the intensity and form. It would function differently than one single dwelling unit as there would be greater parking and open space requirements, and also shared facilities like common amenity areas, elevators, and bicycle storage areas, that are unique to that built form.

Similarly, four dwelling units in one building as a fourplex building typology will function differently than four dwelling units organized as a townhouse building typology. In this example, a fourplex may have a central shared garbage area and central shared amenity area, where townhouses may have separate garbage and amenity areas, as they would have a different configuration and orientation to the street. The use of building typologies reflects differences based on the form and function of the building and integrates aspects of intensity and form with the use.



*Building typologies can integrate aspects of form and function as well as use*

## Potential Approach #4 – Apply Performance Standards to Uses in Zones

Most zoning by-laws in Ontario list clear and distinctive permitted uses for each zone, which are the activities that may occur within any building that satisfies the standard regulations of a zone. Any proposed use that is not listed will require a Zoning By-law amendment for it to be permitted. Some municipalities in Ontario have begun adding performance standards, or specific criteria that defines when a use may be permitted in certain zones, so that the use is only permitted where they meet the applicable criteria.

The Town of Oakville is one example of a municipality that does this. As shown in the example below, some commercial (C1-C4) uses are only permitted if they do not abut a residential use in certain zones, or if they abut a certain street classification.

This technique could be an effective approach under The London Plan, where uses within the Neighbourhoods Place Type could be permitted based on street classification. It could also be used to regulate transitions between Place Types, where significantly different intensities are contemplated, such as between the Transit Village and Neighbourhoods Place Types. This will be explored further in the Zoning For Intensity discussion paper.

**Table 9.2: Permitted Uses in the Commercial Zones** (2017-025)

	C1	C2	C3	C4
<i>Rental establishment</i>		✓	✓	
<i>Restaurant</i>	✓	✓	✓	✓ (5)
<i>Retail propane and transfer facility</i>			✓ (3)	✓ (3)
<i>Retail store</i>	✓	✓	✓	✓ (5)
<i>School, private</i> (2016-023)	✓ (1)	✓	✓	
<i>Service commercial establishment</i>	✓	✓	✓	
<i>Sports facility</i>	✓	✓	✓	
<i>Stormwater management facility</i>	✓	✓	✓	✓
<i>Veterinary clinic</i>	✓	✓	✓	

### Additional Regulations for Permitted Uses Table 9.2

1. Permitted only on a lot abutting a major arterial road.
2. A maximum one *drive-through facility* shall be permitted on a lot.
3. Shall not be permitted on a lot abutting any Residential Zone.
4. The maximum lot area shall be 2.5 hectares. The maximum percentage of net floor area permitted to be occupied by a *place of worship* is 50% of the total net floor area on the lot.
5. Permitted only *accessory* to a motor vehicle service station.
6. Permitted only *accessory* to a retail store.
7. Prohibited on the first storey of a building. (PL140317)

*Excerpt from Town of Oakville*



# Conclusion

Land Use is an important part of the planning equation that must be considered to achieve great places and spaces throughout London in line with the vision of The London Plan. Use is not, however, the whole equation and must be balanced with intensity and form in terms of emphasis and the organizing principles of the new by-law. While the 1989 Official Plan included significant focus on land use, The London Plan balances use much more equitably with other factors, so this new zoning by-law must do the same.

The approaches described in this background paper provide some options for consideration while we move closer towards drafting a new zoning by-law for London.





## BACKGROUND PAPERS

### Part 3: Zoning for Intensity

#### Introduction

The London Plan calls for a city structure that is focused “inward and upward” and directs growth to a series of nodes and corridors through intensification. The ReThink Zoning process will explore how intensity will be managed by developing regulations that apply to place types and answering the questions: how much and how big?

The London Plan contains policies that contemplate different levels of intensity within different place types. In addition to establishing the intensity regulations in the by-law generally, it will be necessary to examine the existing height and intensity permissions in Z.-1 and determine where they implement The London Plan. How these regulations are described will affect the readability of the by-law and how they are implemented will shape future development.

#### Key questions for Zoning for Intensity include:

- **What level of height or intensity should be permitted as-of-right in the zoning**

**by-law, and what levels of intensity contemplated in a place type should require a future planning permission?**

- **What current zoning regulations are effective to ensure the right intensity of development for each place type, and what new regulations should be considered?**
- **Certain zoning regulations have an impact on the ability to achieve more intense forms of development. For example, requirements for parking, landscaped areas, and setbacks may reduce the site area that can be occupied by a building. How should we balance these issues in the zoning by-law?**

Intensity, or “how much” is one of the most contentious aspects of development, and there are many options for how it is addressed as part of zoning. Intensity is often understood as measures of how big (i.e., a building) or how much (i.e., an activity). This paper outlines some of the key considerations when zoning for intensity.



# Approach to Intensity in the Current Zoning By-law

Intensity regulations contained in Zoning By-law Z.-1 were informed by the policy direction of the 1989 Official Plan, as amended from time to time in accordance with regular comprehensive reviews. The policies of that Plan addressed measures of intensity as separate criteria, which apply to land uses in defined geographic areas.

Generally, the 1989 Official Plan permits higher levels of intensity to geographic areas of the City like the downtown and areas designated with the Multi Family, High Density Residential designation. More intensive forms of development were contemplated in specific areas of the City if they met certain criteria like frontage on a major road and proximity to major shopping areas or institutional uses. The policies within the Downtown designation directed the Zoning By-law to regulate intensity through matters such as:

- Floor Area Ratio
- Maximum densities measured in units per hectare
- Height restrictions to provide for pedestrian-scale streetscape, sunlight, and minimize wind impacts
- Height increases in a “step-like fashion”

The Urban Design Principles section of the 1989 Official Plan encouraged “continuity and harmony with adjacent uses which are distinct and attractive”. The plan established a link between the intensity and form of a building by requiring transitions between buildings of different scales.

The Multi-Family, High Density Residential land use designation directs applicants to “take into account surrounding land uses in terms of height, scale and setback”. It also speaks to the need for adequate buffering to protect any adjacent low density residential uses. Outside of Central London, the 1989 Plan encouraged a transition in scale “where appropriate” and encouraged decreases in intensity “as the distance from an activity node increases”. Achieving these policies can be accomplished through sensitive built form and design features, but also through reducing levels of building or site intensity closer to lower intensity areas.

The way Zoning By-law Z.-1 implements these policies of the 1989 Official Plan is through specific zoning regulations. Building intensity is primarily regulated through density (units per hectare) and building height (metres or storeys). In certain base zones, the By-law regulates intensity through lot coverage and maximum gross floor area, often for specified individual uses. Within special provision zones that generally apply to individual sites and are the result of a planning application process, additional building intensity regulations are used including maximum floor area ratios and step-back requirements.



# Approach to Intensity in The London Plan

The London Plan policies strategically plan for and locate intensity throughout the City to create a series of nodes and corridors and support for transit. Within the Place Types that permit higher levels of intensity, the Plan also directs the Zoning By-law to include regulations to ensure appropriate intensity, such as:

- Height
- Gross Floor Area
- Coverage
- Floor Plate Area
- Density in Units/Hectare
- Number of Bedrooms
- Parking
- Floor Area Ratio

While the previous official plan included prescriptive policies to identify permitted densities as the primary measure of intensity,

the London Plan does not provide specific density requirements in most instances. Rather, The London Plan focuses on other measures that tend to have greater impact on the public spaces which surround the site, and relate more to the form of development. Density is identified as a measure of intensity that may be applied in zoning. Consideration should be given to what regulations provide for the greatest opportunity to achieve the vision for each Place Type.

In the Transit Village Place Type, Rapid Transit Corridors and Urban Corridors Place Types, for example, intensity policies are intended to direct building heights to step down to any adjacent Neighbourhoods Place Types. Development should be sensitive to adjacent land uses and employ such methods as transitioning building heights or providing sufficient buffers to ensure compatibility. Development lots are also required to be of sufficient size and configuration to help mitigate planning impacts on adjacent uses.





# Activity and Building Intensity

There are generally two types of intensity that may be regulated in zoning – activity and building intensity. Both types relate to the general question of “how much?” but have different impacts on their surrounding communities. For example, in a residential development, the impacts of activity intensity may include more traffic generated in a neighbourhood, while the impacts of building intensity may include shadow effects.

# Activity Intensity

This type of intensity is based on the activities or uses occurring on a site. These activities often relate to the size of a building as well, but are managed separately as part of zoning. For example, a corner store and a grocery store are small and large-scale examples of a similar retail model. As a result, they have different impacts on a neighbourhood, such as parking, noise, or traffic.



*A corner store (above) and a grocery store (below) are a similar use or activity but occur at very different scales or intensities which impact their location and fit in a neighbourhood.*

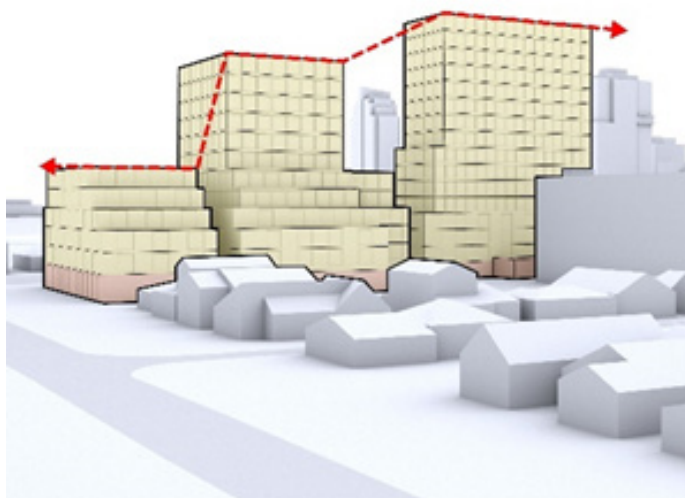


## Building Intensity

Building intensity is primarily based on the size and scale of a building. This is most often understood as building height and can also include building massing.

Building massing is the perception of the bulk of a building. While height impacts this perception, the massing, or bulk of a building can be minimized through different design or form considerations (see *Background Paper 4 – Zoning for Form*).

Traditionally, zoning has regulated building intensity by placing limits on the building box including maximum heights, minimum setbacks, maximum floor area, and maximum lot coverage. These regulations tend to apply height requirements within zones as opposed to directing the building size and scale to appropriately address the local context.



*Building height transitioning to low-rise areas*

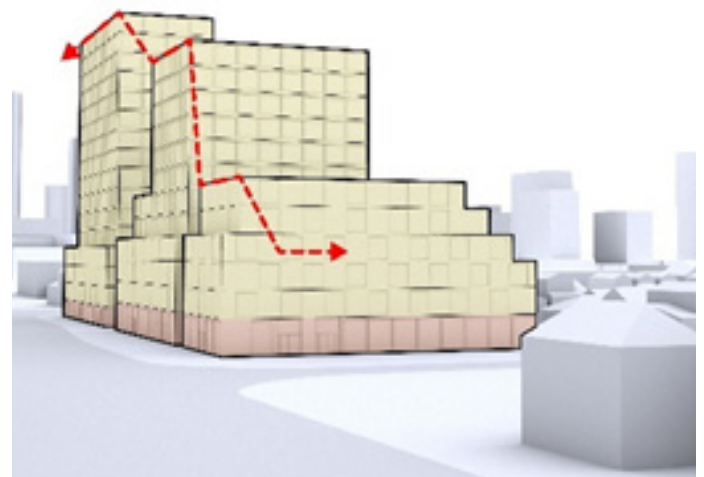
The London Plan anticipates different heights in different areas. For example, taller buildings are to be located along transit corridors with lower rise buildings within neighbourhood areas. While the London Plan directs where intensity should be focused, it is the role of the zoning by-law to add details to advance the Plan's objective for where and how new development will be considered.

**There are two primary considerations for the new zoning by-law:**

**What level of height or intensity should be permitted as-of-right in the zoning by-law, and what levels of intensity contemplated in a Place Type require a future planning permission?**

**What current zoning regulations are effective to ensure the right intensity of development for each Place Type, and what new regulations should be considered?**

The two images below show a potential development application from two perspectives. Here the building has been shaped to allow for a transition between the existing lower buildings to the new higher buildings thereby addressing the local context.





These images show how building height and size can be shaped through more specific intensity standards such as floor area ratio or density requirements. However, form standards (See Background Paper 4 – Zoning for Form) could further address intensity through podium requirements, step-backs, or tower separation requirements, amongst other tools.

Regulating floor area or density can further clarify where and how height and building intensity can be managed, but are limited in their ability to fully address integration with the local context. It is the combination of the form-based regulations that address the ‘how will it look?’ question, and more specifically, step-backs, podium requirements, or separation distances between towers (see the *Background Paper 4 – Zoning for Form*).

## Possible Zoning Approaches for Intensity

Zoning for intensity requires careful consideration that encourages intensification and redevelopment in the locations identified by The London Plan, while ensuring that the impacts of greater intensity development are managed and mitigated. The possible approaches identified below may provide for zoning regulations that help to achieve the city building objectives described by the London Plan.

### Possible Approach #1 – Regulate Intensity Through the Zone

The current zoning by-law uses both use definitions and zone regulations to manage activity intensity. In the *Background Paper 2 – Zoning for Use*, one approach being considered is to merge the definitions of uses with similar **impacts**. In this approach, definitions with

varying **scales of activity** could also be merged and regulated through the zone based on the level of intensity.

For example, the current zoning by-law definition for a Convenience Store includes references to the scale of the use, including a maximum floor area of 300 square meters and a maximum of 30% of that floor area which may be used to sell prepared food. These regulations relate to the ‘how much’ question. By including them in the definition, every store by this definition must meet the intensity regulations. Where the intensity changes, a new definition of the activity would be required.

If this intensity were regulated by the zone instead of through the use definition, any reference to floor area would be deleted from the definition and each zone could determine what size is appropriate based on its specific context. The Town of Oakville uses this approach, which, for example, would permit a convenience store as a retail store. The Oakville definition for a retail store is:

*Retail Store means a premises in which goods, wares, merchandise, substances, articles or things are displayed, rented, or sold directly to the public.*

In addition to capturing a broader range of retail uses that have similar planning impacts, the intensity requirements have been removed from the definition. The intensity standards could then be added as regulations in the zoning and varied to fit the local context.

In other words, rather than having multiple different retail store definitions for different sized stores, there would be one definition and the activity intensity regulations would be set within each zone.

## Possible Approach #2 – Regulate Intensity Through Performance Standards

Performance standards were introduced in Background Paper 2 – Zoning for Use as a method to provide additional regulations for certain permitted uses that are broadly defined. Performance standards are also a useful way to regulate aspects of intensity.

Here is an example of how Performance Standards could be used to implement The London Plan. The table below includes a list of uses that are permitted in different Place Types

and have different limitations on the intensity of those uses based on various criteria. For example, retail stores are permitted in the Downtown and Urban Corridor Place Types, but the size of retail space in the Downtown is unlimited, while in the Urban Corridor Place type a retail store cannot exceed a specified gross floor area. The table below identifies the maximum aggregate intensity based on floor space within a place type which can be included separately as a regulation in each zone, and could be created for other Place Types to moderate intensity levels.

	Downtown Zone	Transit Village Zone	Rapid Transit Zone One	Rapid Transit Corridor Zone Two	Urban Corridor Zone
<b>Retail Store</b>	X	X	X (1)	X (1)	X (1)
<b>Office Use</b>	X	X (3)	X (3)	X (2)	X (2)
<b>Community Centre</b>	X	X	X	X	X
<b>Park</b>	X	X	X	X	X

### Additional Regulations for Permitted Uses:

Individual commercial buildings shall not exceed 6,000m<sup>2</sup> in size

Individual office buildings shall not exceed more than 2,000m<sup>2</sup> of office space

Individual office building shall not exceed more than 5,000m<sup>2</sup> of office space

### Permitted Uses and Regulations within High-Intensity Zones

### Possible Approach #3 – Link Zone Classes to Intensity Variations

*Background Paper 2 – Zoning for Use* described how intensity regulations could be included within zones rather than within defined uses to make the by-law clearer and reduce duplication. One way to do this is to create different zone variations or classes each with its own intensity regulations.

Increasing the number of zone variations could reduce the amount of special provision zones in the future and the overall length of a by-law. Zoning By-law Z.-1 already contains multiple

variations for most zones, however, in many cases the variations are based on differences in permitted uses and intensity requirements are the same. The reduced emphasis on land use in The London Plan makes it possible to determine zone variations on intensity, which thereby would help to balance considerations for intensity and land use. These zone variations could then be applied at the boundaries of certain place types to transition between areas of differing intensity.

One example of a By-law that does this is the Draft City of Vaughan By-law:

Zone Name	Zone Symbol(s)	Purpose of the Zone
Employment Commercial Mixed-Use Zone	EMU	Provide for wide range of employment and other uses and a limited amount of commercial <u>uses</u>
Main Street Mixed-Use – Kleinburg Zone	KMS	Provide for a mix of <u>uses</u> in the core area of Kleinberg
Main Street Mixed-Use – Maple Zone	MMS	Provide for a mix of <u>uses</u> in the core area of Maple
Main Street Mixed-Use – Woodbridge Zone	WMS	Provide for a mix of <u>uses</u> in the core area of Woodbridge

*Excerpt from Draft City of Vaughan By-law*

In this example from the Draft City of Vaughan By-law, zones are categorized by uses and geographic area. Certain zones that permit different uses or intensities could be used to transition between different areas of intensity.

To implement the policies of The London Plan, the principles of this table could be applied to intensity in a London context. For example, buildings within the Transit Village

are encouraged to transition between the core of the Transit Village and adjacent Neighbourhoods Place Types. Two zone variations could then be created for the place type with differing setback, step-back, and height permissions for the core and the periphery. A planning exercise could then be undertaken to review where each of the zone variations are appropriate on a parcel-by-parcel basis.

Zone	Zone Symbol	Purpose of the Zone
Transit Village Zone One (core)	TV1	Provide for a mix of residential, commercial, and other uses in a high-rise form
Transit Village Zone Two (adjacent to Neighbourhoods)	TV2	Provide for a mix of residential, commercial, and other uses in a mid-rise form
Rapid Transit Corridor One (core)	RT1	Provide for a mix of residential, commercial, and other uses in a high-rise form in the core area of a rapid transit station
Rapid Transit Corridor Two (adjacent to Neighbourhoods)	RT2	Provide for a mix of residential, commercial, and other uses in a mid-rise form

*Example of approach to regulating intensity in London*



## Possible Approach #4 – Add to the Existing Regulations

In many cases, there is significant overlap between intensity regulations and form regulations. This section considers intensity regulations used in Z.-1, examples listed in The London Plan as well as additional potential regulations used by leading Ontario municipalities.

Below is an example from the City of Waterloo Zoning By-law, which clearly sets out intensity requirements and includes aspects of form to manage levels of intensity such as podium requirements, and maximum tower footprint.

8.5.9 The following regulations in Table 8K shall apply to the erection, alteration, enlargement, or reconstruction of any BUILDING in the Convenience Commercial (C3) zone constructed after the effective date of this BY-LAW:

<b>Table 8K: Regulations – CONVENIENCE COMMERCIAL (C3)</b>						
	<b>C3-10</b>	<b>C3-20</b>	<b>C3-30</b>	<b>C3-40</b>	<b>C3-60</b>	<b>C3-81</b>
Density (minimum)	(none)	(none)	(none)	150 BEDROOMS per hectare	150 BEDROOMS per hectare	150 BEDROOMS per hectare
Density (maximum)	150 BEDROOMS per hectare	450 BEDROOMS per hectare	525 BEDROOMS per hectare	600 BEDROOMS per hectare	675 BEDROOMS per hectare	750 BEDROOMS per hectare
BUILDING HEIGHT (maximum)	10 metres and 3 STOREYS	20 metres and 6 STOREYS	30 metres and 9 STOREYS	40 metres and 12 STOREYS	60 metres and 18 STOREYS	81 metres and 25 STOREYS
PODIUM Height (maximum)	(none)	14 metres	14.3 metres	14.8 metres	21 metres	21 metres
TOWER Separation (minimum)	(none)	(none)	a.) 22 metres from a TOWER on the same LOT b.) 11 metres from an INTERIOR LOT LINE, except where the INTERIOR LOT LINE abuts lands zoned OS1 (see 3.T.5.1 and 3.T.5.2)			
Horizontal TOWER Dimension (maximum)	N/A	N/A	40 metres	40 metres	40 metres	40 metres
TOWER Footprint (maximum)	N/A	N/A	1,000 square metres	1,000 square metres	1,000 square metres	1,000 square metres
TOWER STEPBACK above PODIUM, including balconies, on the FRONT BUILDING FAÇADE and FLANKAGE BUILDING FAÇADE (minimum)	N/A	N/A	3 metres	3 metres	3 metres	3 metres
AMENITY AREA (minimum)	3 square metres for the first BEDROOM and 2 square metres for each additional BEDROOM in the DWELLING UNIT					

*Excerpt from City of Waterloo By-law*

The table below identifies types of regulations for intensity that could apply to zones based on The London Plan Place Types. Whether a regulation applies or not will vary with the permitted uses and forms of development for each Place Type, depending on relevance. In the Neighbourhoods Place Type, for example, there is no need to include measures that are specific to tall buildings as they are not permitted in this Place Type.

Intensity Measure	High-Intensity Zones (Downtown, TV, RTC, UC)	Medium-Intensity Zones (Shopping Area, Main Street)	Neighbourhoods Zones
Height	Y	Y	Y
Gross Floor Area	Y	Y	Y
Coverage	Y	Y	Y
Floor Plate Area	Y	Y	N
Density in Units/HA	Y	Y	Y
Number of Bedrooms	N	N	Y
Parking	Y	Y	Y
Floor Area Ratio	Y	Y	N
Tower Separation	Y	N	N
Tower Step-back Above Podium	Y	N	N
Podium Height	Y	N	N

*Example of approach to regulating intensity in London for different zones*

While including standards for all of the regulations may appear more cumbersome, this can reduce the need for special provision zones. Regulations should be complementary and aligned to ensure they do not conflict or contradict each other. One example would be for Floor Area Ratio (FAR). An FAR provision of 4.0 may be useful to provide flexibility in design, but if considered only as its own regulation, could allow 100% lot coverage, which would contradict other regulations and the overall policy direction.

The 1989 Official Plan and The London Plan share many common elements of regulating intensity, and the new zoning by-law can carry forward many existing regulations from Z.-1. There is the opportunity to include additional regulations that manage intensity separately from use to provide better clarity and consistency. For example, including standardized podium requirements would differ from Z.-1, where they can vary, and are typically set on a case-by-case basis through individual special provisions.

## Possible Approach #5 – Allow As-of-Right Maximum Heights where Regulations are Met

Two of the main questions of this background paper are:

- What level of height or intensity should be permitted as-of-right in the zoning by-law?
- What levels of intensity contemplated in a Place Type require a future planning permission?

These questions must be considered together, and there are essentially two options that answer the questions. The first is to create a by-law with fewer regulations and lower as-of-right planning permissions that would require a Zoning By-law Amendment to achieve the upper limit. The second is to create a more stringent by-law with higher as-of-right planning permissions that apply in most circumstances without the need to amend the zoning.

The vision and policies of The London Plan together with the approaches explored through these background papers support the second option. This option can focus higher intensity to strategic areas, better define expectations for the community and applicants, and follow best practices outlined in Ontario zoning by-laws. An anticipated advantage of the second option is certainty for all involved parties, by providing confidence to developers that necessary intensity will be permitted in strategic locations, and eliminating the uncertainty of an amendment process.

An additional planning approval for zoning would not be necessary if regulations are used to ensure design excellence on a site where high-intensity development is encouraged. In areas adjacent to other place types, a zoning by-law amendment could be undertaken to determine the appropriateness of additional intensity.

## Conclusion

The intensity aspects of zoning address the questions of ‘how much?’ and ‘how big?’. Several approaches have been evaluated to implement The London Plan’s focus of growing inward and upward. Shifting intensity from defined uses as separate regulations and utilizing performance standards can help reduce the number of uses and better clarify different scales of development. Expanding the number and type of regulations that address intensity can provide more certainty for built scale and related aspects of development, such as form. With sufficient regulations managing intensity, certain select parts of the City could be zoned with greater intensity permissions to encourage development in appropriate locations. The London Plan promotes intensification to the nodes and corridors, and the ReThink Zoning process will explore how intensity can best be managed to achieve the Plan vision.





## BACKGROUND PAPERS

### Part 4: Zoning for Form

#### Introduction

Built Form is an important element of zoning as it determines how the City will look and feel, and in many cases, function. The London Plan identifies form as one of the three key considerations in the review of a proposed development, and it needs to be addressed through the zoning by-law to achieve the Plan's City Building objectives and Place Type policies. Form includes aspects like the massing, location, and design of buildings and the layout and features of development sites.

The London Plan integrates form elements together with use and intensity policies, providing a balanced approach and direction for development in different Place Types. By including rules for built form, a more granular approach can achieve a contextual and cohesive neighbourhood design that is more diverse, especially when combined with rules for 'what can I do?' (use) and 'how much?' (intensity).

Key questions for Zoning for Form include:

- To what degree should form considerations be a part of the zoning considerations?
- How much should "built form" be a site plan control matter?
- What current zoning regulations would be effective to ensure the right form of development in each Place Type, and what new regulations should be considered?
- How can we ensure an appropriate form when permitting increases in height or density?
- To what degree should form considerations be based on the surrounding context?



Many Ontario municipalities have begun to successfully regulate form in their zoning by-laws to a greater degree than traditional approaches. As discussed in Zoning for Intensity, providing strong form regulations can allow for greater as-of-right zoning by providing some assurance for how the impacts of that intensity could be mitigated. This is especially valuable for The London Plan, which seeks to direct a significant amount of growth toward intensification, and especially in nodes and corridors.

## Evaluating Design

Aspects of attractive, well-designed built form outcomes can often be measured and there are a few key components that most often result in a pleasant space. The London Plan encourages good design by supporting development that creates a sense of place and considers human-scale buildings that fit within the surrounding context. Elements of built form must work together with what is happening on a site or in a building, (see *Discussion Paper 3 - Use*) and its size and scale (see *Discussion Paper 4 – Intensity*).

## Residential Neighbourhoods

In the City Building policies of The London Plan, design goals include:

- Transitions between different building heights,
- Clearly visible front entrances,
- Variation in building facades,
- Consistent setbacks,
- Sidewalks,
- Street trees, and
- Landscaping in front yards

In a typical residential neighbourhood, components of form are important in defining character. Building setbacks should provide a balance of privacy and activity, street trees and sidewalks should frame the street, and all front entrances should be wholly visible from the sidewalk. Patios or awnings can be used to provide seasonal protection and make entrances more visible.



*Low-rise developments with varying forms and building envelopes*

## High-Rise Developments

High-rise developments are anticipated in the higher intensity place types, such as along transit corridors, transit villages or the downtown. Where high-rise development is proposed, design goals include:

- parking that is located and designed to remove impacts on the built environment;
- creating comfortable pedestrian environments using podiums and step-backs;
- separation between building towers; and
- both vertical and horizontal proportions in each building and along the street wall

Parking should not be visually dominant, and building height should relate to the street width on which the building fronts to achieve pedestrian-scale buildings. Tower separation and step-backs should consider local wind and sunlight conditions and utilize design features to mitigate impacts.



*This image shows an example of high-density development. The red dotted line highlights the tower separation.*

## Transparency and Entrances

The permeability of a building facade or exterior wall, particularly where it is adjacent to a public space or street, reduces the perception of bulk and massing, provides for passive surveillance, and animates the street with pedestrian movements. A façade that utilizes a high proportion of windows and doors as well as frequent building variation achieves a higher level of activity and visual interest on the street than a blank façade with no openings.

# How the Current Zoning By-law Approaches Form

The 1989 Official Plan includes policies that provide direction on numerous aspects of built form through the Urban Design Chapter and through some policies within the Land Use Designation Chapters. These form policies generally apply to the permitted use and are not given the same emphasis as land use or intensity provisions. The language is often flexible and aspirational with frequent use of terms such as “should” and “to the extent feasible”.

The policies encourage positive design features such as the retention of trees and views of natural features and landmarks, as well as high design standards in strategic locations. The organizing principles of the Plan are to identify the range of permitted uses by area, and then consider form considerations in general terms.

Within the Multi-Family, High Density Residential Designation, for example, policies directed high-rise structures to be oriented, where possible, closest to activity nodes with densities decreasing further away to provide effective transitions to lower density areas.

Zoning By-law Z.-1 follows the same approach as the by-law was written as an implementation tool for the 1989 Official Plan. It uses a variety of regulations within use-based zones to implement the policies of the 1989 Official Plan related to form. Different built forms are often interchangeable with the uses permitted, for

example a single detached dwelling is both the use and form of development, which can be difficult to isolate elements of form to regulate. Often, these overlap with intensity and can vary in terms of regulatory detail from broad to more specific. The regulations that impact the built form and are contained in most zones include:

- Minimum front and exterior side yard depths which vary based on street classification
- Minimum landscaped open space
- Minimum interior side yard depth
- Minimum rear yard depth
- Maximum lot coverage
- Maximum height
- Maximum parking area coverage
- Maximum number of buildings
- Minimum lot area per unit
- Minimum lot frontage
- Maximum floor area percentage

In addition, many special provision zone variations were created over time through the development process and apply to specific properties. These often regulate matters that are not as explicitly addressed in each base zone and include:

- Setbacks from sensitive uses (pipelines and railways)
- Driveway regulations
- Building orientation
- Parking standards and locations
- Porch and garage setback regulations
- Direction on building typology (i.e., buildings may take the form of shopping centres, mixed use buildings or stand-alone structures)
- Restrictions on accessory parking lot depending on street classification

Finally, Zoning By-law Z.-1 has used bonus zones as a means to regulate form with provisions for site specific developments, such as:

- A 'locked in' design that ensures the delivery of positive features presented during the application review process
- The provision of pergolas and seating areas
- Green roof features
- Enhanced landscaping
- Pedestrian plazas
- Universally accessible features
- Underground parking

## How The London Plan Approaches Form

As we shift from the 1989 Official Plan to the London Plan, one of the most significant and important differences in terms of planning approach is the balancing of form considerations in the development process. Instead of determining the range of permitted uses and then considering what form requirements should apply, the London Plan looks at places more holistically and gives direction for built form with equal emphasis to the range of uses and intensities that may be permitted.

Policies related to built form in The London Plan are largely contained in the City Building policies, the Place Type policies, and the Our Tools policies.

## City Building Policies

The City Building policies recognize that the design of the City is shaped by both the natural setting and its built form. The policies provide direction for the way neighbourhoods, buildings, streetscapes, public spaces, and landscapes are designed, as they play a major role in creating a sense of place that is unique to London. This requires that all elements of the built environment contribute to realizing the place type vision, which is why The London Plan also gives direction for elements such as street design, public spaces, and parks that create complete communities.

Character policies address neighbourhood design at a high level and direct that all development contributes to a neighbourhood's character and demonstrate how it fits within its context. Individual Site Layout policies direct new development to respond to the context and character of the surrounding area and minimize impacts on adjacent properties. Building policies address the detailed aspects of built form, such as scale, massing, materials, and relationship to adjacent buildings.





## Place Type Policies

Each of the Urban Place Types in The London Plan sets out a vision and includes built form policies that will achieve the intended function. These include:

Site layout:

- Parking
- Landscaping
- Vehicular access
- Orientation
- Setbacks
- Building location on site

Building:

- Massing
- Step-backs
- Materials
- Architecture

Two examples of form policies within The London Plan illustrate the different approaches and components for an intensive Place Type such as the Transit Village Place Type and a moderate Place Type such as the Neighbourhoods Place Type.

### Transit Village Place Type

The form policies of the Transit Village Place Type emphasize pedestrian convenience and access, and direct that buildings and the public realm be designed to be pedestrian, cycling and transit-supportive. Building orientation, location of entrances, clearly marked pedestrian pathways, widened sidewalks, cycling infrastructure, and general site layout reinforces pedestrian safety and easy navigation. Built form features that provide weather protection features such as canopies can directly support a quality pedestrian environment.

The policies also encourage high-quality architectural design, stating that massing and architecture within the Transit Village should provide for articulated façades and rooflines, accented main entry points, and generous use of glazing and other façade treatments along sidewalk areas. Surface parking areas should be located in the rear and interior side yards to minimize their presence, and underground or structured parking within the building design is encouraged.

### Neighbourhoods Place Type

Neighbourhoods are the largest urban place type by area and are the places where many Londoners live. The vision for the Neighbourhoods Place Type includes key elements that are important to making neighbourhoods vibrant and exciting places to live, where community connections are fostered. The first two elements identified in the vision statement relate to the built form and include “strong neighbourhood character, sense of place and identity,” and “attractive streetscapes, buildings, and public spaces.”

The form policies for Neighbourhoods envision a predominantly residential character and require non-residential uses to fit within that context. These policies direct that neighbourhood design should avoid rear lotting onto major roads, and instead directs more intense development to those streets to provide for a more urban and transit supportive neighbourhood structure with easy access to parks and amenities. Site development should emphasize human interactions with buildings and minimize the impact of parking areas on the public realm.

## Our Tools

The Our Tools section of The London Plan contains Evaluation Criteria for Planning and Development Applications policies for aspects of form as well as intensity. These include a list of potential impacts on nearby properties that could be addressed by built form or site design, such as:

- Traffic and access management
- Noise
- Parking on streets or adjacent properties
- Emissions generated by the use such as odour, dust, or other airborne emissions
- Lighting
- Garbage generated by the use
- Loss of privacy
- Shadowing
- Visual impact
- Loss of views
- Loss of trees and canopy cover
- Impact on cultural heritage resources
- Impact on natural heritage features and areas
- Impact on natural resources

The policies also contain evaluation criteria to determine whether a proposal is sensitive to, and compatible with, its existing and planned context. The built form of a proposal may need to integrate or respond to aspects of:

- Policy goals and objectives for the place type
- Policy goals and objectives expressed in the City Design chapter of this Plan
- Neighbourhood character
- Streetscape character
- Street wall
- Height
- Density
- Massing
- Placement of building
- Setback and step-back
- Proposed architectural attributes such as windows, doors, and rooflines
- Relationship to cultural heritage resources on the site and adjacent to it
- Landscaping and trees
- Coordination of access points and connections





# Possible Zoning Approaches to Form

## Possible Approach #1 – Regulate Building Orientation and Primary Entrances

The provision of primary building entrances onto a public street can play a major role in establishing an active frontage and a welcoming pedestrian-oriented environment. This is recognized in The London Plan within the City Building section of the Plan, which states that principal building entrances “should be located to face the public right-of-way and public spaces, to reinforce the public realm, establish an active frontage and provide for convenient pedestrian access”.



*This cafe in London features the primary entrance oriented towards the street which provides direct access for pedestrians without having to walk through parking areas or drive-through lanes.*

The Transit Village, Rapid Transit and Urban Corridors Place Types contain a similar policy stating that “buildings and the public realm will be designed to be pedestrian, cycling and transit-supportive through building orientation [and] location of entrances”. This is intended to ensure there are no large expanses of blank walls fronting the street, and that features such as entrances and windows break up the massing of buildings and support a pleasant and interesting pedestrian environment.



Sev. S. 14

Sev. S. 14

*This cafe entrance is oriented away from the public street with no activation of the blank façade or access for pedestrians from the sidewalk.*

Examples of how zoning regulations can direct the location of principal entrances and building orientation are found in the by-laws of Newmarket and Oakville as contained in the table below.

By-law	Regulations
Newmarket Urban Centres By-law	Mixed Use Zones 6.2.4.1. General i) Principal Entrance a) At least one principal entrance shall be provided for any building along a public street or adjacent to an Open Space Zone. b) Any principal entrance to a mixed use or apartment building shall be no more than 1.5 metres above grade.
Oakville By-law	Mixed Use Zones: Residential dwelling units located on the first storey shall have the main front entrance into each premises oriented towards a public street.

A similar zoning regulation implementing the policy could be established in London as follows:

Zone	Regulation
Transit Village, Rapid Transit Corridor and Urban Corridor, and Shopping Area Zones	At least one principal entrance shall be provided for any building along a public street or adjacent to an Open Space Zone.



## Possible Approach #2 – Regulate Ground Floor Activities

Active frontage refers to the provision of active uses on the ground floor of buildings to create a vibrant pedestrian environment on the street. These types of uses also add visual interest to a streetscape and can help produce a sense of safety. Many of the Ontario case study by-laws have requirements for a minimum number of active uses, such as retail stores or restaurants, in focused areas such as transit hubs.

Policies within The London Plan also encourage active frontage within building design. For example, high- and mid-rise buildings “should establish a human-scale façade with active frontages”. Similarly, buildings that are adjacent to parks and public spaces should be designed to provide an active frontage onto those spaces to create a positive interaction with the space.

Within the Transit Village Place Type, there is a policy stating that “where there is a mix of uses within an individual building, retail and service uses will be encouraged to front the street at grade”. Similarly, along commercial-oriented streetscapes in the Downtown and within the Main Streets Place Type “retail and service uses will be encouraged at grade”.

Requiring active uses at-grade may not be feasible in every instance. One option may be to require a percentage of the aggregate frontage of an area to be active uses, and to designate areas within an individual zone for this feature. This approach has been used in the Newmarket By-law. As an alternative, the North Oakville By-law example below requires an active frontage as a performance standard to obtain the maximum height.



*An example of a street with active ground floor activities in London.*

By-law	Regulations
Newmarket Urban Centres By-law	<p>Mixed-Use Zones: In a mixed-use building dwelling, a dwelling unit may only be permitted above a ground level commercial use.</p> <p>Priority Commercial Areas: Any building in the areas shown on Schedule “D,” forming part of this By-law, shall have commercial uses comprising 75% of ground floor frontages.</p>
North Oakville By-law	<p>Trafalgar Urban Core Performance (TUC-3) Zone 3: The regulations of the TUC Zone shall apply in the Trafalgar Urban Core Performance (TUC-3) Zone 3, with the exception that the maximum height shall be 30 storeys provided that: [...] <ul style="list-style-type: none"> <li>iii) a minimum of 50% of the first storey shall be utilized for commercial or institutional uses.</li> </ul> </p>

*Excerpt from Newmarket and Oakville By-laws*

### Possible Approach #3 – Regulate Fenestration and Transparency

The use of windows and transparent glass on buildings at the ground-level helps to create a pedestrian-oriented environment and increase passive surveillance. In The London Plan, this is an important policy direction for tall buildings within the City Design policies, and for several places within the Place Type policies.



*This building in London makes significant use of glazing.*



The London Plan directs that the use of “transparent windows should be located to face the public right-of-way and public spaces”. This is reiterated in the materials section, which states that “for commercial, office and institutional uses, transparent glass should be used on the majority of the ground level façades facing a public right-of-way to provide views into and out of the space and enhance the pedestrian environment”. Transparent glazing is effective at creating interest in and around street level as various activities are visually apparent to pedestrians and reinforce passive surveillance and feelings of comfort and safety.

The Transit Village and Rapid Transit and Urban Corridors Place Types each contain a policy on windows and glazing where massing and architecture “should provide for articulated façades and rooflines, accented main entry points, and generous use of glazing and other façade treatments along sidewalk areas such as weather protection features to support a quality pedestrian environment”. In the Rapid Transit and Urban Corridors, “large expanses of blank wall will not be permitted to front the street, and windows, entrances, and other building features that add interest and animation to the street will be encouraged”.

There are a few methods for regulating the use of glazing through a Zoning By-law seen in the case studies below. One option, used by Newmarket, directs the provision of glazing on walls adjacent to a public street, but does not specify a quantum. A second option, which may be better suited to meeting the intent of The London Plan policy, is to require a minimum glazing standard for certain zones, as used in the St. Catharines By-law and Draft Cambridge By-law.

By-law	Regulations
Draft Cambridge By-law	Core Area Zones: Minimum percentage of first storey wall facing front lot line that has openings CMU1 70% CMU2 70%
Newmarket Urban Centres By-law	Mixed-Use Zones: ii) Windows and Glazing Glazing shall be provided in buildings on any wall adjacent to a public street or Open Space Zone.
St. Catharines By-law	Commercial (C5) and (C6) Zones: Min. Ground Floor Street-Facing Building Façade Devoted to Openings. C5 – 50% surface area. C6 – 60% surface area.

*Excerpt from Cambridge, Newmarket and St. Catharines By-laws*

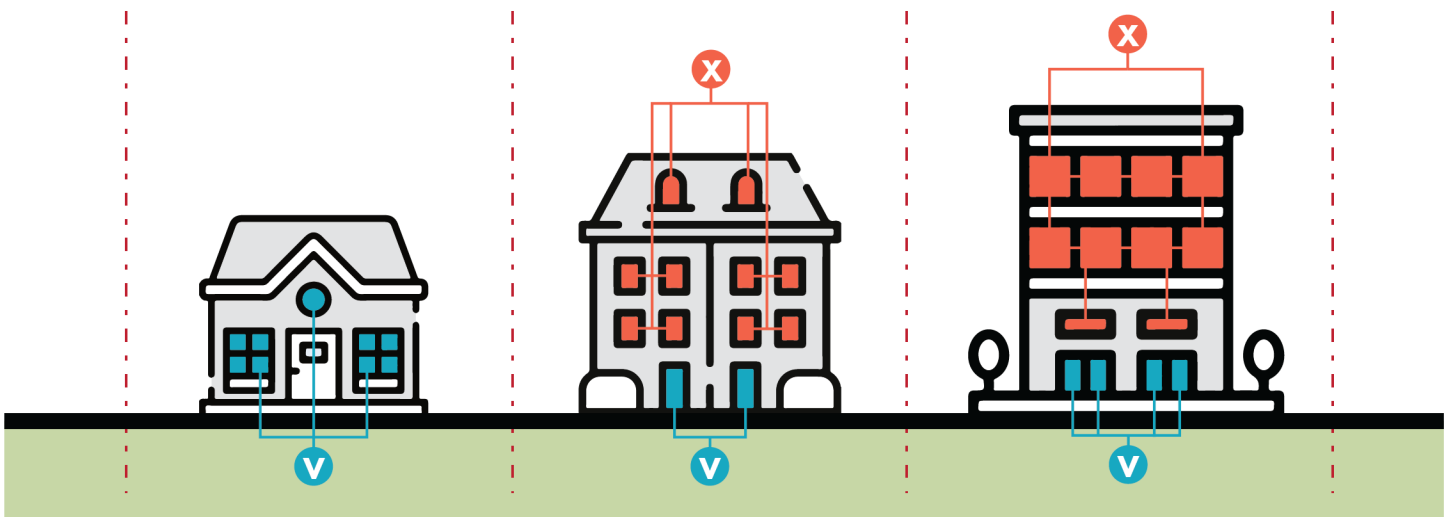
Criteria for glazing could be included as regulations within the new zoning by-law to establish minimum amounts at the ground floor or upper floors. Within the Transit Village, Rapid Transit and Urban Corridor Place Types, regulation could be written as follows:

By-law	Regulations
Transit Village, Rapid Transit Corridor and Urban Corridor Zones	Minimum percentage of the first storey wall facing the front lot line that has openings - 70%

*Example of approach to regulating glazing in London*

Within the Neighbourhoods Place Type where the predominant development form would be low-rise residential uses, glazing requirements could be established for the ground floor and upper floors depending on the zone and character of the area. The graphic below illustrates how these aspects of glazing could be measured in a low-rise residential context.

Articulation						
V	Minimum Ground Floor Front Transparency	20%	20%	20%	20%	20%
W	Minimum Ground Floor Corner Transparency	20%	20%	20%	20%	20%
X	Minimum Upper Floor Front Transparency	20%	20%	20%	20%	20%
Y	Minimum Upper Floor Corner Transparency	20%	20%	20%	20%	20%



*Example of measuring glazing for low-rise residential areas*



## Possible Approach #4 – Regulate the Form of Parking

Parking areas are necessary components of site design to accommodate temporary vehicle storage. However, when located at the street level, they often occupy large areas of land with little to no activation or benefit to those areas. Large, dead, inactive expanses of under-utilized space do not provide enough City Building benefit to justify the space that is required, and when improperly located or designed they can make it hard for pedestrians to traverse, or can overwhelm the streetscape and alter the character and ‘feel’ of an area. An over-supply of parking encourages auto-oriented forms of development which conflicts with urban trends towards more compact and walkable neighbourhoods that are highly connected by transit.

The London Plan policies direct that the “impact of parking facilities on the public realm will be minimized by strategically locating and screening these parking areas”. The policies also direct that surface parking should be located in the rear yard or interior side yard to minimize their visual impact and presence. For parking located in a structure, they should be integrated into the design of a building, and

effectively screened. Underground parking facilities offer the most benefit to ensure there is functional parking available while not compromising building or site design, and is encouraged for multiple Place Types, as are the opportunities for shared and consolidated parking areas.

The direction in the above policies can thus be broken into three categories:

- Regulating the type of parking permitted by zone (surface, structured, underground)
- Providing form regulations for the location and design of parking facilities on a site
- Providing opportunities for consolidating parking across lots

### Regulating the Type of Parking Permitted

Parking requirements are often found to be inflexible, based on site-based parking needs and prescriptive supply ratios. Parking regulations should be primarily determined by the context of the site for such aspects of transit availability, travel patterns and market demand.

Most of the case studies regulate the type of parking permitted in different zones or provide incentives to encourage certain types of parking. For example, one zone in the North



*This image shows a development with large amounts of surface parking at the front of the site.*

Oakville By-law allows an increased maximum height if all parking is provided underground or in a parking garage.

The case studies range from requiring a minimum of 50% up to 85% of all parking provided to be structured parking in transit-oriented zones. Engagement and evaluation is necessary to determine the quantity of required structured parking in each place type, however, a reasonable regulation based on the policy direction above could be as follows:

- A maximum of fifty percent (50%) of required parking spaces may be provided as surface parking.

By combining this with a framework allowing for tall buildings in appropriate locations, development that meets the intent of The London Plan and complies with zoning regulations can be pursued without a zoning by-law amendment. This regulation can also be important for achieving underground parking that was previously eligible for bonusing.

### Form Regulations for Parking

The Newmarket Urban Centres By-law regulates parking location, garages, and amounts as follows:

By-law	Regulations
Newmarket Urban Centres By-law	<p><u>Parking Lot Location:</u> Where required, parking lots shall be located in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>• Zone Parking Lot Location Requirement Mixed Use Zones</li> <li>• Parking spaces may be provided on another lot within a different Mixed Use Zone but not more than 150.0 metres from the lot line of the use it is intended to serve.</li> <li>• Parking lots shall be located in the interior side yard and/or rear yard not less than 3.0 metres from any side or rear lot line. However, a parking lot as a sole use may be located in any yard.</li> <li>• Open Space, or Institutional Zones</li> <li>• Parking lots may be located within any yard but shall not be located within 3.0 metres of any street line.</li> </ul> <p><u>Parking Garages:</u> Above Grade Parking Garage Any building that contains an above grade parking component facing a public or private street or an Open Space Zone must provide commercial, residential or institutional uses along the ground floor of the wall facing the public or private street or Open Space Zone.</p> <p><u>Underground Parking:</u> Below grade parking is permitted to be setback 0.0 metres from property lines, and may be permitted under Private Parks, parks, Private Lanes and Private Streets, but is prohibited under Public streets.</p> <p><u>Reduced Parking Standards for Proximity to Transit:</u> The minimum and maximum parking rates for each of the permitted residential and non-residential uses may be reduced by 30%</p>

*Excerpt from Newmarket Urban Centres By-law*

Based on the policy direction above, the location of parking within a site could be regulated as follows, based on the Newmarket By-law:

Zone	Regulations
Transit Village, Rapid Transit Corridor and Urban Corridor Zones	Parking lots shall be located in the interior side yard and/or rear yard not less than 3.0 metres from any side or rear lot line.
All other Neighbourhood, Shopping Area and Open Space zones	Parking lots shall not be located within 3.0 metres of any street line.

*Example of approach to regulating parking in London*

**Consolidating Parking Across Lots**

Consolidation of parking could be utilized where neighbouring or nearby lots include land uses with different peak demand periods for parking, or where small lots don't have adequate space to provide on-site parking and could be better utilized with a shared lot in another location. Of the case study by-laws, only Newmarket's addresses consolidating parking across lots, it includes:

*Zone Parking Lot Location Requirement Mixed Use Zones:  
 Parking spaces may be provided on another lot within a different Mixed Use Zone but not more than 150.0 metres from the lot line of the use it is intended to serve.*

This approach could be utilized for the London context within some Place Types, however, careful consideration should be made to not inadvertently cause the proliferation of large expanses of surface parking or commercial parking lots as a standalone land use where they are not desirable. Consolidating underground parking areas for multiple sites could provide more functional layout and shared services without occupying valuable surface space.





## Possible Approach #5 – Provide Landscape Screening Requirements

One method for regulating the transition between different uses and intensities is through requirements for landscape strips or planting buffers. The width of the required landscape strip or planting buffer could vary depending on the adjacent use or zones. This method has become popular in recent years and has been used by every case study by-law examined through this report.

The use of planting strips is encouraged both indirectly and directly in The London Plan. Indirectly, planting strips could assist with achieving The London Plan’s key directions, Forest City policies and canopy cover targets. Directly, planting strips can be used to implement several policies for positive site design by preserving privacy on adjacent sites, providing screening, buffering, and softening the transition between place types. For example, the Rural Urban Interface policy describes “the incorporation of buffers such as treed landscape strips” as a design measure to mitigate conflicts between urban and rural uses.

Development within the Shopping Area Place Type is directed to utilize such methods as “providing sufficient buffers to ensure compatibility”. The Rapid Transit Corridor and Urban Corridor policies also state that an “appropriate transition of building scale and adequate setback distances should be provided between the Corridor and adjacent neighbourhood areas”.

The Light Industrial Place Type Form policies state that “The Zoning By-law and the Site Plan Control By-law may specify higher standards for setbacks, the location of parking and loading areas, signage, landscaping along major entryways to the city and adjacent to residential areas”.

The Parking policies encourage the use of landscaping for surface parking as a means to provide canopy coverage, screening, improve stormwater management and increase pedestrian comfort. Implementing a regulatory framework similar to that of the Newmarket By-law could be effective in terms of implementation for parking lots and between zones.



*This image shows a parking lot well-screened with landscaping (City of Pickering)*



By-law	Regulations
Draft Cambridge By-law	<p><u>Planting Strips</u></p> <p>The following regulations apply to planting strips in the zones that are specifically identified in this Section:</p> <p>A minimum 3.0 metre wide planting strip that is a minimum of 1.8 metres in height and abutting the full length of the lot line is required where a lot in any Institutional, Commercial or Employment Zone abuts an interior side or rear lot line of a lot in any Residential Zone or Open Space Zone.</p> <p>Where parking areas are connected to parking areas on adjacent lots, a planting strip in accordance with sub-section (a) is not required for that portion of the lot line where the parking is connected.</p> <p>Where there is a wall or fence having a height of 1.8 metres or more along an interior side or rear lot line, the width of the planting strip established in subsection (a) can be reduced to 1.8 metres in width.</p> <p>A minimum 3.0 metre wide planting strip abutting the full length of the lot line is required along the front and exterior side lot lines in any Institutional, Commercial and Employment Zone.</p> <p>Notwithstanding subsection (d), the requirement for a planting strip is waived wherever a building is permitted to be closer than 3.0 metres from the lot line.</p> <p>Planting strips required by this section of the By-law can be counted as part of any landscaped open space requirement of this By-law, but cannot be counted as part of the required landscaping for parking areas.</p>

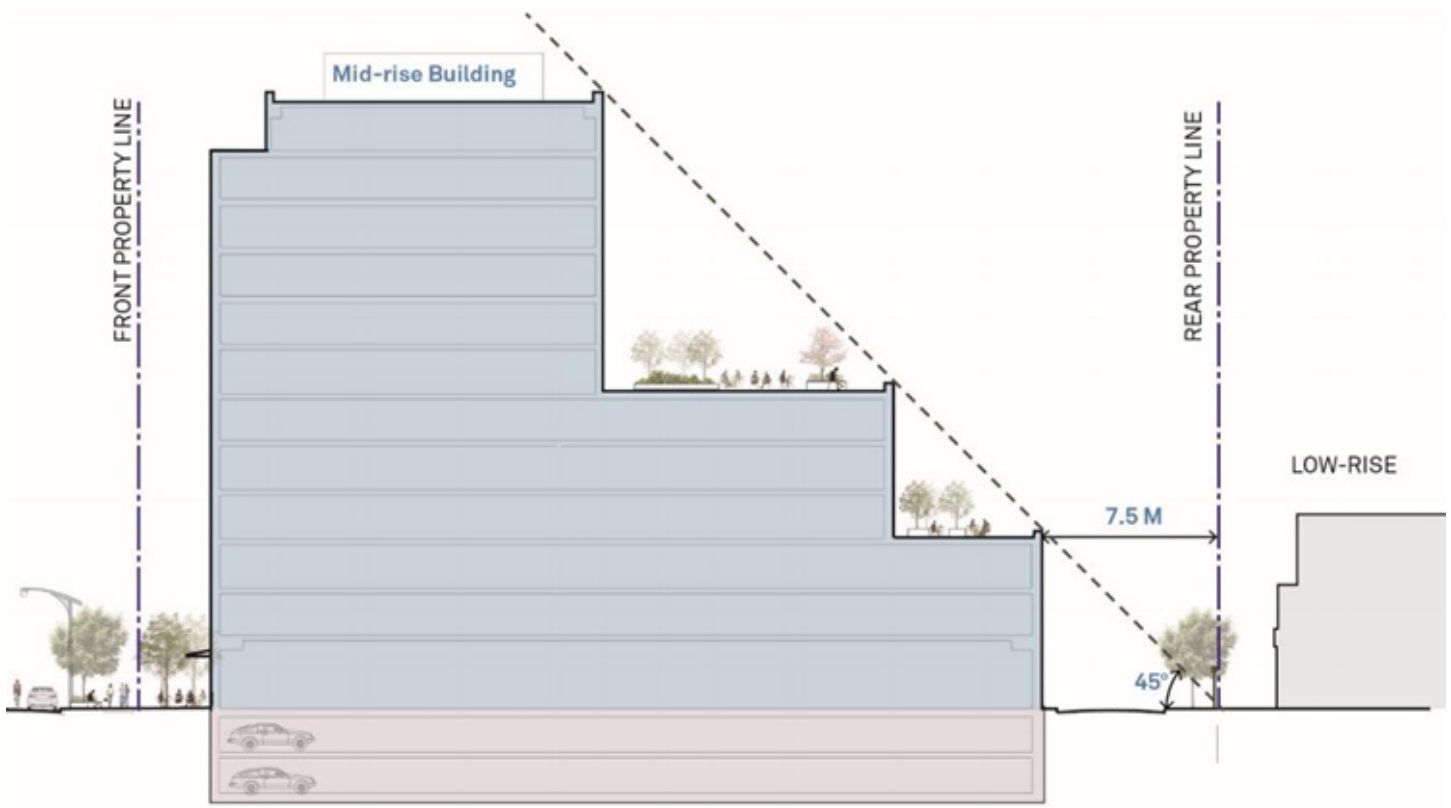
*Excerpt from Cambridge By-law*

By-law	Regulations
Newmarket Urban Centres By-law	<p><u>Landscaped Buffers for Parking Lots</u></p> <p>A landscaped buffer area shall be required for parking lots designed to accommodate 5 or more parking spaces where permitted, and shall conform to the following requirements:</p> <p>Such buffer area shall be at least 3.0 metres wide and located around the periphery of the parking lot within the lot on which the parking area is located. Such buffer area shall not be used for any other purpose other than vegetative landscaping but shall not prevent the provision of entrances and exits across the buffer area.</p> <p>Any required planting in a buffer strip shall have a minimum height of 1500mm for coniferous vegetation, a minimum diameter measured at a height of 1.4 metres from grade of 60mm for deciduous vegetation, and a minimum height or spread of 450mm for shrubs, but shall not be permitted to exceed a height of 1.0 metre within a daylighting triangle.</p> <p>Where a buffer area is required between a parking lot in an Mixed Use Zone and an Open Space Zone, the buffer area shall be a minimum of 3.0 metres wide and shall be located in the Mixed Use Zone. The buffer area shall be used for no other purpose than landscaping or entrances and exits and shall be bordered by an opaque fence 1.8 metres in height.</p> <p>Notwithstanding subsection i) above, where a buffer area is required between a parking lot in a Mixed Use Zone and an Open Space Zone, the buffer area shall be a minimum of 3.0 metres wide and shall be located in the Mixed Use Zone. The buffer area shall be used for no other purpose than landscaping or entrances and exits and shall be bordered by an opaque fence 1.8 metres in height.</p> <p><u>Landscaped Buffers Adjacent to Residential Areas</u></p> <p>Notwithstanding any other provision of this By-law, where the rear lot line or interior side lot line of a Mixed Use or Institutional Zone abuts a residential zone outside of the area of this By-law, a landscaped buffer shall be required in accordance with the following provisions:</p> <p>the landscaped buffer shall be located on the lot containing the mixed use, or institutional use, immediately adjacent to the lot line that borders such lot with the residential use under By-law 2010-40.</p> <p>where a landscaped buffer is required, such landscape material within the buffer shall be not less than 1.5 metres high and shall not be less than 3.0 metres in width. Notwithstanding this requirement, landscape material shall not exceed a height of 1.0 metre within the minimum front or exterior side yard.</p>

*Excerpt from Newmarket By-law*

## Possible Approach #6 – Consider the Use of an Angular Plane

An angular plane is a tool that projects a theoretical line at a 45-degree angle from a defined point, usually a property line to determine appropriate heights. The tool is generally used for mid- and high-rise developments where they are located adjacent to low-density areas. The use of an angular plane is regulated in the Newmarket Urban Centres By-law and the Draft Vaughan By-law and results in step-backs being applied to the taller buildings.



*This image illustrates an angular plane concept (City of Vaughan)*

Based on the policy direction of The London Plan, which encourages transitions of building heights from Transit Village, Shopping Area, and Rapid Transit and Urban Corridor Place Types to adjacent neighbourhoods, the following regulation could be used:

Zone	Regulations
Transit Village, Rapid Transit Corridor, Shopping Area and Urban Corridor Zones	A 45-degree angular plane shall be required from any Neighbourhoods Zone, measured from 7.0 meters above grade.

*Example of approach to using an angular plane in London*

By-law	Regulations
Newmarket Urban Centres By-law	<p><b>Angular Planes</b></p> <p>Any building on a lot adjacent to the rear or side yard of a residential zone under By-law 2010-40 or Open Space Zone in either By-law 2010-40 or this By-law must comply with a 45 degree angular plane from a height of 1.7 metres above the established grade at the lot line of the adjacent residential zone under By-law 2010-40 or Open Space Zone in either By-law 2010-40 or this By-law; but the angular plane shall not extend beyond the applicable lot, or, if the lot is bisected by a public or private street, beyond the boundary of the public or private street, as set out in Diagram 6–4</p> <p>Any building on a lot across the street from a residential zone under By-law 2010-40 or Open Space Zone in either By-law 2010-40 or this By-law, must comply with a 22 degree angular plane measured from a height of Y as determined by the Right of Way width X of the street (see Table 6.2.4.6) at the front lot line but the angular plane shall not extend beyond the applicable lot as set out in Diagram 6–5, or, if the lot is bisected by a public or private street, beyond the public or private street.</p>
Draft Vaughan By-law	<p><b>Angular Plane:</b> Means an imaginary plane extending from a lot line and above the entirety of the lot at an inclined angle that is specified by this By-law. Where an angular plane requirement applies, no portion of a building or structure shall be permitted to encroach above the angular plane unless an encroachment is expressly permitted by this By-law.</p>

*Excerpt from Newmarket and draft Vaughan By-laws*



## Possible Approach #7 – Consider Tower Regulations for High-rise forms

The City Design and Place Type policies for high-rise development speak to reducing the impact of towers and creating a comfortable pedestrian environment, which can be achieved through regulating the tower floorplate size, floorplate configuration and podium size.

The tower floorplate size relates to the overall massing of the tower or the size of its footprint, and impacts the amount of sky views, wind, sunlight, and shadows. The tower floorplate configuration relates to the shape of the tower, for example if it is a square shape or rectangular. Different tower configurations could accommodate the same number of units (intensity) but create a different feel based on the dimensions of the length and width and the form and scale created. A rectangular shape would have a slim side and a broader side that could make the building feel larger from certain angles and create greater impacts on views and shadows.

The Waterloo By-law is an example of a by-law that regulates the size and configuration of the tower, as well as the podium features of the lower levels.

By-law	Regulations
Waterloo By-law	<p>Tower Footprint 1,000 square metres maximum</p> <p>Horizontal Tower Dimension 40 metres maximum</p> <p>Tower setback above podium, including balconies, on the front building façade and flankage building façade – 3 metres minimum</p> <p>Podium height – 10.5m minimum – 14.3 metres and 4 storeys maximum</p>

*Excerpt from Waterloo By-law*

A podium is the lower part of a building located at the base that is comprised of the street level or ground floor and one or more storeys above. Podiums are useful to create a pedestrian-scale environment at the street edge, frame the public realm, and articulate entrances. The taller tower component of the building is stepped back from the edge of the podium which minimizes the massing of the tower, assists with wind impacts, and reduces shadow impacts. Regulating the height of podiums as well as the tower step-backs can produce well-designed high-rise buildings that transition height down to the street creating a comfortable and pedestrian-scale environment.



*This image shows a podium at a human-scale with the building height and bulk set back from the street edge.*

## Possible Approach #8 – Consider Tower Separation Regulations

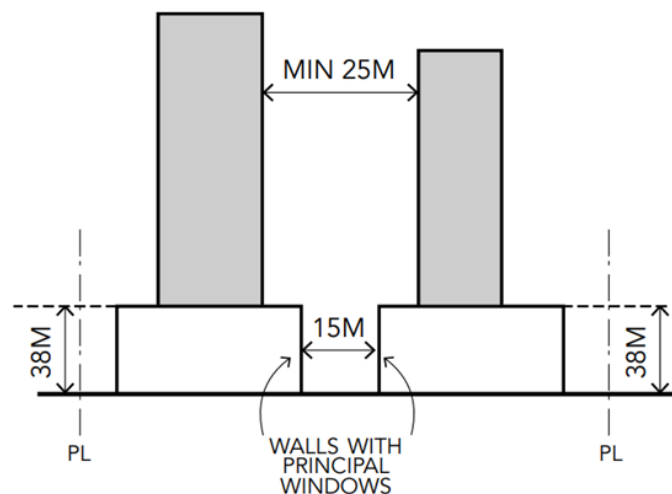
Tower separation is a regulation sometimes used in areas planned for significant intensity. Tower separation can help to reduce wind and shadow impacts, minimize the obstruction of views, and reduce the perception of mass on the neighbourhood. Tower separation regulations can also ensure that development potential on adjacent sites is protected.

Recent Secondary Plans in high-intensity areas such as the Old East Village Dundas Street Corridor contain policies that require high-rise buildings to have a minimum separation distance of 30m between towers to ensure impacts of shadowing, loss of sunlight, and wind conditions at the street are minimized, that natural light and a reasonable level of privacy is provided to occupants, and that adequate distance is provided to ensure there is no negative impact on the future development of neighbouring sites. Regulating tower separation as a zoning provisions can implement these policies and shape the built form of towers.

This example from the Newmarket Urban Centres By-law shows how tower separation regulations can be combined with podium regulations to shape high-rise development.

By-law	Regulations
Newmarket Urban Centres By-law	<p><u>Separation Distance</u></p> <p>Any part of a building wall on the same lot containing principal windows that has a height of less than 38.0 metres shall be set back a minimum of 15.0 metres from any other part of a building wall containing principal windows on the same lot.</p> <p>Any part of a building wall higher than 38.0 metres shall be separated a minimum of 25.0 metres from the part of any other building wall on the same lot that is higher than 38.0 metres.</p>

*Excerpt from Newmarket Urban Centres By-law*



*Regulations for tower separation and podiums help shape high-rise development*







## BACKGROUND PAPERS

### Part 5: Review Of Ontario Municipalities

#### Introduction - Zoning Review of Major Ontario Municipalities

A review of zoning by-laws for Ontario's most populous municipalities was undertaken as part of the research for these background papers. Each City's zoning by-law represents a unique way to implement their governing Official Plan policies, and together these by-laws illustrate the diversity of ways to approach use, intensity, and form regulations. The approach, strategy and innovation of other City's by-laws provide valuable insight for methods that could be successfully employed in London.

The focus for this Background Paper was on Ontario cities as they are subject to the same provincial planning framework that includes the *Planning Act* and Provincial Policy Statement. Some select by-laws and approaches from other provinces and countries were also considered during this review. The table below shows the top 25 Ontario cities by population, the date of their current zoning by-law, and whether it has been included in this review.

Seven municipal case studies were selected for more detailed review as they have innovative or recent zoning practices, a similar city structure, or comparable Official Plan policies to London. Where a new zoning by-law or comprehensive update is being prepared, only the new or updated by-law was considered in this review. The case studies reflect various zoning approaches in Ontario and have potential learnings and best practices that London can incorporate going forward.



## Ontario's Most Populous Cities and their Zoning By-laws

Municipality	Year Zoning By-law Approved	Included?
Ajax	2003	No
Barrie	2009	No
Brampton	Review ongoing, no draft	No
	Main Street North Development Permit System By-law – 2015	No
Burlington	2014	No
<b>Cambridge</b>	<b>Review ongoing, draft available</b>	<b>Yes</b>
Greater Sudbury	2010	No
Guelph	Review ongoing, no draft	No
Hamilton	2009	No
Kingston	Review ongoing, draft available	No
Kitchener	Review ongoing, no draft	No
Markham	Review ongoing, no draft	No
Milton	2014	No
Mississauga	2007	No
<b>Newmarket</b>	<b>2010</b>	<b>No</b>
	<b>Urban Centres Zoning By-law – 2019</b>	<b>Yes</b>
<b>Oakville</b>	<b>2014</b>	<b>Yes</b>
Oshawa	1994	No
Ottawa	2008	No
Richmond Hill	Review ongoing, no draft	No
<b>St. Catharines</b>	<b>2013</b>	<b>Yes</b>
Thunder Bay	2010	No
Toronto	2013	No
Vaughan	Review ongoing, draft available	Yes
<b>Waterloo</b>	<b>2018</b>	<b>Yes</b>
Whitby	Review ongoing, no draft	No
Windsor	1986	No

## Municipal Case Studies Selected for this Review:

- City of Cambridge (Ongoing – Second Draft)
- Town of Newmarket Urban Centres Zoning By-law (2018)
- North Oakville (2009)
- Town of Oakville (2014)
- City of St. Catharines (2013)
- City of Vaughan (Ongoing – Third Draft)
- City of Waterloo (2018)

## Summary of Key Findings

- The by-laws reviewed are traditional zoning by-laws passed under Section 34 of the *Planning Act*, and the Brampton Main Street North Development Permit System By-law is passed under Section 70.2/O. Reg. 173/16
- The by-laws contain use definitions that are generally simple and brief
- Regulations are generally not found in the definitions section
- Despite simplified use definitions, the overall number of defined uses in most of the by-laws is still considerable. Nonetheless, the uses section takes up a small portion of the overall by-law and many of the by-laws contain tables or charts showing uses grouped by family as well as permitted uses for each zone
- The overall number of zones varies in each by-law. Many of the case studies have zones for specific areas (e.g. mixed use or transit-oriented development centres), and others have variations or performance classes
- Many of the by-laws contain performance standards which permit a standard range of uses, as well as additional permitted uses that are allowed if they meet certain criteria

- Rather than listing site-specific zones (special provisions) within the zones section, most of the by-laws list specific zones at the end of the by-law in a separate section or as an appendix. This improves the readability of the by-law and can help to cut down on the length of the document
- Despite simplified use definitions, most of the by-laws have a considerable number of site-specific zones (special provisions). Approaches that tend to reduce the number of special provisions include the inclusion of more zones or zone variations, and the use of performance standards.

## Organizing Structure

Zoning By-law Z.-1 and most of the case study by-laws are all similar in terms of organizing structure. The greatest difference can be found in the way special provisions (site-specific / exception zones) are organized. In Z.-1, they are found within each zone, whereas in most of the case study by-laws, they are listed together at the end or included as a separate appendix. Including these exceptions zones at the end of the by-law makes the document more user-friendly, as they are not generally relevant for most readers. The Table below illustrates the structure of each by-law included in this review. For comparison the current London Zoning By-law structure includes 1 – Administration/ Enforcement and Interpretation, 2 – Definitions, 3 – Zones and Symbols, 4 – General Provisions, 5-51 – Zones (Including Special Provisions).

## Organizing Structure of Municipal Case Studies

Cambridge (Draft)	Newmarket Urban Centres (2019)	North Oakville (2009)	Oakville (2014)
1 – Interpretation and Administration 2 – Classification of Zones 3 – Definitions 4 – General Provisions 5 – Parking and Loading Standards 6-13 – Zones 14 – Exceptions (Special Provision Zones) 15 – Holding Provisions 16 – Temporary Uses 17 - Enactment	1 – Interpretation and Administration 2 – Establishment of Zones 3 – Definitions 4 – General Provisions 5 – Parking, Loading & Queuing Requirements 6 – Zone Provisions 7 – Overlay Zones 8 – Site Specific Provisions, Holding Provisions, Temporary Use Zones, and Interim Control Zones 9 - Enactment	1 – Administration 2 – Establishment of Zones 3 – Definitions 4 – General Regulation 5 – Parking and Loading Regulations 6 – Permitted Use Regulations 7 – Zone Regulations 8 – Special Provisions 9 – Holding Provisions 10 – Interim Control By-laws 11 – Temporary Use Permissions 12 – Maps 13 – Enactment	1 – Administration 2 – Establishment of Zones 3 – Definitions 4 – General Provisions 5 – Parking, Loading, and Stacking Lane Provisions 6-14 – Zones 15 – Special Provisions 16 – Holding Provisions 17 – Interim Control By-laws 18 Temporary Use Permissions 19 – Maps 20 – Enactment

St. Catharines (2013)	Newmarket Urban Centres (2019)	North Oakville (2009)
1 – Administration and Interpretation 2 – General Provisions 3 – General Parking Provisions 4 – Establishment of Zones 5 – 11 – Zones 12 – Definitions 13 – Special Provisions 14 – Holding Provisions	1 – Administration 2 – Establishment of Zones and Schedules 3 – Definitions 4 – General Provisions 5 – Specific Use Provisions 6 – Parking, Tracking and Loading Requirements 7-13 Zones 14 – Exception Zones *to be provided in a separate file 15 – Enactment	1 – General 2 – Definitions 3 – General Regulations 4 – Interpretations 5 – Enforcement 6 – Parking, Driveways, Loading 7-13 Zones * Site Specific Zones included as an appendix

# Ontario Municipal Case Studies

## Case Study #1 – Cambridge Zoning By-law (Draft)

**Use, Intensity, and Form** – The Draft Cambridge by-law balances use and intensity, with less emphasis on form. The by-law contains simple use definitions that are regulated in each zone rather than in the definitions section. There are, however, many uses, and they are not grouped into “use families”. The use tables in each zone contain footnotes with intensity regulations for certain uses. The form regulations contained in each zone are standard, and additional control for form is achieved through special provisions (site-specific zones).

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>• Permitted uses and regulations are contained in each zone and listed succinctly in tables</li> <li>• Contains a high number of exceptions with over 400 special provisions</li> <li>• Although there are many use definitions, the definitions are short and generally do not contain regulations</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Contains over 130 uses and 40 zones</li> <li>• While the by-law does not contain use families, similar uses are grouped in the definitions section (e.g., community use: land, building or structure owned and operated by the City or a community service group that provides social, recreational or other similar facilities for use by the general public. Examples of community uses include cultural facilities, libraries, and sports/fitness facilities (such as arenas, swimming pools, skate parks, gymnasiums, tennis courts, and playing fields).</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>• Yes (see table below)</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard regulations contained in most zoning by-laws, the Cambridge by-law includes some innovative and unique regulations:</p> <ul style="list-style-type: none"> <li>• Maximum floor space index or gross leasable floor area in certain areas</li> <li>• Minimum amenity area for certain uses</li> <li>• Performance Standards in certain zones (e.g. use not permitted on a lot that fronts on Hespeler Road)</li> <li>• Minimum distance between a parking aisle and a window to a habitable room</li> <li>• Additional permitted or prohibited uses</li> <li>• Minimum planting strip required</li> <li>• Minimum dwelling unit size</li> </ul>



Table 8.3 – Permitted Uses in Commercial Zones except the RC1 Zone

	Use	RC2	CC1	CC2	NC	AC	CV1	CV2	CV3	VC
1.	Animal clinic	X	X (2)	X (2)	X (3)		X (2)			
2.	Art gallery	X	X (2)	X (2)	X (3)					
3.	Banquet hall	X	X (2)	X (2)	X (3)					
4.	Business office	X	X (2)	X (2)	X (3)		X (2)	X (4)	X (1)	X
5.	Business service use	X	X (2)	X (2)	X (3)		X (2)	X (4)	X (1)	X
6.	Caterer's establishment	X	X (2)	X (2)	X (3)					
7.	Child care centre	X	X (2)	X (2)	X (3)		X (1)(2)	X (1)(4)	X (1)	X
8.	Commercial fitness centre	X	X (2)	X (2)	X (3)		X (2)	X (4)(5)	X (1)	X
9.	Commercial parking lot	X	X	X	X (3)					
10.	Commercial recreation use, private	X	X (2)	X (2)						
11.	Commercial trade school	X	X (2)	X (2)	X (3)					
12.	Drive-through service use	X	X (2)	X (2)	X (3)	X				
13.	Financial institution	X	X (2)	X (2)	X (3)			X (4)		
14.	Food truck	X	X (2)	X (2)	X (3)	X	X	X	X	

*Permitted Uses in Commercial Zones in the Cambridge Draft By-law. The numbers in parenthesis direct the reader to criteria – creating performance standards.*

## Case Study #2 – Newmarket Urban Centres Zoning By-law (2019)

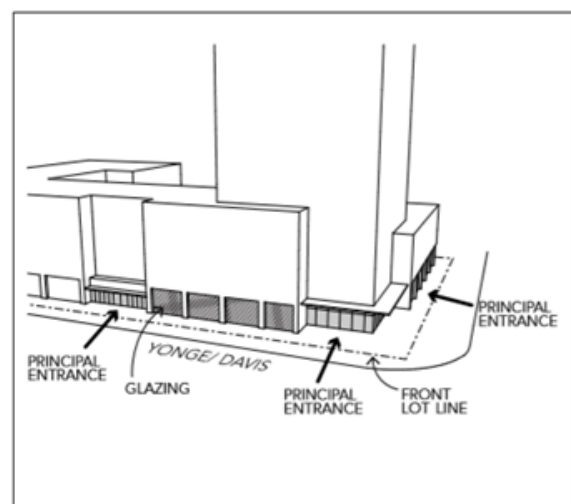
**Use, Intensity, and Form** – The Newmarket Urban Centres By-law balances use, intensity, and form, with increased emphasis on intensity and form. The by-law only applies to one specific part of the municipality and is designed only with three types of zones: mixed-use, institutional, and open space. The by-law contains many definitions but is permissive in terms of applicability. Like some of the other case studies, this by-law includes both permitted and uses that are permitted subject to meeting conditions or performance standards. There are a considerable number of illustrations demonstrating form and intensity regulations. It regulates, for example, mechanical equipment on tall buildings, angular planes, tower separation, and podium requirements. It also requires different provisions depending on the street classification adjacent to the development site.

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>Permitted uses and regulations are contained in each zone and listed succinctly in tables. Uses are either listed as 'P' (Permitted) or 'PC' (Permitted with Conditions)</li> <li>Contains very few exceptions (special provisions) with only 9 examples. Exceptions are also listed in the Zone section, similar to Z.-1. This is the only case study that does this.</li> <li>The by-law contains numerous illustrations, both in the definitions and zones sections</li> <li>The by-law also contains overlays for various matters, including parking reduction and additional permitted uses</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>Contains over 110 uses and 40 zones</li> <li>Contains use families, which are different depending on the zone. For example, in some zones, uses are broken up into "residential" and "non-residential" families. In others, they are broken up more specifically (e.g., retail and service uses, automobile related uses, general institutions...)</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>Contains uses that are 'Permitted with Conditions. There is a table with angular plane requirements dependent upon right of way width and height, and context-specific separation distance requirements</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard regulations contained in most zoning by-laws, the Newmarket by-law includes some innovative or unique regulations:</p> <ul style="list-style-type: none"> <li>Separation distance requirements for towers and podiums</li> <li>Podium requirements</li> <li>Windows and glazing requirements</li> <li>Angular plane requirements</li> <li>Overlay zones</li> </ul>

## 6.2.4. Building Requirements

### 6.2.4.1. General

- i) *Principal Entrance*
  - a) At least one *principal entrance* shall be provided for any *building* along a *public street* or adjacent to an *Open Space Zone*.
  - b) Any *principal entrance* to a *mixed use* or *apartment building* shall be no more than 1.5 metres above *grade*.
- ii) *Windows and Glazing*  
Glazing shall be provided in *buildings* on any wall adjacent to a *public street* or *Open Space Zone*.



**Illustration 6-2.** *Principal Entrance and Glazing Example*

*Building Requirements and Illustration example in the Newmarket By-law. The By-law makes regular use of descriptive illustrations.*

## Case Study #3 – Oakville Zoning By-law (2014)

**Use, Intensity, and Form** – The Oakville Zoning By-law balances use, intensity, and form, albeit with more use regulations in comparison to the North Oakville By-law. Each zone contains permitted uses, and some uses are contingent upon meeting requirements in footnotes. These requirements include things like separation distances from sensitive uses. The by-law also contains considerable context-specific form requirements, such as flankage requirements if a parcel is located on a certain street class. Use is still an important consideration of the by-law and multiple residential zone variations are differentiated based on permitted uses.

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>• Zones are grouped by category and laid out in a table</li> <li>• Uses are clearly tabulated with each zone</li> <li>• Many regulations are contained within tables</li> <li>• Emphasizes regulations in the zones rather than in the permitted uses</li> <li>• Performance standards contained within uses and zoning tables (e.g., some uses are not permitted on a lot abutting a residential zone)</li> <li>• There are 398 special provisions; some are carried forward from the previous by-law</li> <li>• Special provisions are laid out with a table and map; the regulations follow the same regulations contained for each zone. Additional permitted uses are also often included</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Contains over 140 uses and 44 zones</li> <li>• The By-law contains use families (Residential Uses, Retail Uses, Service Commercial Uses, Office Uses, Community Uses, Open Space Uses, Employment Uses, Hospitality Uses)</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>• Yes, conditions included in the permitted uses tables for each zone. There is also a table showing required landscaping widths, which vary by use and zone.</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard zoning regulations, the Oakville by-law contains other unique regulations such as:</p> <ul style="list-style-type: none"> <li>• Minimum flankage yard</li> <li>• Minimum interior side yard abutting a lot in any Residential Zone, Institutional (I) Zone, or Community Use (CU) Zone</li> <li>• Minimum number of storeys</li> <li>• Maximum first storey height</li> <li>• Permissions based on street frontage</li> <li>• Location of Functional Servicing</li> <li>• Built Heritage Resources Exception</li> <li>• Driveway, Parking Structure, and Surface Parking Area Regulations</li> <li>• Main Wall Proportions</li> </ul>

<b>Table 9.2: Permitted Uses in the Commercial Zones</b> (2017-025)				
	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>
<i>Rental establishment</i>		✓	✓	
<i>Restaurant</i>	✓	✓	✓	✓ (5)
<i>Retail propane and transfer facility</i>			✓ (3)	✓ (3)
<i>Retail store</i>	✓	✓	✓	✓ (5)
<i>School, private</i> (2016-023)	✓ (1)	✓	✓	
<i>Service commercial establishment</i>	✓	✓	✓	
<i>Sports facility</i>	✓	✓	✓	
<i>Stormwater management facility</i>	✓	✓	✓	✓
<i>Veterinary clinic</i>	✓	✓	✓	

### **Additional Regulations for Permitted Uses Table 9.2**

1. Permitted only on a *lot* abutting a major *arterial road*.
2. A maximum one *drive-through facility* shall be permitted on a *lot*.
3. Shall not be permitted on a *lot* abutting any Residential Zone.
4. The maximum *lot area* shall be 2.5 hectares. The maximum percentage of *net floor area* permitted to be occupied by a *place of worship* is 50% of the total *net floor area* on the *lot*.
5. Permitted only *accessory* to a *motor vehicle service station*.
6. Permitted only *accessory* to a *retail store*.
7. Prohibited on the *first storey* of a *building*. (PL140317)

*Table from Oakville Zoning By-law and Footnotes – Uses with parentheses are only permitted if certain specified criteria or requirements are met.*

## **Case Study #4 – North Oakville Zoning By-law (2009)**

**Use, Intensity, and Form** – The North Oakville Zoning By-law balances use, intensity, and form. One of the interesting elements of the by-law is that the zones are based on intensity and locational differences rather than use differences. The by-law contains zone variations that are titled ‘performance zones’ with different form and intensity requirements. These address similar matters as those in the Vaughan by-law. The permitted uses are listed upfront in a table, and uses are seldom discussed later in the by-law, with each zone instead describing permitted building types. Many of the form regulations are contained in the general provisions section.



<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>• Contains numerous special provision zones (73)</li> <li>• Permitted uses are clearly displayed in a table with a column for each zone</li> <li>• Zone variations (labelled as performance zones) are used to allow for minor changes in intensity</li> <li>• (e.g., Neighbourhood Centre Performance (NC-2) Zone 2 - The permitted uses, buildings and regulations of the NC Zone shall apply in the Neighbourhood Centre Performance (NC-2) Zone 2, however, notwithstanding the provisions of Section 5.1.3, Location of Parking Spaces, the required parking spaces for any use may be located on the lot on which the use is located, and/or on one half of the street abutting the lot where the on-street parking is permitted.)</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Contains over 80 uses and 18 main zones (42 including sub zones)</li> <li>• Does not contain use families</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>• No. The by-law labels sub-zones as performance zones, which allow for additional permitted uses or more flexible regulations. These “performance zones” do not contain performance standards as the term has been applied in these background papers.</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard regulations, the North Oakville by-law contains innovative regulations such as:</p> <ul style="list-style-type: none"> <li>• Minimum Floor Space Index / Density</li> <li>• Minimum setback by yard type (common yard vs porch)</li> <li>• Screening requirements</li> </ul> <p>The North Oakville by-law uses very specific regulations in its special provisions (e.g., where a mixed-use building is located, the following additional regulations apply:</p> <p>[...]</p> <ol style="list-style-type: none"> <li>3. Below grade setbacks: Minimum 0 metres</li> <li>4. Ground floor height, measured from top-of-slab to top-of-slab, other than for a multiple-attached unit: Minimum 4.5 metres</li> <li>5. Projection of stairs, porches, balconies, at-grade terraces, cornices, pilasters and/or bay windows, with or without foundation, beyond the main wall of a building: To a maximum of 0.3 metres from any public street.</li> <li>6. Height of parapets: Maximum 3 metres</li> <li>7. Height of mechanical and/or elevator penthouse, rooftop equipment, and stair tower: Maximum 6 metres</li> <li>8. Height of rooftop architectural features, including pitched roofs: Maximum 6 metres)</li> </ol>

**Table 6.1 - Permitted Use Table**

USE	ZONE												
	TUC	DUC	NUC	PUC	NC	GU	S	HDR	LE	GE	SA	CE	AS
<i>Funeral Home</i>	•	•	•										
Arena, Theatre, Stadium, Trade and Convention Centre	•	•	•						•	•	•		
<i>Veterinary Clinic</i>	•	•	•										
<i>Gas Bar</i>													•
<i>Drive-Through Facility</i>													
<i>Ancillary Retail / Service Commercial</i>													
<b>Community and Institutional Uses</b>													
<i>Art Gallery (2012-001)</i>	•	•	•		•			•					
<i>Library (2012-001)</i>	•	•	•		•			•					
<i>Museum (2012-001)</i>	•	•	•		•			•					
<i>Place of Worship</i>	•	•	•		•			•	•		•		

Table showing permitted uses for each zone in the North Oakville By-law. Where there are requirements as to whether a use is permitted, those conditions are created through a sub-zone instead of as performance criteria.

### Case Study #5 – St. Catharines Zoning By-law (2013)

**Use, Intensity, and Form** – The St. Catharines By-law places greater emphasis on intensity and less on use and form. The by-law contains standard types of form regulations but includes a relatively short list of broad and brief defined uses. Individuals zones provide intensity regulations for each permitted use in tables. Some uses are further regulated in footnotes. The by-law also uses classes of zones (e.g., M1-M3) to regulate intensity. One example of this by-law’s innovation is in the way that residential zoning is treated. R1 refers to suburban neighbourhoods and R2 refers to established neighbourhoods. They each allow a range of permitted uses but contain regulations specific to their context.

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>Permitted uses are clearly laid out with colour coded zones in tables</li> <li>Relies heavily on special provisions – there are 155 special provision (site-specific) zones contained at the end of the by-law</li> <li>Utilizes holding provisions</li> <li>Zones are grouped by category and regulations are listed succinctly in tables</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>There are 72 uses, 24 zones and no use families</li> <li>In each zone there is a table of provisions for each use</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<ul style="list-style-type: none"> <li>The by-law uses standard regulations and provides additional specificity through special provisions</li> </ul>

## SECTION 6 COMMERCIAL

No person shall use any lot or construct, alter or use any building or structure in any Commercial Zone except in accordance with Sections 6.1 to 6.5.1 of this By-law.

In addition to the above, any lot may be subject to additional regulation or restriction of use by the City, upper tier government or agencies. Refer to Section 1.1.3 and Section 2.19 of this By-law.

### 6.1 Zone Names and Symbols

Zone Symbol	Zone Name
C1	Local Convenience Commercial
C2	Community Commercial
C3	Arterial Commercial
C4	Major Commercial
C5	Downtown Commercial Core
C6	Downtown Traditional Main Street

*St. Catharines By-law – Zones and Uses: The by-law uses colours and tables to clearly display permitted uses.*

### 6.2 Permitted Uses

USES	Zones					
Animal Care Establishment	C1	C2	C3	C4	C5	C6
Apartment Building		C2 <sup>(b)</sup>		C4 <sup>(b)</sup>	C5	C6 <sup>(a)</sup>
Car Wash		C2	C3	C4		
Commercial Parking Structure		C2 <sup>(h)</sup>	C3	C4 <sup>(h)</sup>	C5 <sup>(a)</sup>	C6 <sup>(a)</sup>
Cultural Facility	C1	C2 <sup>(h)</sup>	C3	C4 <sup>(h)</sup>	C5	C6
Day Care	C1	C2	C3	C4	C5	C6
Apartment Dwelling Unit(s)	C1 <sup>(d)</sup>	C2 <sup>(d)</sup>		C4 <sup>(d)</sup>	C5	C6 <sup>(d)</sup>
Emergency Service Facility		C2 <sup>(h)</sup>	C3	C4 <sup>(h)</sup>	C5	C6
Hospital					C5	

*St. Catharines By-law – Permitted uses are linked to zones through different colours.*

## Case Study #6 – Vaughan Zoning By-law (Draft)

**Use, Intensity, and Form** – the draft Vaughan By-law balances regulations for use, intensity, and form. Definitions are short and are regulated through each zone, where sub-zones allow various levels of intensity. Uses are categorized by use family, and the by-law uses footnotes to establish whether a use is permitted based on whether it meets form or intensity criteria. The by-law emphasizes form by regulating the type and location of parking within each zone, adding landscape buffer requirements, and adding podium and tower separation requirements. The by-law also uses innovative regulations based on context, such as maximum height based on lot coverage, or garage setback requirements depending on the type of street it fronts onto.

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>• Each zone contains a plain language explanation of its purpose</li> <li>• Zones are grouped by category and permitted uses and regulations are laid out in clear tables</li> <li>• Emphasis on performance standards</li> <li>• Special provisions are to be contained within an appendix</li> <li>• Contains a larger than average number of illustrations</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Contains over 100 uses and 40 zones</li> <li>• The By-law contains use families (Residential Uses, Commercial Uses, Community Uses, Other Uses, Specified Accessory Uses, Employment Uses)</li> <li>• Uses are generally short and do not contain regulations</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>• Yes; (e.g., This use shall only be permitted as part of a mixed-use development and the total amount of gross floor area of all uses subject to this provision shall be limited to a maximum of 30% of the gross floor area of all uses on the lot.)</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard zoning regulations, the Vaughan by-law uses considerable novel regulations, such as:</p> <ul style="list-style-type: none"> <li>• Required build-to-zone (required setback range for buildings from a street)</li> <li>• Minimum required build-to line for corner lots (%)</li> <li>• Minimum build-to line for all other lot types (%)</li> <li>• Minimum street wall</li> <li>• Minimum ground floor height</li> <li>• 45-degree angular plane</li> <li>• Podium and tower requirements</li> <li>• Tower separation</li> <li>• Parking permitted in the form of a surface parking lot</li> <li>• Parking permitted in the form of an above-grade parking structure</li> <li>• Minimum landscape strip abutting a street line (m)</li> <li>• Minimum required landscape strip on any interior side lot line or rear lot line abutting a Residential Zone or an Open Space Zone</li> </ul>



## MIXED-USE ZONES

### List of Mixed-Use Zones

For convenience, Table 8-1 identifies the Mixed-Use Zones established in accordance with Part 2 of this By-law:

Table 8-1: List of Mixed-Use Zones

Zone Name	Zone Symbol(s)	Purpose of the Zone
Low-Rise Mixed-Use Zone	LMU	Provide for a mix of residential, commercial and other <u>uses</u> in a low-rise form
Mid-Rise Mixed-Use Zone	MMU	Provide for a mix of residential, commercial and other <u>uses</u> in a mid-rise form
High-Rise Mixed-Use Zone	HMU	Provide for a mix of residential, commercial and other <u>uses</u> in a high-rise form
General Mixed-Use Zone	GMU	Provide a mix of commercial, <u>office</u> and institutional uses
Community Commercial Mixed-Use Zone	CMU	Provide for a mix of <u>office</u> and other <u>uses</u> and a limited amount of commercial <u>uses</u>

*Draft Vaughan By-law zoning explanations. The by-law uses strong graphic elements and plain language explanations to create a user-friendly document.*

### Regulations for the LMU, MMU, HMU, GMU, CMU and EMU Zones

#### Permitted Uses in the LMU, MMU, HMU, GMU, CMU and EMU Zones

Table 8-2: Permitted Uses in the LMU, MMU, HMU, GMU, CMU and EMU Zones

	LMU	MMU	HMU	GMU	CMU	EMU
<b>Commercial Uses</b>						
<u>Art studio</u>		• <sup>(3)</sup>	• <sup>(3)</sup>	•	•	•
<u>Business service</u> <sup>(5)</sup>	• <sup>(2)</sup>	• <sup>(3)</sup>	• <sup>(3)</sup>	• <sup>(5)</sup>	• <sup>(2)</sup>	• <sup>(2)</sup>
<u>Car wash</u>				E		
<u>Clinic</u>	• <sup>(2)</sup>	• <sup>(3)</sup>	• <sup>(3)</sup>	•	• <sup>(2)</sup>	• <sup>(2)</sup>
<u>Commercial school</u>	•	•	•	•	•	•
<u>Commercial storage</u> <sup>(5)</sup>				E		
<u>Financial institution</u> <sup>(5)</sup>	• <sup>(2)</sup>	• <sup>(3)</sup>	• <sup>(3)</sup>	•	• <sup>(2)</sup>	• <sup>(2)</sup>
<u>Fueling station</u> <sup>(1)</sup>		E	E	E	E	E
<u>Funeral services</u> <sup>(5)</sup>		•	•	•	•	•
<u>Health and fitness centre</u> <sup>(5)</sup>	• <sup>(2)</sup>	• <sup>(3)</sup>	• <sup>(3)</sup>	•	• <sup>(2)</sup>	• <sup>(2)</sup>
<u>Hotel</u> <sup>(5)</sup>		•	•	•	•	•
<u>Hotel (small scale)</u> <sup>(5)</sup>	•	•	•	•	•	•
<u>Micro-manufacturing</u> <sup>(1)</sup>		•	•	•	•	•

*Vaughan By-law – Table showing permitted uses in various zones. Uses with numbers in parentheses are permitted based on additional specified criteria or requirements*

## Case Study #7 – Waterloo Zoning By-law (2018)

**Use, Intensity, and Form** – The Waterloo by-law is a used-based by-law with innovative form and intensity regulations. Uses play a larger role in the Waterloo by-law’s approach as compared to other by-laws that are included in this review. For example, the by-law contains a definition for bake shop and qualifies it using a maximum number of seats. The general provisions section also contains regulations for uses. It states that, for example, baking can be permitted in a bake shop if it accounts for 30% or less of the shop’s floor area. Each zone contains a table with permitted, complementary, and accessory uses, and some uses are qualified with exceptions or additional regulations. The by-law also contains mixed-use zones for specified areas with additional form regulations based on context. These regulations include things tower step-backs, tower separation, and landscape buffer requirements where a parcel abuts a residential zone.

<b>Organizing Structure</b>	<ul style="list-style-type: none"> <li>• Contains a higher-than-average number of zones, including zones for specific neighbourhoods</li> <li>• Contains primary uses, complementary uses, and ancillary uses</li> <li>• In some zones, contains different regulations for different frontages (active, convertible, neighbourhood)</li> <li>• Also identifies areas (Area A, Area B, etc. where additional permitted uses can occur)</li> <li>• There are 214 site-specific zones attached in a separate schedule</li> <li>• Contains complementary uses and ancillary uses</li> <li>• Special provisions are contained in a separate schedule; similar to the Oakville by-law, they are laid out with a table and a map and the regulations are generally brief</li> </ul>
<b>Use</b>	<ul style="list-style-type: none"> <li>• Contains over 120 uses and 45 zones</li> <li>• Does not contain use families but does contain classes (e.g. Artist Studio Class 1 and 2)</li> </ul>
<b>Performance Regulations</b>	<ul style="list-style-type: none"> <li>• Yes, contains performance standards with sub-zones allowing different heights and regulations, contains complementary uses, allows for different permissions based on frontages</li> </ul>
<b>Notable Regulations for Intensity or Form</b>	<p>In addition to standard zoning regulations, the Waterloo by-law contains other unique regulations such as:</p> <ul style="list-style-type: none"> <li>• Minimum low rise residential lot line setback</li> <li>• Maximum complementary uses</li> <li>• Maximum ancillary uses</li> <li>• Ancillary uses location</li> <li>• Ancillary retailing maximum</li> <li>• Maximum number of buildings on a lot</li> <li>• Landscaped buffer requirements</li> <li>• Podium height</li> <li>• Tower regulations (separation, dimensions, footprint, step-backs)</li> <li>• Structured parking</li> </ul>

8.5.9 The following regulations in Table 8K shall apply to the erection, alteration, enlargement, or reconstruction of any BUILDING in the Convenience Commercial (C3) zone constructed after the effective date of this BY-LAW:

<b>Table 8K: Regulations – CONVENIENCE COMMERCIAL (C3)</b>						
	<b>C3-10</b>	<b>C3-20</b>	<b>C3-30</b>	<b>C3-40</b>	<b>C3-60</b>	<b>C3-81</b>
Density (minimum)	(none)	(none)	(none)	150 BEDROOMS per hectare	150 BEDROOMS per hectare	150 BEDROOMS per hectare
Density (maximum)	150 BEDROOMS per hectare	450 BEDROOMS per hectare	525 BEDROOMS per hectare	600 BEDROOMS per hectare	675 BEDROOMS per hectare	750 BEDROOMS per hectare
BUILDING HEIGHT (maximum)	10 metres and 3 STOREYS	20 metres and 6 STOREYS	30 metres and 9 STOREYS	40 metres and 12 STOREYS	60 metres and 18 STOREYS	81 metres and 25 STOREYS
PODIUM Height (maximum)	(none)	14 metres	14.3 metres	14.8 metres	21 metres	21 metres
TOWER Separation (minimum)	(none)	(none)	a.) 22 metres from a TOWER on the same LOT b.) 11 metres from an INTERIOR LOT LINE, except where the INTERIOR LOT LINE abuts lands zoned OS1 (see 3.T.5.1 and 3.T.5.2)			
Horizontal TOWER Dimension (maximum)	N/A	N/A	40 metres	40 metres	40 metres	40 metres
TOWER Footprint (maximum)	N/A	N/A	1,000 square metres	1,000 square metres	1,000 square metres	1,000 square metres
TOWER STEPBACK above PODIUM, including balconies, on the FRONT BUILDING FAÇADE and FLANKAGE BUILDING FAÇADE (minimum)	N/A	N/A	3 metres	3 metres	3 metres	3 metres
AMENITY AREA (minimum)	3 square metres for the first BEDROOM and 2 square metres for each additional BEDROOM in the DWELLING UNIT					

*Waterloo By-law Convenience Commercial Regulations – This table shows levels of intensity permitted by each sub-zone. This is an interesting comparison to Z.-1, where convenience commercial uses are regulated in the definitions section.*

## Conclusion

The municipal case studies illustrate different approaches to regulate use, intensity, and form. These recent by-laws and innovative methods employed by the seven municipal case studies provide detailed examples for different way to create and implement a zoning by-law. London will benefit from the ability to learn from innovative techniques and proven best practices from other recent zoning by-laws. The most relevant by-law provisions have been featured as possible approaches in the background papers for use, intensity, and form.