

# City of Ottawa

## Zoning Best Practices Review

Final Report

January 2022

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# EXECUTIVE SUMMARY

The City of Ottawa is currently preparing to undertake a comprehensive review of its Zoning By-law. This report provides a review and analysis of best practices and noteworthy approaches to zoning themes and issues from jurisdictions across North America, where they may meaningfully apply. The intention of this report is to provide the City of Ottawa with a collection of cross-jurisdictional best practices that will inform and support the creation of its new Zoning By-law.

The research undertaken and compiled in this report refers to a wide array of topics related to zoning by-law organization, zone categories, overlays, key issues, zone regulations, residential zones, and review components from a total of fifteen (15) Canadian jurisdictions and seven (7) American jurisdictions. Many of these jurisdictions have recently, or are currently, undertaking their own zoning by-law review or update, which aids in offering a recent, or contemporary, perspective on zoning approaches. As a result, various issues and findings relevant to Ottawa were identified and examined including, but not limited to, affordable housing, infill management, performance standards, density targets, character, housing typologies, lot requirements, and landing page design.

The breadth of the investigation consisted of establishing an overview of each zoning topic or issue, followed by a summary of the identified best practices and noteworthy approaches. Each section concludes with relevant suggestions for consideration and/or implementation, and consideration regarding its applicability to the City of Ottawa.

The research contained within this report, was supported by interviews with six (6) select local governments, in an effort to further investigate preliminary findings, and to confirm the success of the identified best practices. These conversations aided in providing invaluable insight on lessons learned, timelines, and project budgets. Key takeaways from the interviews indicated successful zoning by-law reviews revolved around adequate staffing of a dedicated zoning bylaw review team, availability of senior management, and the establishment of a clear project direction.

This report is intended to provide the City of Ottawa with an informed advantage in assessing and applying the current best zoning practices from across North America into the future review of the City of Ottawa Zoning By-law. The City of Ottawa is presented with a great opportunity to rethink its planning regulatory framework to work cohesively with the City's newly adopted Official Plan. Based on observations from other jurisdictions, the City is establishing a framework for success by outlining issues and potential solutions prior to embarking on such a detailed and comprehensive process.

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# 1 Introduction

The purpose of this Report is to provide a background review of best practices and noteworthy approaches to zoning issues from jurisdictions that have recently undertaken, or are currently undertaking, a zoning by-law review or refresh. The report is intended to establish an understanding of what has worked and what has not worked, across a range of jurisdictions and topic areas, to help inform and provide clear direction for the City of Ottawa's Zoning By-law review. This report does not propose to prescribe specific provisions or clauses that shall be applied within the City of Ottawa, but instead outlines a range of best practice zoning examples and how they are applied within the cited municipalities. The contents of this report do not compel the City of Ottawa to support or endorse the use of any methods described. The report addresses this research through the following five sections:

- **Section 2** establishes context for the City of Ottawa's Zoning By-law Review.
- **Section 3** provides an overview of twelve (12) Canadian municipal zoning by-laws and zoning by-law reviews that were examined.
- **Section 4** provides a summary of best practices and noteworthy approaches to a range of zoning topics, as well as issues of interest to City of Ottawa Staff. Several other innovative or noteworthy approaches were encountered during research, which included best practices from three (3) additional Canadian jurisdictions and seven (7) American jurisdictions. The best practices identified from each municipality has been integrated into the zoning topic's corresponding section.
- **Section 5** provides a detailed account of the municipal interviews, an overview of their by-law review or refresh, lessons learned, and when available, budget estimates for each.
- **Section 6** provides a conclusion to the Report.

It should be noted that throughout this review, investigation identified a trend in some municipalities in which they have chosen to move away from the exclusive use of a zoning by-law to control all aspects of development regulation. Instead, these municipalities identified are supporting existing zoning by-laws with an accompanying guiding document, which in most cases is directly linked to the zoning by-law, and thereby enforced under similar legislation. In other cases, Municipalities are simply using aspirational guidelines to supplement their zoning regulations. While this approach allows a level of innovation that can be quickly adapted, it could be argued that the added documentation creates complexity or ambiguity. This approach and the relationship of zoning by-laws to other implementation tools is further discussed in Section 4.1.9. The City of Ottawa's decision to whether this approach is desirable and applicable remains at their discretion.

## 2 Context

This section of the report briefly summarizes the context and drivers for undertaking a zoning best practice review.

### 2.1 City of Ottawa Zoning By-law 2008-250

The City of Ottawa's in-effect Zoning By-law 2008-250 was passed by Council in 2008. The Zoning By-law implements the City's Official Plan by controlling development in the City and regulating the use of land and the location of buildings and structures. Since being passed by Council, the By-law has been amended extensively.

### 2.2 New Official Plan

In August 2019, the City of Ottawa initiated its Official Plan review. The City's in-effect Official Plan was adopted in May 2003 and approved by the Ministry of Municipal Affairs and Housing in November 2003. Since that time, the Official Plan has been modified extensively.

As part of the Official Plan Review, the City released its "Preliminary Draft Official Plan," including draft secondary plans, for public review on November 20, 2020. The Preliminary Draft Official Plan proposed a new planning paradigm and associated policy structure based on transects, hubs, corridors, neighbourhoods, and overlays. The Preliminary Draft Plan also set out an ambitious vision to accommodate growth and intensification which is further articulated in a Growth Management Strategy approved by Council in May 2020. Community engagement on the Preliminary Draft Plan saw high levels of community input.

The next iteration of the Draft Official Plan was released in August 2021. A joint Planning Committee and Agriculture and Rural Affairs Committee meeting was held on September 13 – 15, 2021 and constituted the Statutory Public Meeting for the new Official Plan. Council adopted the new Official Plan on November 24, 2021, which was submitted to the Ministry of Municipal Affairs and Housing (MMAH) for its 120-day review. MMAH approval of the Plan is expected in March 2022.

### 2.3 Zoning By-law Review

The *Planning Act* requires that the City update its Zoning By-law within three (3) years of a new Official Plan coming into effect. The Zoning Best Practice review, which encompasses this Report, will form an important first step in the City of Ottawa's Zoning By-law review process. The review will establish a baseline understanding of what works and what does not, as well as lessons learned that can be applied to the City of Ottawa. Once approved, the new City of Ottawa Zoning By-law will be a key tool in implementing the City's Official Plan.

### 2.4 Municipal Interviews

In order to fully understand the effectiveness of the approaches reviewed in this report, telephone interviews were undertaken with municipal staff from the following municipalities:

- City of Hamilton
- City of Victoria
- Halifax Regional Municipality
- City of Edmonton
- City of Regina
- City of Saskatoon

The jurisdictions chosen for interview are based on the currency of the in-effect by-law, noteworthy initiatives, and ongoing / recent reviews. Interview summaries are detailed in Section 5.

### 3 Jurisdictional Overview

This Section of the Report provides a high-level overview of the jurisdictions and associated by-laws predominantly reviewed. Each jurisdictional summary includes details on the last by-law review’s work plan and timeframe, as well as major topics or issues encountered. The following jurisdictions are presented:

<b>Ontario</b>	<b>British Columbia</b>	<b>Saskatchewan</b>
City of Toronto	City of Vancouver	City of Regina
City of Hamilton	City of Victoria	City of Saskatoon
<b>Quebec</b>	<b>Alberta</b>	<b>Manitoba</b>
City of Montreal	City of Calgary	City of Winnipeg
Quebec City	City of Edmonton	<b>Nova Scotia</b>
		Halifax Regional Municipality

The following municipalities were reviewed in addition to the above; however, only in a capacity to obtain specific details of provisions which were identified as best practices:

#### Canadian Municipalities

Gatineau, Quebec	Mississauga, Ontario	Town of High River, Alberta
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#### International Municipalities

Portland, Washington, USA	Denver, Colorado, USA	Miami, Florida, USA
Arlington, Virginia, USA	Minneapolis, Minnesota, USA	St. Louis, Missouri, USA
Carmel, Indiana, USA		

#### 3.1 Municipal Overview – Work Plan and Timeline

The following table details specific information on when each municipality started and finished their by-law reviews, roughly how long the review took, and when the by-law came into effect. Note that in some cases, reviews or updates have not been undertaken by certain municipalities in several years and is therefore labeled not applicable.

**Table 1: Jurisdiction Overview**

Jurisdiction and By-law	Review Type*	Start of Review	End of Review	Date In-effect	Length of Review	Additional Information
<b>City of Toronto</b> <i>Zoning By-law 569-2013</i>	Comprehensive	2010	Ongoing	May 2013	Ongoing	The by-law is being updated and approved in phases.
<b>City of Hamilton</b> <i>Comprehensive Zoning By-law No. 05-200</i>	Comprehensive	2003	Ongoing	May 2005	Ongoing	Consolidation Aug 2019; Significant amendments made 2006-2018. By-law is implemented in stages, which is currently still ongoing.
<b>City of Montreal</b> <i>Ville-Marie &amp; Plateau Mont-Royal Boroughs (Planning By-law 01-282 and 01-277)</i>	Update	N/A	N/A	Two By-law frameworks adopted in December 2001	N/A	The two By-laws have not been through any comprehensive refresh processes since their adoption. Only specific reviews on various topics.
<b>Quebec City</b> <i>Harmonization Planning No. 1400 By-law</i>	Comprehensive	2005	2009	August 2009	4 years	The draft of the new harmonization planning by-law began in 2005 after the new Master Plan adoption (which followed the 2002 city amalgamation).
<b>City of Vancouver</b> <i>Zoning and Development By-law</i>	Update	2018	Aiming for Q3 2022	June 1956	4 years (Projected)	Consolidated April 2021, review project is ongoing.
<b>City of Victoria</b> <i>Zoning By-law 2018</i>	Comprehensive	2015	Early 2018	July 2018	3 years	Was originally going to be presented to council in 2017, but some issues arose that caused them to make changes and delay.
<b>City of Calgary</b> <i>Land Use By-law 1P2007 &amp; Guide for Local Area Planning</i>	Comprehensive	2018	2021	Guide for Local Area Planning did not pass	3 years	Guidebook to support the Land Use By-law did not pass.
<b>City of Edmonton</b> <i>By-law 20001</i>	Comprehensive	2017	Aiming for Sept 2022	Aiming for Jan 2023	4 years	Renewal is currently ongoing.
<b>City of Regina</b> <i>Zoning By-law No. 2019-19</i>	Comprehensive	2015	2019	August 2019	4 years	Prior to the 2015 review, the Zoning By-law had not been updated since 1992.
<b>City of Saskatoon</b> <i>Zoning By-law No. 8770</i>	Refresh	2007	2009	July 2009	2 years	Comprehensive review ongoing (2019 – 2022)
<b>City of Winnipeg</b> <i>Downtown Zoning By-law No. 100/2004</i>	Comprehensive	N/A	2004	June 2004	N/A	The Downtown Zoning By-law No. 100/2004 applies to all areas within Winnipeg's Downtown. The Zoning By-law No. 200/2006 applies to all areas outside of the Downtown.
<b>Halifax Regional Municipality</b> <i>Regional Centre Land Use By-law</i>	Comprehensive	2015	Package A: September 2019 Package B: ongoing	Package A: November 2019 Package B: ongoing	Ongoing	The Urban Core review for Package B is expected to be Fall 2021. There are latter phases of the review which will involve updates to the suburban and rural plan areas, although no timeline for these reviews has been released.

\* 'Comprehensive' Review type includes a complete re-write of the Zoning By-law. 'Update' review type includes updates to certain sections of the Zoning By-Law. More information on each municipality's review topics and issues can be found in Section 3.2 - 3.14.

### 3.2 City of Toronto, Ontario

The City of Toronto is the most populous city in Ontario and Canada with a population of approximately 2.7 million people (2016). In 1998, the regional municipality of Metropolitan Toronto underwent amalgamation with its constituent municipalities (old City of Toronto, Etobicoke, Scarborough, North York, East York, and York) to create the City of Toronto as its known today.

Zoning By-law 569-2013 was passed in 2013 and applies to most of the City. The purpose and intent of the By-law is to regulate the use of land, the bulk, height, location, erection and use of buildings and structures, the provision of parking spaces, loading spaces and other associated matters.

#### Work Plan and Timeframe

In 2010, the City of Toronto undertook its first attempt to pass a new zoning by-law for the amalgamated City (By-law 1156-2010). This attempt resulted in an extraordinarily high number of complaints and appeals due to transitional issues. The new Zoning By-law was repealed in 2011, requiring the enactment of the former by-laws from the each of the former municipalities. A second attempt at a new Zoning By-law was conducted in 2013 (By-law 569-20130) which saw far fewer appeals largely owing to more lenient transitional provisions.

#### Major Review Topics / Issues

Subsequent to Toronto City Council repealing the first version of the consolidated Zoning By-law, staff were directed to meet with appellants to understand their concerns. They found many related to the transition from the old to the new zoning regime and included: treatment of pipeline development applications; recognition of variance and by-law permissions; and treatment of existing buildings. To address these concerns, the City developed transitional provisions establishing criteria to determine whether to include a specific property in the new Zoning By-law.

Although these transitional provisions have made passing the new Zoning By-law easier with fewer appeals, the result has left a series of “holes” scattered around the City. In these areas, nine (9) By-laws passed under the former municipalities continue to apply. It is the eventual intent that all properties will be incorporated within the new Zoning By-law.



<b>Number of Zones:</b> 26
<b>Geographic Context:</b> Urban
By-laws in-effect: 10
<b>Review Timeframe:</b> 2010 – 2013 (3 years)
<b>On-line Format:</b> PDF and HTML

### 3.3 City of Hamilton, Ontario

The City of Hamilton is a mid-sized Ontario municipality with a population of approximately 580,000 (2017). The City of Hamilton currently has seven (7) Zoning By-laws in effect, most of which cover the former municipalities of the now amalgamated City.

The City of Hamilton's Comprehensive Zoning By-law was passed in May 2005 and currently only applies to downtown Hamilton. The By-law's purpose is to regulate the use of land and implement objectives of the Urban Hamilton Official Plan and Rural Hamilton Official Plan. The Comprehensive Zoning By-law is intended to eventually replace all previous By-laws (for the former municipalities) and is being implemented in stages.

#### Work Plan and Timeframe

The City of Hamilton initiated its Zoning By-law review in 2003 and passed its new By-law in 2005 which continues to be implemented in stages. Amendments to various sections of the new By-law were also made between 2006 - 2018. Specifically, amendments were made to introduce new Transit Oriented Corridor (TOC) Zones and Commercial Mixed-Use Zones.

#### Major Review Topics / Issues

The major impetus for developing a new zoning by-law was to create a single by-law for the entire City of Hamilton, though this has not yet been achieved. In 2016 and 2018, the City passed by-law amendments to add new Transit Oriented Corridor (TOC) Zones and new Commercial and Mixed-Use Zones (CMU), as well as a Utility Zone for the urban area in 2017.



<b>Number of Zones:</b> 57
<b>Geographic Context:</b> Urban and Rural
By-laws in-effect: 7
<b>Timeframe:</b> 2003 – ongoing (18 years +)
<b>On-line Format:</b> PDF only

### 3.4 City of Montreal, Quebec

The City of Montreal is Quebec's largest city as well as the core centre of the metropolitan community of the same name (Montreal Metropolitan Community – MMC). Its population is estimated at 1,825,208 (July 2020). The City of Montreal, as its known today, is the result of a municipal amalgamation that took effect in 2002. Montreal is now subdivided into 19 boroughs (“arrondissements”), which are responsible for local services and matters whereas the City's central services manage pan-Montreal and cross-sectional policies and issues.

The City's 19 boroughs correspond either to previous districts forming the pre-amalgamated City of Montreal or former distinct municipalities on the island of Montreal. The City of Montreal adopted the City of Montreal Master Plan ('Official Plan') in 2005, applicable to all its newly enlarged territory. This document includes “borough chapters” dealing with local planning issues relevant to each borough while ensuring common grounds with the whole city's planning structure and policies. With regards to planning / zoning regulations, all the boroughs have their own planning by-laws ('Zoning By-law'). These 19 by-laws were mostly adopted before or around the 2002 municipal amalgamation.

For the purposes of this report, the boroughs of Ville-Marie (which covers the downtown area, the central business district and Old-Montreal) and Plateau-Mont-Royal (a central neighbourhood district adjacent to the former) were reviewed.

#### Work Plan and Timeframe

Since the City's amalgamation, all planning by-laws have been continually revised. Some similarities exist across the by-laws due to the continuous adoption of the Master Plan amendments since 2005 and/or any other planning-oriented policies that had to be adopted and implemented at the local / borough level to meet compliance requirements. However, each borough's by-law has unique nuances with respect to structure and content.

Ville-Marie Planning By-law 01-282 and Plateau Mont-Royal Planning By-law 01-277 were adopted in December 2001 and July 2002, respectively. In both cases, no major reviews have been undertaken since adoption; however, numerous issue-specific amendments have been made.

#### Major Review Topics / Issues

With respect to the Borough of Ville-Marie, updates were made to the By-law in 2013 to reorganize categories of uses with the intention of encouraging more mixed-use development in downtown as well document simplification. Through this review, many traditional use categories (e.g., residential, office, etc.) were replaced with 11 mixed uses categories. General provisions apply to all mixed-uses categories (floor surface area for buildings/establishment, the storeys where certain uses are permitted, etc.), and each category is subject to specific provisions. Heavy industrial uses were more strictly regulated and confined to specific areas only. Other important revisions carried out were the removal in 2018 of the minimum required parking number ratios for all uses; the reduction in 2020 of the commercial signs maximum surface area, along with new restrictive measures to protect designated heritage signs that are representative of Montreal's landscape and identity.

With respect to Plateau Mont-Royal, a major update to the By-law was made in 2009, introducing a “landscape areas and units” overlay. The guiding principle underlying the landscape units' approach is to foster the preservation (or reinstatement) of a building's original architectural components. Prior to this



**Number of Zones:** Varies by By-law

**Geographic Context:** Urban

**By-laws in-effect:** 19

**Review Timeframe:** 2001-2021  
(continuously)

**On-line Format:** PDF

zoning revision, a comprehensive heritage and architectural study was undertaken to characterize the built environment typologies and to set preservation standards accordingly. This study has put an emphasis on the various typical residential dwellings, such as duplex, triplex, etc. (most of them parts of the "missing middle") for which the Plateau borough is known for, and also commercial, industrial, and institutional buildings that are representative of the local history.

### 3.5 Quebec City, Quebec

Quebec City is the province of Quebec’s second most populous urban centre with an estimated population of 531,902 (2016). The City is integrated within the Quebec Metropolitan Community which has a population of 800,296 and includes both urban and rural areas. Quebec City has 6 boroughs, each of them having a locally elected council. The City’s central planning service is responsible for implementing the Planning and Development Master Plan (equivalent of an Official Plan), adopted in June 2005.

A “Central Harmonization Planning By-law” (equivalent of a Zoning By-law) came into effect in August 2009 and applies to all boroughs. At the borough level, 6 distinct Planning By-laws directly apply as a local adaptation of this city-wide harmonization planning By-law.



#### Work Plan and Timeframe

Following the 2002 municipal amalgamation, a comprehensive redesign process of all the former municipalities’ planning guidelines and by-laws was undertaken, which led to the adoption in 2009 of the Central Harmonization Planning By-law and its 6 counterparts’ borough by-laws. This approach was intended to create a more cohesive set of zoning standards and criteria, applicable for the entire city, as well as to ensure an effective implementation of the new Planning and Development Master Plan’s (2005) vision and guidelines.

Essentially, the Central Harmonization Planning By-law sets an integrated regulation structure, including general provisions, definitions, classes of uses, significant standards, project assessment processes and authorizations’ management. As for the borough’s planning by-laws, they mainly address the specific normative and quantitative provisions (e.g., density, heights, setbacks, etc.) in the light of local issues.

**Number of Zones:** 4,776 (across all by-laws)

**Geographic Context:** Urban and Rural;

**By-laws in-effect:** 7 (6 borough-specific by-laws and 1 harmonization by-law)

**Review Timeframe:** 2002-09 (7 years)

**On-line Format:** PDF and HTML

#### Major Review Topics / Issues

The Central Harmonization Planning By-law was subject to notable reviews in 2014 and 2016 with respect to some densification initiatives within low density residential sectors. The City realized this was a sensitive issue and therefore some specific standards, objectives, and criteria were integrated into the planning framework, particularly in the scope of the qualitative assessments via the architectural establishment and site plan approaches.

### 3.6 City of Vancouver, British Columbia

The City of Vancouver is the most densely populated city both in British Columbia and Canada with a population of approximately 631,486 people (2016). It forms a part of the Greater Vancouver area, which has a population of 2,463,431 (2016). The City is currently undergoing engagement and development of its first citywide Official Plan, and has previously undertaken planning engagement under a number of community-level plans.



Unlike the Ontario context, there are no planning appeals in the City of Vancouver’s planning framework; however, there is an appeal system for matters dealing with the building code, namely, the Building Board of Appeal.

Under the City of Vancouver Zoning By-law, the City’s Director of Planning and Development Permit Board are given extensive interpretation powers for conditional zoning approvals, while staff decision-making power on conditional approvals for major projects is informed by recommendations from the Urban Design Panel.

The City of Vancouver Zoning By-law was adopted in 1956 and has undergone a number of edits and amendments since first adoption. The Zoning By-law itself is divided into two major sections, Zoning and Development By-law, and individual zoning district schedules, which provide zone-specific standards. Vancouver’s system of conditional use approvals is similar to a non-appealable form of Ontario’s development permit system. In Vancouver, this system relies on an interconnected network of policies, guidelines and bulletins in the Vancouver context which references, but does not solely rely upon the provisions of the Zoning By-law.

<b>Number of Zones:</b> 95
<b>Geographic Context:</b> Urban
<b>By-laws in-effect:</b> 1
<b>Review Timeframe:</b> 2018 – ongoing
<b>On-line Format:</b> PDF (project documents indicated a hyperlinked document is a goal of their current review)

#### Work Plan and Timeframe

The City of Vancouver commenced a full review of its regulation (the Regulation Redesign project) in November 2018 with a series of public engagement activities. The City originally released an engagement timeline, as shown below, focused on an implementation timeline in 2019, however estimated completion has subsequently been postponed to fall 2022.

#### Major Review Topics / Issues

Over time, a lack of consolidation, shifting methods of neighbourhood level planning, and a large staff complement have created a complex and confusing regulatory system, which is generally not considered to be user-friendly. Initial steps taken to address these issues include consolidation of the webpages dealing with planning matters, and improvements to the general provisions and definitions sections of the documents.

### 3.7 City of Victoria, British Columbia

Victoria is the capital city of British Columbia with a population of 85,000 people and is amongst the most densely populated cities in the country.

The vision and regulations for land use in Victoria are guided by the City of Victoria Official Community Plan ('Official Plan'), and two Zoning By-laws; one for the Downtown Area (the 'Zoning By-law 18-072 ('Downtown') and another for all areas outside the Downtown Area (the 'Zoning Regulation By-law') which have been in effect since 1981. Zoning By-law 08-072 regulates only the Downtown Area and is intended to support growth and development within the Downtown Core.

#### Work Plan and Timeframe

In 2016, the City of Victoria began their review of the Zoning By-law for the Downtown Core and in 2018, the new Zoning By-law (18-072) was approved by Council. Four new zones were established for the Downtown Core Area, replacing more than 70 previous zones. The new By-law's intent is to support City objectives related to economic development, improving development processes, and providing more user-friendly regulations with improved clarity.

#### Major Review Topics / Issues

Public Consultation was held in March and April of 2017 where staff held individual meetings and presentations to stakeholders, conducted a public open house, and sent notices to all property owners. Some of the major topics examined in detail were a housing strategy, off-street parking requirements, and garden suites.

The City of Victoria's first attempt at approval of the Zoning By-law was postponed in 2017. This allowed Council the opportunity to provide direction on the regulation of short-term rentals (as this use is common to most of the zones in the downtown area) and to improve definitions for specific uses. The By-law was updated and adopted in 2018 with the inclusion of the requested provisions for short-term rentals.



<b>Number of Zones:</b> 4
<b>Geographic Context:</b> Urban
By-laws in-effect: 2
<b>Review Timeframe:</b> 2016 – 2018 (2 years)
<b>On-line Format:</b> PDF

### 3.8 City of Calgary, Alberta

The City of Calgary is Alberta's largest city and western Canada's second most populous city with a population of 1,392,609 (2021).

Calgary's Land Use By-law 1P2007 (equivalent to a zoning by-law) came into effect on June 1, 2008. The purpose of the By-law is to achieve the orderly, economical, and beneficial development, use of land and patterns of human settlement, as well as maintain and improve the quality of the physical environment.

#### Work Plan and Timeframe

In 2017, in lieu of undertaking a zoning by-law update, the City of Calgary began work on the Guidebook for Great Communities in an effort to align the Land Use By-law and Municipal Development Plan. The Guidebook was intended to be a regulatory document that simplified zoning standards through a flexible, form based, and 'people-centred' hybrid code approach.

In summer 2021, under a new title, the Guide for Local Area Planning, was taken to Council as a statutory document but was not approved. However, City staff still intends to use the guide as closely to a regulatory document as possible in order to prove its efficacy. Had the guidebook passed, the next steps would have been to undertake a review of the Land Use By-law.

Since its passing in 2008, the City's Land Use By-law has become outdated, and continues to be misaligned with the Municipal Development Plan. At this time, the City has chosen not to go forward with a review of the Land Use By-law until City staff can prepare two new local area plans using the Guide for Local Area Planning. Once these local area plans are complete, it is the intention of the City to move forward with a Land Use By-law Review utilizing the Guide for Local Area Planning's hybrid-code approach. This is anticipated to commence in 2022.

#### Major Review Topics / Issues

One of the main constraints for Calgary City Planning is that its Land Use By-law was created long before its current Municipal Development Plan. Numerous community engagement events over the last 10 years have brought the following issues to light:

- Unclear relationship between the Municipal Development Plan and the Land Use By-law.
- Misalignment between desired policy objectives of the Municipal Development Plan and the implementation tools (districts and rules) in the Land Use By-law.
- Restrictive or inflexible regulations that limit the opportunity for innovation.
- Land use districts that are assigned according to development that is already built instead of assigning districts that enable new development aligned with policy.



<b>Number of Zones:</b> 64
<b>Geographic Context:</b> Urban
By-laws in-effect: 1
<b>Review Timeframe:</b> 2017 – Ongoing
<b>On-line Format:</b> PDF and HTML

### 3.9 City of Edmonton, Alberta

The City of Edmonton is Alberta’s capital and with a population of 972,223 (2019), is the Province’s second largest city and Canada’s fifth largest city. Edmonton’s growth can be attributed to the absorption of its five (5) adjacent municipalities (Strathcona, North Edmonton, West Edmonton, Beverly, and Jasper Place). In 2001, Edmonton completed a Zoning By-law review to integrate the five (5) by-laws of the former municipalities. Zoning By-law 12800 came into effect on June 14, 2001.

The City of Edmonton Zoning By-law contains the rules and regulations for the development of land in Edmonton and divides the City into land use districts (zones). The By-law regulates the use of land and buildings and provides a process for making decisions on development permit applications.

#### Work Plan and Timeframe

In 2017, City Council approved a service package to undertake a new Zoning By-law and Municipal Development Plan (the “City Plan” - equivalent to an Official Plan) in tandem. While the City Plan was adopted in late 2020, the by-law renewal project has experienced several administrative delays and staffing changes, that have delayed the approval timeline, and pushed the target adoption date out to January 2023.

Despite several delays, public engagement has been ongoing since 2018 and has included outreach methodologies such as presentations, workshops, webinars, and pop-up events. To date, the City of Edmonton has released numerous background reports, including a series of 12 discussion papers that explore various topics, and are made accessible to the public on the City’s Engaged Edmonton website. A draft by-law has yet to be released and the project is currently in its second of five phases (Phase 2: Develop & Build).

#### Major Review Topics / Issues

The City of Edmonton Zoning By-law renewal will culminate in a restructured Zoning By-law that reflects Council’s strategic plan, the City Plan, and other City policies; supports improved development outcomes; leads to more efficient and effective service delivery; provides Edmontonians with clear and enforceable regulations; and is adaptable over time. With major policy documents like Edmonton’s Metropolitan Region Growth Plan directing regional density targets, more infill, more mixed-use development, and transit-oriented development, the renewal has required extensive background research of best practices in order to effectively incorporate objectives into the Zoning By-law.



#### Number of Zones:

- Zoning By-law 12800 – 46
- 2022 Update – 21 Zones Targeted

**Geographic Context:** Urban; or Urban and Rural

By-laws in-effect: 1

**Review Timeframe:** 2017 – 2023 (Ongoing)

**On-line Format:** PDF and HTML

### 3.10 City of Regina, Saskatchewan

The City of Regina is the second most populous city in Saskatchewan with a population of 215,000 people (2016). The City's land use planning is directed by an Official Plan (referred to as an 'Official Community Plan') and a Zoning By-law.

Zoning By-law 2019-19 was passed in 2019 and regulates land use and development throughout the City.

#### Work Plan and Timeframe

The City of Regina initiated the process of updating its Zoning By-law in 2015 and completed the update in 2019. The project was executed across four phases that included an existing conditions analysis, a best practice review, the by-law development and final approval.

#### Major Review Topics / Issues

The focus of the City of Regina's Zoning By-law Update was to address provisions related to the variety of uses permitted in zones, screening and buffering requirements, parking and overall formatting and readability.

Through the development of the updated Regina Zoning By-law, the desire to increase the number of uses permitted within zones was addressed by introducing thresholds that permit uses as-of-right in a particular zone, up to certain size. Under these provisions, once an as-of-right threshold is exceeded, the use becomes conditional and subsequently prohibited. This approach enables an increased variety of uses to exist in the mixed-use, industrial, and site-specific (referred to as 'direct-control') zones. In order for this approach to function, the City of Regina has created broad land use categories that describe, but not explicitly list, land uses. For example, "Assembly, Recreational" means a land use where members of the general public gather for sports, social, training, spectating or entertainment activities. Broad land use categories provide flexibility as they allow City staff to determine the applicable land use category. Using this approach, a use may be permitted up to a certain size without Council approval on the condition that it does not result in an increased intensity of the use and there is no public opposition. If these conditions are not satisfied, then a use may be required to obtain Council approval despite being below the maximum size threshold.

The 2019 City of Regina Zoning By-law update simplified the document by replacing unique lot-specific screening and buffering requirements with zone-specific provisions. This was complemented by the addition of land use specific screening and buffering requirements. Vehicle parking requirements were streamlined by adjusting the minimum vehicle parking rate. A standard rate was set for residential uses, allowing the same parking requirement to apply for all residential buildings, regardless of the building type. The parking rate for almost all non-residential uses is based on total floor area.



<b>Number of Zones:</b> 39
<b>Geographic Context:</b> Urban and Rural
<b>By-laws in-effect:</b> 1
<b>Review Timeframe:</b> Regina Zoning By-law, 2015 – 2019 (4 years)
<b>On-line Format:</b> PDF only

### 3.11 City of Saskatoon, Saskatchewan

The City of Saskatoon is the most populous City in Saskatchewan with approximately 246,000 (2016). The City's land use planning is directed by an Official Plan (referred to as an 'Official Community Plan') and a Zoning By-law.

Zoning By-law No. 8770 was passed in 2009 with the purpose of controlling the use of land and regulating development to ensure a high quality of life and provide for the health, safety, and general welfare in the City.

#### Work Plan and Timeframe

The in-effect City of Saskatoon Zoning By-law was passed in 2009. In 2019, the City of Saskatoon initiated a comprehensive review of the Zoning By-law, which is being undertaken through three phases. The final repeal and replacement of Zoning By-law No. 8770 is anticipated to in 2022.

#### Major Review Topics / Issues

As part of the current Zoning By-law review, the City of Saskatoon is conducting an in-depth review of four (4) topic areas: environmental initiatives, neighbourhood level infill, landscaping provisions and parking regulations. From an environmental perspective, the Zoning By-law review will examine provisions for green roofs and net zero buildings. Zoning By-law No. 8770 currently contains infill regulations for mature neighbourhoods (referred to as 'established neighbourhoods'). These infill regulations were reviewed in 2017 and are being examined again as part of the By-law review.

Landscape provisions are being examined with regards to the location of trees, and hard and soft landscaping requirements. Parking regulations are also being reviewed in terms of consistency across dwelling groups and the provision of flexible visitor parking requirements for residential uses.



**Number of Zones:** 56

**Geographic Context:** Urban and Rural

**By-laws in-effect:** 1

**Review Timeframe:**

Current Saskatoon Zoning By-law, 2007 – 2009 (2 years)

New Saskatoon Zoning By-law, 2019 – 2022 (Ongoing)

**On-line Format:** PDF only

### 3.12 City of Winnipeg, Manitoba

The City of Winnipeg is the most populous city in Manitoba and the seventh largest in Canada with a population of approximately 705,000 people (2016). In 1971, the old City of Winnipeg underwent amalgamation with the Metropolitan Corporation of Greater Winnipeg and the surrounding municipalities to create the City of Winnipeg as its known today.

The vision and regulations for land use in Winnipeg are guided by the City's Official Plan, "Our Winnipeg," and two Zoning By-laws; one Zoning By-law for the Downtown Area (the 'Downtown Winnipeg Zoning By-law') and another for the areas outside of the Downtown Area (the 'Winnipeg Zoning By-law'). The Downtown Zoning By-law 100-2004 regulates the Downtown Area with the purpose of supporting the unique neighbourhoods, character areas and focal points. Zoning By-law 200-2006 regulates the areas outside of the Downtown Area and is intended to promote thoughtful development throughout the balance of the City.

#### Work Plan and Timeframe

Following the completion of the Downtown Winnipeg Zoning By-law in 2004, the City of Winnipeg initiated the process of updating the Winnipeg Zoning By-law for the remainder of the City in 2005. The Winnipeg Zoning By-law was drafted between 2005 and 2007. As part of the Winnipeg Zoning By-law's development, seven (7) open houses and 41 stakeholder meetings were held.

#### Major Review Topics / Issues

Prior to the 2007 update, the Winnipeg Zoning By-law was last updated in 1994 (Zoning By-law 6400/94). The main focus of the update was to consolidate the zones (referred to as 'districts') while also simplifying the approach to regulating uses. The updated Zoning By-law reduced the number of zones from 44 to 22 to provide more flexibility and the number of uses was reduced from 460 to 139. After the zones and uses were consolidated, use permissions were revised to change certain uses from "conditional" to "permitted" to provide greater clarity and more certainty. The reduction in conditional uses was accompanied by the introduction of new use-specific provisions to address common interpretation issues without the need for additional review time. Overall, this approach was intended to provide more predictability and decrease municipal review times.

During the review process, the public raised concerns about the lack of protection the 1994 Zoning By-law provided against insensitive infill development in existing neighbourhoods adjacent to residential areas. In response, the City of Winnipeg created a set of new Overlays that delineated boundaries for infill development and protected neighbourhood Mainstreets.



**Number of Zones:** 22

**Geographic Context:** Urban and Rural

**By-laws in-effect:** 2 (Downtown Winnipeg Zoning By-law and Winnipeg Zoning By-law)

**Review Timeframe:**

Downtown Winnipeg Zoning By-law, (To be confirmed)

Winnipeg Zoning By-law, 2005 – 2007 (3 years)

**On-line Format:** PDF only

### 3.13 Halifax Regional Municipality, Nova Scotia

Halifax Regional Municipality (HRM) is the most populous City in Nova Scotia with a population of approximately 403,390 people (2016). In 1996, Halifax (former city) underwent amalgamation with the City of Dartmouth, the Town of Bedford, and the Halifax County Municipality to create HRM as it's known today.

In 2015, HRM launched the Centre Plan ('Official Plan') for the Regional Centre – the development of which is still ongoing. The area covered by this plan includes the urban cores and downtown of peninsular Halifax, and downtown Dartmouth, the urban area on the opposing side of Halifax Harbour. The intent is to bring this geographic area under one Plan and By-law which would redact and eliminate 3 plans and by-laws (Halifax Peninsula, Downtown Halifax, and Downtown Dartmouth), and partially remove 2 Plans and by-laws from the geographic boundaries. The remaining two areas still have a presence in adjacent communities and therefore will only be amended (not repealed) to remove properties within the Regional Centre. The vision and regulations for land use in Halifax Regional Municipality are guided by the Municipal Planning Strategy, Regional Centre Secondary Municipal Planning Strategy, and Land Use By-law (Package A and Package B).



**Number of Zones:** 25

**Geographic Context:** Urban (Centre Plan)

By-laws in-effect: 23

**Review Timeframe:** 2015 – ongoing

**On-line Format:** PDF

#### Work Plan and Timeframe

HRM initiated their review in 2015 by beginning to conduct technical studies and outreach meetings. The Municipality decided to split the Plan and By-law area up into a "Package A" and "Package B" approach. The City began drafting Package A in 2017, which included growth areas and corridors (adopted in 2019), while Package B (currently in the adoption process with various committees/Council) includes established residential, park land, institutional, and Downtown areas as well as all areas previously approved and adopted as part of Package A. The Regional Centre Plan and Land Use By-law attempted to update this geographic area in its entirety; however, more work was required to research areas such as parkland, established residential, and institutional zones prior to bringing it forward for Council's review and adoption which ultimately, extended the timeline.

#### Major Review Topics / Issues

The HRM Centre Plan aims to simplify the current patchwork of development rules in the urban areas of the municipality, peninsular Halifax, and Dartmouth within the Circumferential Highway (Highway 111). One of the major issues with the previous Land Use By-law was the document's organization, which requires the reader to review the document in its entirety to ensure nothing is missed for a particular zone. The By-law is generally considered not to be user-friendly for the experienced by-law user, and highly complicated and confusing for those not experienced in by-law structure.

Public consultation has been ongoing since 2016, including an online portal, open houses, online interactive mapping tool, surveys, neighbourhood theme and scenario workshops, several stakeholder meetings and pop-up events. Each package is accompanied by a "What We Heard" report, which is summary of the engagement process and feedback received that is presented to the Community Design Advisory Committee.

## 4 Zoning Topics and Best Practices

This section of the Report provides an overview of various zoning topics and issues researched for each jurisdiction identified in Section 3. Best practices, trends, and noteworthy approaches are identified as well as a discussion of applicability to the City of Ottawa.

### 4.1 Organization

Zoning By-laws, by their nature, tend to be complex and technical documents that address a wide range of planning and design matters. Logical and thoughtful organization of a by-law's content is critical for ease of interpretation and implementation.

#### 4.1.1 Hierarchy of Sections

The order in which various by-law sections are presented forms the basic organizational framework of a Zoning By-law.

##### Best Practices

Almost all by-laws reviewed were organized with a basic flow from general to more specific provisions. Administration and interpretation sections come first, followed by general provisions (where applicable), then specific zones and associated regulations, followed by maps and schedules. Definitions are typically found at the beginning or end of the by-law (as discussed further below).

Parking provisions can be an exception to the typical hierarchy. These provisions may be found within, or organizationally close, to the general provisions, which is the case with the City of Ottawa and the **City of Toronto**. However, they may also be located towards the end of the by-law, in the case of the **Cities of Victoria, Halifax, and Montreal, and Quebec City**.

The organization of the **Halifax Regional Municipality's** By-law is unique among the by-laws reviewed, owing to its form-based approach. While the By-law includes a section on 'General Land Use Requirements' (similar to general provisions), it also provides a specific section on built form related to different building typologies - low rise buildings, mid-rise buildings, tall mid-rise buildings, and high-rise buildings. These typologies are each granted different step-back and setback requirements related to the height of features.

##### Applicability to Ottawa

There are no limitations on the City of Ottawa's options for organizing its zoning by-law. The City's current by-law generally flows from general to more specific provisions, similar to most jurisdictions. However, as discussed above, no significant draw backs have been identified for by-laws that are organized differently.

#### 4.1.2 Holding Zones

Holding zones are permitted through the *Planning Act* and have the effect of permitting a use in principle but prohibiting such use until the holding symbol ('H' or 'h') is removed through a Zoning By-law Amendment. For example, a holding symbol may be implemented to ensure that development of a site does not occur before sufficient servicing is provided to the site, at which time the holding symbol can be removed. It should be noted that the concept of holding zones is not widely used in other jurisdictions outside of Ontario.

##### Best Practices

Based on Ontario By-laws reviewed, there are only minor differences in the organization of holding zones. In the case of the **City of Toronto**, like the City of Ottawa, provisions for holding zones are listed along with site-specific exceptions. In the case of the **City of Hamilton**, a dedicated schedule lists all holding zones (exclusive of any site-specific exceptions) and specifies the criteria under which the holding symbols may be removed.

## Applicability to Ottawa

There are no limitations on the City of Ottawa's options for organizing its holding zones. The City could consider separating holding provisions from site-specific exception provisions or maintaining the in-effect By-law's approach of listing holding zones along with site-specific exceptions.

### 4.1.3 Definitions

Definitions play an important role in all zoning by-laws, establishing provisions that are clear and implementable.

#### Location and Organization of Definitions

Typically, definitions are located at the beginning of a zoning by-law, which is the case for most of the municipalities reviewed, except for the **Halifax Regional Municipality** (Regional Centre Area), **City of Regina**, and **City of Winnipeg** (Downtown), which locate their definitions near the end of the zoning by-law. In **Quebec City**, specific terms are only defined under the section of the zoning by-law which they are relevant to. For example, "Designated Official" is only defined under the Regulation By-law Administration section. In the **City of Winnipeg's** By-law, land use categories and sub-categories (such as, Industrial Use) are further defined under the Land Use Regulations section.

Generally, definitions are organized alphabetically with the defined term bolded. Related definitions may be grouped together under a parent definition. For example, "dwelling" may be followed by "dwelling unit" and "duplex dwelling". In some cases, definitions may be supplemented by series of bullet points or an illustration to provide further explanation.

#### Best Practices

Municipalities have taken a variety of approaches to improve the organization, application, and readability of definitions within their zoning by-law documents.

In the HTML version of the **City of Edmonton** Zoning By-law, when defined terms are clicked on, a pop-up textbox will appear to provide the full definition of the term. The use of "pop-ups" enables users to read the Zoning By-law without needing to cross-reference the definitions section. In the **City of Victoria** Zoning By-law, definitions are divided into two categories: administrative and use. The 'administrative' category is used for definitions such as floor area and lot coverage, whereas the 'use' category establishes specific land use definitions. In the **City of Vancouver** Zoning Bylaw, certain definitions have a land use category associated with them to aid users' understanding of the terms. For example, the definition for Barber Shop falls under the "Service Use" category.

The **Halifax Regional Municipality** (Regional Centre Area), **City of Regina**, and **City of Winnipeg** (Downtown) locate their definitions sections at the back end of their Zoning By-laws, functioning similar to a glossary. This glossary approach allows users to see how the definitions are used in the Zoning By-law first and then view the fully defined term at the end of the document. Finally, the **City of Winnipeg** Zoning By-law includes "Rules of Measurement" which specifies which definitions are associated with a measurement.

## Applicability to Ottawa

The City of Ottawa could incorporate hyperlinked definitions into a future HTML version of its Zoning By-law. When defined terms are selected, this function could open a new browser window displaying the definitions section and the defined term at the top of the page. The City of Ottawa could also create a sub-section within its definitions section for "Terms of Measurement" that specifies which definitions have measurements and/or calculations associated with them.

### 4.1.4 Site-specific Exceptions / Special Zones

Site-specific exceptions are used to permit development standards that deviate from the generally applicable standards of a zoning by-law. Site-specific exceptions may apply to a single property or

multiple properties within a defined area. This enables existing or proposed development, which would otherwise be deficient in meeting zoning provisions, to be in compliance with the zoning by-law.

### Terminology and Organization

Different language is used to describe site-specific exceptions depending on the jurisdiction. For example, they are referred to as “special areas” in Nova Scotia, “Direct Control Districts” in Alberta and Official “Development Plans” or “Comprehensive Development (CD) Districts” in British Columbia. Despite the variation in terminology, this concept serves the same purpose of permitting development that would otherwise not meet the exact provisions of the zoning by-law.

The organization of site-specific exceptions varies. The most common approach is to organize site-specific exceptions in dedicated sections, typically located at or near the end of the by-law. The **City of Toronto**, **City of Saskatoon**, **City of Calgary**, and the **City of Vancouver** have standalone sections that contain all site-specific sections in their zoning by-laws. Site-specific exceptions may also be listed as sub-sections within each zone. For example, the **City of Victoria** lists site-specific exceptions under the parent zone provisions. Municipalities may also utilize “schedules” to describe site-specific exceptions, as is the case with **City of Hamilton**, which lists its site-specific exceptions in one schedule that lists exception details for each site. The separation of site-specific exceptions in the City of Hamilton has made it easier for the public and City staff to understand the provisions. The existence of a separate schedule also simplifies the process of consolidating existing and creating new site-specific exceptions. The **City of Winnipeg** also uses schedules to organize their area-specific exceptions; with each area-specific exception having its own dedicated schedule that contains the details of the exception.

### Best Practices

While site-specific exceptions are an integral part of many zoning by-laws, select municipalities are looking towards alternatives to reduce the need for them in their zoning by-laws. As part of the **City of Edmonton**’s new Zoning By-law, the need for site-specific exceptions may be reduced through the creation of standard zones that permit a wider range of uses and development forms. This approach would provide greater flexibility within existing zones while reducing the volume of requests for amendments to the Zoning By-law received.

### Applicability to Ottawa

The City of Ottawa textually describes site-specific regulations in exceptions and graphically shows site-specific regulations in schedules. To reduce the need for site-specific exceptions and schedules, the City of Ottawa could revise its zones to permit a wider range of uses and development forms and therefore permit a greater range of development as-of-right. The City’s current practice of separating ‘urban exceptions’ from ‘rural exceptions’ is unique among jurisdictions reviewed.

## 4.1.5 General Provisions

General provisions refer to regulations that apply universally across all zones and may pertain to specific uses. This is in contrast to zone-specific provisions, which only apply within a certain specific zone.

### Best Practices

Across all municipalities, with the exception of the **Halifax Regional Municipality** (Regional Centre), and **City of Vancouver**, general provisions are located near the beginning of each zoning by-law. The content of general provisions varies greatly across municipalities reviewed. In some municipalities, like the **City of Toronto**, **City of Hamilton** and the **City of Calgary**, a broad approach is applied to general provisions, which may cover matters such as accessory buildings and separation distances to natural hazards. This contrasts with other municipalities, including the **Halifax Regional Municipality** (Regional Centre), **City of Regina** and **City of Victoria**, whose general provisions include specific lot standards for specific sites. The general provisions sections include provisions for individual sites as well as city-wide regulations. The City of Regina includes specific lot standards within its general provisions to differentiate the standards for each site. The purpose of this approach is to provide greater predictability regarding the lot standards for the specific sites.

Some zoning bylaws, including the **City of Saskatoon**'s, group parking or landscaping standards outside of their general provisions. The **City of Hamilton**'s Zoning By-law contains a section of general provisions tailored specifically to the downtown zones. In the **City of Calgary**'s Zoning By-law, general provisions are grouped in two sections, one relating to development permits, and the other to general provisions.

### Applicability to Ottawa

Recognizing that the organization of general provisions is somewhat context-specific, the City of Ottawa could consider including parking, and lot standards as part of their general provisions to consolidate and simplify the Zoning By-law text.

### 4.1.6 Images and Diagrams

Images and diagrams are increasingly common in municipal zoning by-laws to provide clear, accessible, and user-friendly information to the reader. Images and diagrams can aid users in the interpretation of the regulations, which can often result in a consistent approach versus having multiple interpretations or questions from those unfamiliar with the form and function of a zoning by-law.

#### Best Practices

Several approaches to providing images and diagrams within zoning by-laws have been used across various municipalities. The **City of Montreal** integrates images and simple diagrams to demonstrate variations of building types, such as triplexes and row-houses, and colourful maps to increase readability and clarity of the by-law. **Halifax Regional Municipality** utilizes diagrams throughout several sections of their land use by-law, including built form requirements, definitions, and design requirements. The diagrams are intended to provide a greater understanding and are used for informational purposes only. The **City of St. Louis** uses diagrams throughout their form-based code (overlay zone) to illustrate technical terms such as “build-to-line” and “setback”. It also integrates images and diagrams into the building development standards section, which regulates primary exterior materials, frontage types, and architectural standards for various building types in order to establish a cohesive urban form and character.

The **City of Edmonton** is currently updating their zoning by-law with the goal to develop a user-friendly by-law that can be easily accessed online. In communication materials about the new by-law, diagrams have been incorporated to describe zoning regulations and proposed outcomes. The City of Edmonton also uses diagrams to depict the impact of the by-law renewal. Figure 1 illustrates mixed use and comprehensive site zones, contrasting current built forms with possible built forms.

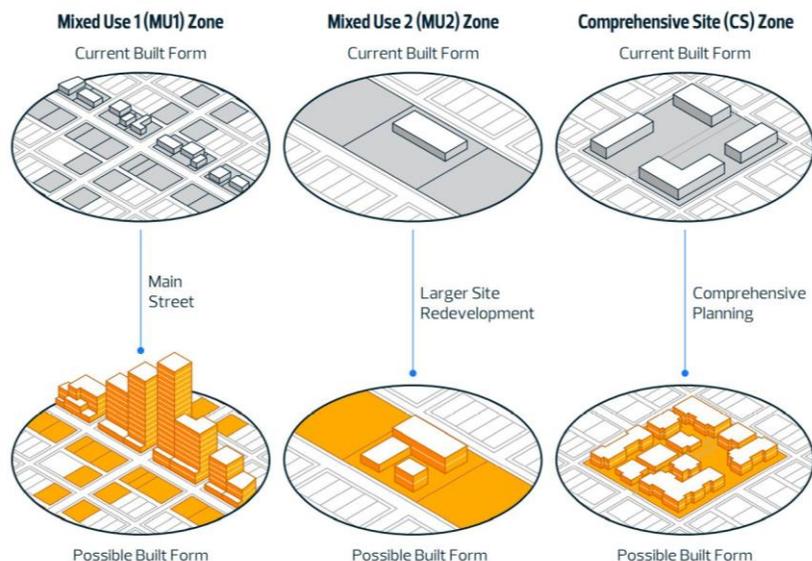


Figure 1: City of Edmonton Built Form Figures

The **City of Edmonton** is looking to create a highly visual, graphically focused by-law similar to the land use by-law for the **Town of High River, Alberta**, where the graphic key, as seen in Figure 2, orients readers to the by-law and how each land use district fits within the transect of the city.



**Figure 2: Town of High River Land Use Diagram**

Throughout the document, illustrations supplement text and regulations to visually depict the intention of the by-law, such as a corner visibility triangle and primary and secondary frontage. The use of clear, colourful diagrams, figures and illustrations helps to create not only a visually appealing document, but one that is easily understood and referenced by its users. The intended “look and feel” of the outcomes of the land use by-law in **Town of High River** are suggested through the use of sketches and photographs. The by-law includes sketches that illustrate how certain areas use setback and architectural articulation to transition building uses to the pedestrian street-level experience.

### Applicability to Ottawa

The use of diagrams and figures supports a user-friendly by-law, which aids interpretation and improves accessibility to those unfamiliar with planning jargon. Diagrams and figures help to clarify the intent and implementation of written policies or definitions and can be useful for reviewer reference as well. Particularly where a new zone or legislation is being added to the by-law, diagrams are a clear and concise way of presenting spatial information. It is recommended the City of Ottawa strive to develop an engaging, user friendly zoning by-law with thoughtful and informative imagery and graphics used where appropriate. Graphics could be paired with a Terms of Measurement subsection within the Definitions section of the by-law to describe harder to understand concepts.

### 4.1.7 Mapping Presentation, Interface, and Tools

Interactive zoning maps are a user-friendly tool that provide access to various data layers of the respective jurisdiction. It allows users to search detailed information on a specific address such as its current zoning, legal description, and general information of the parcel. Furthermore, they allow users to pan, zoom, scroll, and create maps.

### Best Practices

The **City of Calgary** uses an interactive “Development Map” system to provide information on land use redesignations and development permits across the City. The map was created to welcome public involvement in land use redesignations and development permits applications. The interface is both user friendly and responsive and allows users to adjust the level of detail visible on the map by applying layers located in a simple legend. Upon clicking on a parcel or area of the map, information pertaining to the address, developer, and details of the application pop up. Applications of interest can be searched by address, permit number, community, or ward, or by zooming in to an area on the map. The user can click on the Details button to learn more about the proposal and its current status and to submit comments to the file manager.

The **City of Victoria** uses an interactive map known as 'VicMap' that provides access to detailed information related to parcels including, legal type, lot size, actual use, zoning, and property report. Users can search specific locations by address, intersection, street, and PID (Parcel Identifier). Additionally, users can search more generally by parks and open spaces, park amenities, neighbourhood, and through a business directory (by name, address, category, keyword, or buffer). The interface has a variety of tools such as draw, measure, plot coordinates, identity, filter, and query builder. Notably, VicMap has a variety of layers related to all city-related data including, aerial photos dating back to 2001, parking, parks and open space, tree canopy from 2019 and 2013, emergency services, etc.

The **City of Edmonton** uses an interactive map that contains an extensive amount of detail on individual parcels depending on which zone and its current or future use. Additionally, users have access to information on each parcel such as zoning, nearby transit, year built, area, legal description, land applications, current applications on-site, nearby applications, nearby addresses, and general information surrounding its ward, community leagues, waste collection, current zone and by-laws, proposed applications, plans in effect, and overlays. The interface includes drawing tools, zoom, print, address lookup, and hyperlinks to the Zoning By-law for the zone, plan in effect (ARPs), and overlays are included.

**Quebec City** uses an interactive map that is well detailed for both content and graphic/visual quality purposes. General zoning, properties and projects' information are available, as well as many other planning related topics such as Master plan guidelines, interim regulations, flooding zones and various overlays. Quebec City's interactive map is useful for citizens and developers as they have access to various measuring tools (i.e., distance, surface area, height, etc.) along with many drawing and graphic options (e.g., freehand, directed sketches, level of transparency levels, allowing to see/hide aerial views). These tools cannot confirm standard compliancy; however, they are useful to approximate the required standards.

### Applicability to Ottawa

Recognizing that the City of Ottawa already has an interactive zoning map, 'geoOttawa' that is consistent with the other jurisdictions, the City could create an additional data layer to link to the information regarding land applications within the Development Application Search (DevApps) to allow users to look at current applications on existing parcels, or nearby applications. Through DevApps, users can learn more about the proposal, its current status, and its developer.

### 4.1.8 Landing Pages

A landing page, also known as "destination page," is a single web page that appears in response to clicking on a link to an organization's main site or a single page within the site. Simply put, the landing page is the destination a user reaches upon clicking a link to the desired municipal webpage.

#### Approach

Several approaches to landing pages have been used across municipalities. The most common and simplified approach is for the municipality's zoning by-law specific information to be contained within its municipal website. The **City of Toronto**, **City of Saskatoon**, **City of Hamilton**, **City of Calgary**, and **City of Vancouver**, for example, all have dedicated zoning by-law landing pages within their municipal website.

As an outlier of this traditional model, the **City of Edmonton** has opted for an alternative approach by containing their zoning by-law renewal related information within an entirely separate website. A landing page for the by-law renewal still exists on the City's website, with a brief overview of the initiative's goals and projects; however, any additional information, including engagement and background documentation, are all housed on a City-wide engagement platform facilitated through Bang the Table's Engagement HQ. In similar fashion, Discussion Papers on each of the by-law related issues and topics are contained within Amazon's webservice platform (AWS). A similar approach has been taken with the City's interactive version of their Municipal Development Plan, the City Plan, although the By-law Renewal Team intends to use its current content management system, Robo Help, as a simple by-law presentation tool will prove

easier to amend and maintain. Instead, the team aims to enhance the website's existing platform, hosting more illustrations, graphics, and intuitive design in an effort to cater to the occasional user.

## Presentation and Navigation

What varies across municipal landing pages is how information is presented. In an effort to provide lists of documentation including several by-laws, amendments, mapping attachments, supporting reports, and often, application forms all in one place, zoning by-law landing pages can fall victim to a very formal layout and appearance. Although the style and organization of each landing page reviewed differed, most municipalities struggled with the simple presentation of such a complex document, rendering their landing pages overwhelmingly busy and heavily text driven, and therefore not very user friendly.

## Best Practices

It is known to be a good practice to have all information pertaining to a zoning by-law contained in the same location. **Quebec City** notably has a very well organized and tidy presentation of its landing page. All planning by-laws are accessible in one - what Quebec City calls 'Harmonized' - location. The landing page's header starts with a brief overview and disclaimer of the information contained in each attachment, followed by a hyperlink to the regulation itself and a separate link for amendments. Below, each Borough (or Arrondissement) is itemized separately as a rectangular heading with a collapsible drop-down menu feature, where each has various documents contained within. The simple streamlined design is relatively succinct and not overwhelming due to its tab-like function, which is reinforced and kept simple by its shaded headings. Links within the drop-down menus then either take the user to a new webpage within the site or automatically open a PDF in a new browser tab. Quebec City's by-law landing page is so simple in that it only includes information pertaining to amendments, a search portal tool to other by-laws, and the by-law regulation itself.

In a more interactive method, the **City of Calgary**'s presentation of its landing page begins with a hero header of the Land Use By-law itself, which takes you directly to a HTML version of the by-law. Directly below the hero header, supplementary by-law related information, is presented as headings on navigation tiles. The 3x3 arrangement of hyperlinked tiles then either downloads a PDF file or directs the user to an information page with more links specific to that topic. For example, a tile heading titled *Land Use By-law Maps* will take you to another webpage containing mapping information, while a tile titled *Listed Use Matrix* will prompt a downloaded PDF of all uses permitted in each district. Other headings include information pertaining to Land Use Districts/Zones, Direct Control Districts, amendments, and current projects. Underneath these overarching tiles is more information about the Land Use By-law, a 'contact us' section, and a heading for recent land use by-law amendments. This straightforward approach is highly intuitive and useful to first time visitors.

Underneath the main content of the landing page, the City of Calgary also chose to include additional information on current projects as they involve amendments to the Land Use Bylaw. This is unique in that these amendments are dedicated to *Land Use Bylaw Amendments to Support Business and Economic Recover*. This section begins by detailing the City's intent to support businesses, followed by each amendment, and an overview of its purpose. This simple addition keeps users up to date on recent amendments and succeeds in reinforcing the City's efforts in supporting its local economy.

## Noteworthy Features

An increasingly common and helpful tool municipalities are utilizing is the 'Live Chat' feature. Both the **City of Vancouver** and **City of Calgary** employ this tool, which upon activation, either connects users directly to a staff member, or takes you through a series of questions to be directed to a specific department. This tool is being used in addition to the 'contact us' link, more commonly applied by municipalities in recent years, and has become increasingly common as city halls and offices closed to the public throughout the Covid-19 pandemic. The City of Calgary, for example, prompts the user to select an inquiry type, and adds the user to the queue, stating how many inquiries are in a virtual line ahead of them. Once at the front of the queue, a live agent is there to assist the user with their inquiry. When the chat is finished, there is an option to email the chat transcript to the user.

The **City of Vancouver** has made additional efforts in explaining how zoning and development works by creating their own *Zoning 101* YouTube video. This 3-minute animated video briefly and effectively explains the history of zoning and how zoning is used to shape development in the City. The narrator very clearly explains overarching components of the zoning by-law, including but not limited to the use of districts, and the general approach to regulations such as building height, yard setbacks, and density. The illustrations in the video are then echoed in another feature on their website – the zoning and land use *Document Library* – a tool created to house all documents related to the zoning by-law. The use of this feature is explained in another short video, and the library itself is separated by subject headings dependant on the component of the by-law, each with drop-down menus containing pertinent documents. Although the delivery of this page is somewhat disorganized at first glance, its intention is beneficial and informative. The use of video to explain the City of Vancouver’s zoning by-law effectively creates a more comprehensible experience for its users.

### Applicability to Ottawa

The appearance and style of a municipality’s zoning by-law landing page often mirrors the theme of their civic website and is therefore at the discretion of City and its designers. It is, however, recommended that the City of Ottawa should strive to create a succinct, user friendly landing page for its zoning by-law-related contents when it comes to presentation and arrangement. Intuitive design, simplified layout, and intentional organization are all desirable components and encouraged to both engage and make web navigation easier for all user abilities. To make its zoning by-law landing page more interactive and educational, the City could consider organizing it similarly to its “Learn about the planning process” page. A live chat feature could be introduced to connect residents to a Development Information Officer for detailed zoning information.

#### 4.1.9 Relationship of Zoning By-laws to Other Municipal Documents and Implementation Materials

Beyond the zoning by-law, municipalities also have many other planning by-laws, municipal planning-oriented policies, reference documents and various implementation materials. Therefore, achieving an appropriate relationship between the Zoning By-law and these other documents is important to consider. What follows is not best practices but rather a summary of the main findings over relationships with municipal documents.

##### Summary

The zoning by-laws in the studied municipalities are often required to be aligned with the Official Plan (or other Master Plan) and serve to implement its objectives and policies. Provincial laws and guidelines determine the format and regulations possible as part of a zoning by-law. In **Halifax Regional Municipality**, for example, a zoning by-law is adopted concurrently as part of an official plan review.

Zoning by-laws also sometimes refer to sector plans, secondary plans, transportation / transit master plans and other policies. In addition, other planning by-laws (e.g., a subdivision, building or parking by-law, interim control by-law, etc.) are distinct from the zoning by-law, but have to refer implicitly back to the zoning bylaw, to ensure a comprehensive and integrated view of the planning framework is maintained. This is the opposite of a situation where all applicable planning standards are regrouped into one single zoning by-law reference document (in traditional paper format or in digital website format).

In many cases, zoning by-laws entirely integrate and organize contents derived from other sources in order to implement planning standards more efficiently on legal and technical grounds. As an example, the Plateau Mont-Royal borough (**City of Montreal**) Planning By-law (zoning by-law equivalent) has incorporated architectural design standards drawn from a technical research report. In other cases, the Zoning By-law sets the minimum standards for development (like floor space area ratios) through neighbourhood specific areas. However, the management of specific development areas may require referring either to other distinct planning by-laws or to the official development plan where a complex network of policies, guidelines, and bulletins need to be considered as part of project approval.

## Applicability to Ottawa

The City of Ottawa Zoning By-law is required by law to consider higher level documents or planning requirements guided by the province. In regard to the relationships between the Zoning By-law to other municipal documents and implementation materials (i.e., Official Plan, secondary plans, Community Design Plans, Transit-Oriented Development Plans, design guidelines, by-laws, etc.), no clear best practice was identified. It is recommended that the City of Ottawa explore this aspect in further detail as it develops its future planning framework. It was found, however, that a reduction in the references to other municipal documents (for the implementation of related standards) improved the clarity of the applicable planning regulation, while also aiding in the interpretation and implementation of the Zoning Bylaw.

## 4.2 Zone Categories

Zoning By-laws typically divide a municipality, or part of a municipality, into any number of zones wherein a specific set of uses are permitted, and performance standards are applied. For example, each zone has a list of uses that identify what may be established, and what specific regulations apply to development. Regulations may determine where buildings are placed, how tall they can be and what shape they take, among other requirements.

This review revealed a wide degree of variability in the number of zones across by-laws. The number of zones did not correlate with the size or age of a city, nor age of by-law. The number of zones range from very few, as seen in the **City of Victoria**, (totalling 4 zones), to many, as in the **City of Vancouver** (which has 56 residential zones among 95 total zones). The City of Ottawa by comparison has substantially more zones, with a total of 446 when including sub-zones. Table 2 provides a sample of the zone breakdown, in comparison to the City of Ottawa.

Note that the City of Ottawa has significantly more zones when taking into consideration the impact of major area overlays, which supersede the base zoning standards and provide significant changes to calculation of height, yard setbacks, etc. across significant portions of the City. This results in some 350 different subzones in Residential zones alone, and in effect, creates something very akin to a transect system by proxy, albeit implemented in a very cumbersome manner. These overlay and subzones are not considered in the total land use zone typologies outlined in Table 2.

**Table 2: Land Use Zone Typologies Across Sample of Municipalities**

	City of Ottawa	City of Toronto	Halifax Regional Municipality (Regional Centre)	City of Saskatoon	City of Vancouver	City of Edmonton	City of Calgary
Residential	153	7	6	14	56	16	30
Commercial/ Mixed-use	97	3	5	14	13	7	20
Institutional	9	5	5	4	0	3	2
Industrial / Employment	35	4	3	6	16	5	7
Rural and Agricultural	78	0	0*	1	1	7	0
Other	74	7	6	17	12	8	5
<b>Total</b>	<b>446</b>	<b>26</b>	<b>25</b>	<b>56</b>	<b>95</b>	<b>46</b>	<b>64</b>
*Note that the review of Halifax Regional Municipality's By-law was for their urban core area of the communities of Halifax and Dartmouth – HRM does not have a consolidated Zoning By-law for the entire municipality. Latter phases of the Municipality's regulatory review process are expected to target more rural areas.							

Most municipalities have historically focused on establishing and organizing zones to minimize conflicts between different land uses, through use-based zoning. Use-based zoning effectively separates perceived incompatible uses, thereby reducing flexibility and the ability to adapt to changing development models. This methodology has been under scrutiny in recent years, allowing for other approaches to surface, including form-based zoning, smart code, and hybrid zones, as discussed further in Section 4.4.5.

### Best Practices

Through zoning by-law reviews, many cities have sought to reduce the number of zones in their by-laws through consolidation. This method is thought to reduce complexity, simplify the development permit process, create opportunities for a variety of developments, and improve readability for all users. Fewer zones are also thought to enable a wider range of development and built form, allow for flexibility in the types of buildings, and improve clarity.

Zone consolidation is being undertaken by the **City of Edmonton** through its current by-law review. The City aims to reduce its 46 standard zones to approximately 20-25 zones. Establishing fewer zones is also viewed as a means to better integrate these direct control zones (equivalent to site-specific exceptions) into standard zones. This approach and the engagement surrounding it is ongoing; however, it remains a well-received concept across the municipality.

### Applicability to Ottawa

Consolidation and flexibility across zones are recurring themes amongst many municipalities currently undertaking, or recently having completed, a zoning by-law review. Given the large number of zones currently found in the City of Ottawa's Zoning By-law, the City should consider reducing the number of subzones and exceptions through the review and completion of the new By-law.

## 4.3 Overlays

An overlay represents a secondary layer of regulatory provisions in a zoning by-law. Overlays are typically either based on:

- Environmental features or environmental hazards (e.g., floodplains);
- Special design or physical planning constraints/opportunities (e.g., heritage overlay); or
- Imposing additional design or performance requirements (e.g., heights, densities, maximum FAR or FSI, etc.).

### Best Practices

Many jurisdictions, such as the **City of Edmonton**, have endeavoured to reduce the number of overlays in their By-laws. The City of Edmonton's in-effect By-law has eleven (11) overlays and previously (up until 2001) had 22 overlays. As part of Edmonton's current Zoning By-law review, the City will be further rationalizing its overlays, for example, by eliminating instances where two or more overlays overlap and pose a significant barrier to development.

The **Halifax Regional Municipality** in their regional Centre Plan area have developed two systems of overlays (1) mapping overlays for height, floor area ratios, setbacks and streetwall heights. This approach reduces the overall number of zones, while maintaining granularity in density and height provisions. The second (2), less successful implementation was for six maps of 46 special area overlays. Special areas are used in the zoning by-law to apply area-specific requirements. For example, in the Young Avenue Special area, there is the ability to internally convert a single-detached dwelling to a two-unit or three-unit dwelling, which is not normally possible in the underlying zone.

Halifax Regional Municipality viewed their approach of using overlay maps to regulate maximum heights, density limits and building setbacks as a best practice to future-proof against bylaw amendments. For instance, a site-specific amendment for height requires a mapping amendment to the zoning by-law

rather than the drafting of a new zone or subzone. This is a different approach than how overlay zones are often used to place additional or supplemental regulations on an area of land.

Both sets of Halifax Regional Municipality's overlay systems are well-implemented in their online mapping system. When properties are selected, a consolidated view of zoning, height, floor area ratios, and special areas are queried, presenting a comprehensive view of those requirements. Unfortunately, Halifax Regional Municipality's mapping software does not appropriately illustrate all overlays, such as where requirements for Pedestrian-Oriented Commercial Streets may apply. To determine this, it requires the reader to review an additional number of online schedules, as the full information is not available unless viewing the PDF schedules, which can cause interpretation issues.

### Applicability to Ottawa

The City of Ottawa currently has five (5) overlays in effect and could consider minimizing or combining and simplifying the use of overlays to reduce potential confusion in implementation and interpretation. Based on this review, the use of topic-specific overlay maps to regulate matters such as height, floor area ratios, setbacks and streetwall heights could be considered to reduce the number of zones and schedules the City of Ottawa has, as well as simplifying amendments. For example, one map dealing with maximum building height could be applied to all zones and amended on a site-specific basis, rather than creating a new subzone. The City of Ottawa Zoning By-law contains a number of subzones that could be eliminated through this regulatory overlay mapping approach.

## 4.4 Key Issues

### 4.4.1 User-friendliness and Useability

User-friendliness in the context of zoning by-laws generally refers to improving a document's readability, decreasing the use of ambiguous language, use of easy-to-read fonts and styles, and simplification (e.g., number of zones). Zoning by-laws can be complex and hard to interpret for those with little or no experience in by-law structure, therefore increasing use-friendliness can play a key role in making zoning by-laws more accessible.

#### Best Practices

One of the major goals of the **City of Victoria's** review of Zoning By-law 18-072, was to create a by-law that was more user-friendly. A key element to this review was the reduction of over seventy (70) zones to just four (4) zones. This significant change was combined with creating clear language, separate sections for 'use' and 'administrative' definitions, more illustrations, additional permitted uses, reduced needs for site-specific zones, and reduced cross-referencing between the Official Community Plan and Zoning Regulation By-law.

The **City of Edmonton** is in the process of updating their current Zoning By-law. As part of this renewal initiative, one of the goals is to improve user-friendliness. Zones will be organized using tables, charts, diagrams, and section headings designed to help users navigate the by-law. There will be more relevant information listed in each zone to reduce cross referencing between sections, and a new web interface will improve the user experience by integrating a variety of functions to help applicants and residents better understand the regulations governing a specific property.

### Applicability to Ottawa

As part of the City of Ottawa's Zoning By-law Review, the City could modernize their by-law through the use of clear language, reduction of zones, more illustrations and clear organization of the by-law.

### 4.4.2 Pre-Zoning and Up-Zoning

Zoning by-laws have traditionally zoned lands to generally reflect existing building heights and densities on a given lot or area. As a result, any proposal for greater height or density would typically necessitate a site-specific zoning by-law amendment and development review process. Up-zoning is sometimes best

understood as rezoning that takes place as a result of a proponent applying for a higher density than what is currently permitted.

Pre-zoning refers to a pre-emptive increase in allowable heights and/or densities, generally to implement an official plan, in advance of a specific development proposal being brought forward. With pre-zoning, the municipality intentionally zones an area to the highest density that may be contemplated in their official plan, secondary plan, or transit-oriented development plan, regardless of whether that lot's use currently reflects its highest permitted density. Pre-zoning therefore allows for potential "as-of-right" development at greater heights and/or densities.

### Best Practices

None of the jurisdictions reviewed explicitly indicated the use of pre-zoning or up-zoning. However, the **City of Vancouver** Zoning By-law has used pre-zoning to manage high-density development as part of planning exercises like the West End Community Plan, the False Creek Flats Plan, and the Joyce-Collingwood Station Precinct Plan.

During these and other neighbourhood-level community planning exercises, the zoning by-law has had several medium density and townhouse specific residential zones added, mostly in proximity to, or along, transit corridors. The city's most recent example of this is the RM-9, RM-10, and RM-11 Zones. These zones were designed to foster compact neighbourhoods that support walking, cycling, and transit use. Density provisions are tied to which street the lot has frontage, with multi-unit uses only permitted on major transit streets, or where there is significant frontage.

In the case of False Creek Flats, the plan was implemented through two zones, FC-1, and FC-2. This was to enable the transformation of an industrial use area into a more urban, high-density mixed-use neighbourhood, including some residential and compatible industrial uses together supporting a wide spectrum of economic uses. A number of arts and cultural production uses are permitted as-of-right in both False Creek Flats zones.

The Joyce-Collingwood Station Precinct Plan pre-zoned areas around Joyce-Collingwood Station for mid-rise residential buildings from four to six-storeys, and townhouses in their RM-10N zone (referred to as a district schedule).

### Applicability to Ottawa

It is noted that there are precedents of using pre-zoning in the City of Ottawa, for example zoning around major transit station areas to implement transit-oriented development plans. The City could consider wider use of pre-zoning across the City or in select areas to implement any increases in height or density envisioned in the recently adopted Official Plan.

#### 4.4.3 Affordable Housing

The provision of affordable housing is increasingly an issue of concern in many Canadian cities. While affordable housing is a complex issue that cannot be addressed through land use planning alone, planning strategies, policies and zoning provisions which support affordable housing can be part of the solution.

### Best Practices

The **City of Vancouver's** approach to protect and develop affordable rental-specific housing as-of-right is through bonus density provisions coupled with housing agreements. The City introduced rental incentive programs in 2009 to address the lack of investment in new purpose-built market rental housing. Among the programs and strategies implemented were the Moderate-Income Rental Housing Pilot Program, the Below-Market Rental Housing Policy for Re-zonings, the Secured Rental Policy, the Short-Term Incentives for Rental Housing, and the Community Plans.

In 2019, following a ten-year review of the Rental Incentive Programs, an updated Secured Rental Policy was introduced to improve the City's response to these challenges by encouraging the construction of secured rental housing instead of ownership housing. The updates are the outcome of extensive public

and stakeholder consultation over the last four years. Because planning guidelines and by-laws are closely integrated with the success of affordable housing policies, two key zoning changes have been identified to encourage construction of rental housing:

1. Proposed changes to C-2 zoning (commercial mixed-use areas) would allow six storey rental buildings through a shortened approvals process that requires a development permit. With this change, new six storey rental buildings on commercial streets follow the same approval process as four storey condo buildings.
2. Proposed changes to the policy for rezoning in RS (low density residential) and RT (medium density residential) zones to allow new rental buildings up to six storeys, including process changes to utilize new standard rental zones to make it simpler and faster to build new rental housing and updated locational eligibility criteria that focus on areas within walking distance of public transportation, shopping, and other daily needs.

The **City of Edmonton's** Zoning By-law 12800 has seen several amendments adopted in an effort to ensure that more opportunities exist for non-market developments. These include an amendment to permit missing middle housing and an amendment permitting Open Option Parking, which effectively removed minimum on-site parking requirements.

Moving forward with Edmonton's Zoning By-law review, the City has several policies in place to invest in affordable housing programs and guide its zoning directives. With the City Plan having identified that at least 48,000 households are in core housing need, administration has acknowledged the pressing need to determine how the new zoning by-law could contribute to a comprehensive strategy in providing affordable housing across many neighbourhoods. Recognizing that this is a continued priority with several complexities, administration has chosen to explore the matter further in the short-term after the new zoning by-law has been adopted by council.

It was confirmed through the municipal interview with City of Edmonton staff that in the meantime, the renewal's approach will focus on ensuring there aren't any barriers in place to enable affordable housing providers from building attainable affordable housing for their projects. City staff intends to work closely with the development community to realize the ambitions of these affordable housing providers, and further implement these provisions as amendments into the new zoning by-law. With the addition of Inclusionary Housing provisions in Alberta's Municipal Government Act, municipalities like Edmonton will be required to work more diligently in providing a certain amount of affordable housing in accordance with the land use by-law and inclusionary housing regulation.

The **City of Toronto** has developed a number of policies to expand the range of affordable housing options in the City. While the overall response to affordability has long been to increase residential density and condo developments in easily accessible areas, like downtown and along the major transit lines, a number of additional recent policy initiatives have been undertaken. The Housing TO 2020-2030 Action Plan is a comprehensive set of strategies across the full spectrum of housing needs (homelessness to rental and ownership housing to long-term care for seniors) and provides for new strategic city investments on various needs.

One measure under the Action Plan is the implementation of inclusionary zoning. Inclusionary zoning is intended to ensure that new housing opportunities are targeted to low and moderate-income households as well as to ensure that long-term affordability is maintained. This approach has already been initiated through secondary plans and area-specific policies, for example, at the Toronto Port Lands. The City has required that a certain percentage of development in these areas be provided as affordable housing as a condition of development. The development of official plan policies and zoning provisions for inclusionary zoning would require new residential developments to include affordable housing units and create mixed-income housing. The City's incentives and funding for that purpose could also be layered on to Section 37 provisions ('bonusing') enabled currently through the *Planning Act*. However, Section 37 benefits will no longer apply post 2022 as it will be replaced with the new Community Benefit Charge, though affordable housing could be considered as a program objective of a Community Benefit Change.

The **City of Montreal**'s by-law for a Diverse Metropolis (#20-041) came into effect on April 1, 2021. This by-law, distinct from the Planning By-law (equivalent to a Zoning By-law), establishes requirements for developers to make contributions to address housing needs. Developing a residential project with a floor surface area greater than 450 m<sup>2</sup> (equivalent to approximately five dwelling units) requires an agreement with the City to contribute to its supply of social, affordable, and family-oriented housing. The value of a developer's contribution varies based on five (5) "value sectors" delineated across the City.

In the last year, the **City of Portland** has made major moves in low-density zoning reforms that are expected to directly address homelessness, a lack of affordable housing, and ultimately result in the increase of housing supply and accessibility for low to middle income residents. The biggest impact made comes with legalizing up to four homes on almost any residential lot. These changes also include what Portland City Council is calling a 'deeper affordability' option, permitting four to six homes on any lot if at least half of the units are low-income. This will make it viable for non-profits to intersperse below market housing anywhere in the city. Parking standards will also drastically change, by way of removing all mandates from three quarters of the City's residential land and making home driveways in apartment zones optional across the City.

These changes are a cumulative effort of Council's approval of the Design Overlay Zone Amendments (DOZA) project, the Shelter to Housing Continuum (S2HC) project, and the Residential Infill Project (RIP). Each project includes significant changes to streamline the review process and regulatory tools (DOZA), enhance the built environment through rezones, new overlay zones, increased options for housing, and limits on building scale (RIP), provide for more inclusive neighbourhoods, and better address the needs of Portland's homeless population (S2HC).

Portland's reform was built upon similar actions in Vancouver and Minneapolis, where in 2018, the City's leaders re-legalized duplexes and triplexes, respectively. Similarly, in 2019, Seattle legalized accessory cottages, resulting in something very close to citywide triplex legalization; and that same year, Austin, Texas passed another very simple sixplex-with-affordability proposal. Given these efforts, Portland's provisions are more likely to result in the gradual increase of housing stock than any of the others. That in part has to do with Vancouver and Minneapolis' city by-laws effectively capping the size of new buildings in low-density zones, regardless of how many homes they create. For example, in Minneapolis, the interior square footage of a building can be up to half the square footage of its lot. Although Portland's new rules set the same size limit for one-unit buildings, duplexes will be up to three-fifths the square footage of their lot, and triplexes and fourplexes up to 0.7. Likewise, Vancouver and Seattle ban new housing from affordable areas of the city in order to limit redevelopment speculation, and attempt to limit infill development without an affordable housing component. Similarly, in Austin, although provisions for affordable housing exist, splitting the fixed cost of a lot among six homes won't bring development prices low enough to justify providing affordable housing without a subsidy.

While projects like legalizing sixplexes for regulated affordable projects serve as a force multiplier for non-profits that are already developing modest homes at below-market prices, it alone may not be enough to increase the number of affordable homes being built. Portland's extra square footage opportunity is intended to channel investment away from luxury remodels and instead towards new homes that are more affordable. In doing so, it also succeeds in lifting a de facto ban on new affordable housing from much of the city. Vancouver nor Minneapolis has no such distinctions in their Low-Density zones.

### **Applicability to Ottawa**

Vancouver, Edmonton, Toronto, and Montreal offer Canadian examples of affordable housing strategies through various policy instruments and interventions. It is noted that approaches from some jurisdictions, such as Montreal, use legislative frameworks that are different than what is available in Ontario, and therefore may not be implementable through Section 34 of the *Planning Act* (Zoning By-laws). It is suggested that the City of Ottawa further analyse Portland's approach to affordable housing provisions, to assess the City's methodology and in turn, determine its overall feasibility and adaptability within Ottawa. It should be noted that Ottawa's zoning by-law already permits accessory and secondary dwelling units. Ottawa's new Official Plan identifies some zoning tools that can be used to create affordable housing including Section 37 benefits (to be replaced by the Community Benefit Charge), inclusionary zoning, and

alternative development standards The Official Plan also envisions allowing different forms of missing middle housing as-of-right in the by-law and studying the viability of tiny homes. It also must be considered that given these jurisdiction's affordable housing strategies and provisions are relatively new to by-law regulation, long term efficacy has yet to be fully proven.

#### 4.4.4 Mature Neighbourhoods and Infill Management

While infill development provides a great opportunity to increase intensification, the impact of infill on mature neighbourhoods is an important, and sensitive, consideration. Most cities endeavour to preserve character and ensure the continuation of existing uses in developed neighbourhoods, through some level of an infill management strategy. Often the approach is to establish a set of planning and design standards intended to assist the development industry in achieving high quality and compatible residential infill.

##### Best Practices

In the **City of Toronto**, Neighbourhood Character Guidelines are being used to sculpt and articulate as-of-right zoning so new buildings better respond to existing character. These guidelines exist in several neighbourhood specific documents to help define character and provide a compatibility tool kit, acting as a "how-to" manual that outlines the processes that residents and other community groups can follow, in order to ensure that future changes in the neighbourhood are appropriate and in keeping with distinctive character. Neighbourhood character guidelines can also serve as a template for ensuring that future developments are undertaken in a manner that is sensitive, gradual, and generally consistent with the existing physical character of the neighbourhood. Toronto City Council states that these guidelines meet the objective of strengthening the ability to reinforce the City's zoning by-laws and to defend these before appeal bodies.

In the **City of Edmonton**, the Mature Neighbourhood Overlay is used to regulate residential development in Edmonton's mature residential neighbourhoods, while responding to the context of surrounding development and maintaining the pedestrian oriented design of the streetscape. The Mature Neighbourhood Overlay was first considered in 1997 and was revised in 2017 to support increased and better designed infill by continuing to encourage development that responds to the context of a property, increasing predictability in the approvals process, and providing more design flexibility for new housing.

The overlay requires new homes to be sensitive to existing development, and to retain the classic tree-lined street and rear lane access. This overlay reduced the maximum height for new development from 8.9 metres to 8.6 metres, required a contextual front setback based on existing homes across the entire block and restricted development to two and half storeys.

It was confirmed through the municipal interview with City of Edmonton staff that the Mature Neighbourhoods Overlay has been a successful approach, and is celebrated by the communities it serves, particularly in its efforts in maintaining rear lane access. Though it has been a success, the By-law Renewal Initiative team intends to revise the overlay, taking successful general regulations out of the existing overlay to imbed them into appropriate zones where they might better apply. This is part of an overall effort to remove ambiguity and discretion, while ensuring certain successful elements apply to desired zones. Regulations that are geographically inconsistent, and therefore impossibly fit into the topographically rigid parameters of standard zones, would be kept within the overlay.

#### Mature Neighbourhoods Guidelines vs. Overlays

Vancouver's approach to 'guidelines', particularly in the regulation of mature neighbourhoods, are used in conjunction with specific zones within the Zoning and Development By-law for the sake of providing qualitative written and illustrative support. While these documents are not regulatory like an overlay, zone, or district would be within a by-law, because they reflect the quantitative parameters detailed throughout the by-laws, some cities and users will argue their usefulness. These guidelines therefore support and build on aesthetic provisions in a way a by-law may not be able to.

In the **City of Regina**, the Residential Infill Development Overlay Zone (RID) is used to regulate infill development, particularly within developed neighbourhoods. Introduced in 2017 to support the implementation of recommendations in the City's Infill Housing Guidelines, the overlay intends to foster residential infill that contributes to revitalization of older neighbourhoods, while complementing existing buildings. The RID established specific requirements for buildings and structures located within Regina's infill boundary, which encompasses areas of Regina's developed neighbourhoods, primarily consisting of areas with houses built before and up to the 1960s.

The RID Overlay Zone creates a completely separate set of development standards for front and side yard setbacks, building heights and maximum first floor height, to be applied on top of all other zones where it is applied. For example, building heights containing two units or less zoned within Residential zones are limited to 8.5 metres, except where architectural details such as cupolas, spires, and even skylights are included. Maximum first floor height standards require a maximum first floor height of 1.37 meters from grade level, intended for fire safety standards, but also being sensitive to the first-floor height of neighbouring properties. These requirements have allowed for the City of Regina to control the size and location of buildings. Alongside these requirements, the RID Zone contains a set of guidelines for the design of certain architectural elements, such as the massing of the roof.

In the **City of Vancouver**, mature neighbourhoods and guidelines are recognized through Historic Area Zones. Infill opportunities are typically managed through a community planning approach where new zones are put in segments of neighbourhoods. The development of laneway housing is a significant contributor to infill development in many areas. In addition to the Zoning and Development By-law, Guidelines for Additions, Infill and Multiple Conversion Dwellings, as well as Design Guidelines pertaining to specific districts, such as the C-2 Guidelines, are to be used in conjunction with varying district provisions. These guidelines are intended to ensure that renovations, alterations, and additions to existing character houses maintain a form and character sensitive to the design of the original house; additions, infill, and conversion developments are respectful of the design of adjacent properties and provide a good fit with the overall neighbourhood; and site design considers and respects existing amenities, including trees and mature landscape.

#### **Applicability to Ottawa**

The City of Ottawa's Zoning By-law currently includes a Mature Neighbourhoods overlay requiring a Streetscape Character Analysis for infill housing or changes within the front or corner side yards of lots within mature neighbourhoods. This practice is consistent with approaches from the **City of Regina** and **City of Edmonton**. The City of Ottawa recently undertook an infill amendment process that removed a number of regulations from specific applicability to the Mature Neighbourhood Overlay and applied them more generally to zoning writ large – though complexity and interpretation difficulty remains. The City of Ottawa's Zoning By-law also includes a neighbourhood-specific overlay, the Westboro Development Overlay, to manage infill development within a specific geography. It should be noted, however, that based on informal feedback received from development permit applicants, the current framework for residential zones in Ottawa is very difficult to interpret.

#### **4.4.5 Performance Standards and Lot Requirements**

Performance standards generally refer to quantifiable requirements for building elements such as height, lot coverage, floor space index, setbacks from the street and minimum yard requirements. Lot requirements refer to standards such as lot area, lot width, and lot depth. Performance standards and lot requirements together have a direct influence on built form.

Performance standards can also be used to directly influence provisions within a zone or district, notably how surrounding sites are impacted by proposed developments. Therefore, performance-based zoning focuses on outcomes rather than prescriptive regulations to manage off-site impacts (e.g., shadows, vibrations, noise). Performance-based zoning standards are often used to measure shadowing and massing impacts on parks, natural features, neighbouring buildings, and surrounding streets, as well as step back requirements (or setback requirements for portions of buildings above a certain height). This provides applicants and designers the flexibility to achieve the requirements in a variety of different ways.

Whether or not the development's impact reflects the intended performance, depends on the municipalities' internal procedures, particularly when ensuring accuracy of the project post development.

### Best Practices

As a general practice across municipalities, lot requirements are included within each zone and in some cases, defined in greater detail within subzones. In the case of the **City of Toronto**, more general lot requirement details such as availability of services, lot frontage, lot coverage, are located within its own chapter, titled Regulations Applying to all Zones.

In **Quebec City**, performance standards apply, distinct from traditional building and lot requirements, for measuring noise impacts as a constraint near high traffic highways and roads (Decibel, dBA). Performance standards also apply to odors related to livestock agriculture (odor coefficient).

In some municipalities, emerging approaches are being considered as an alternative to use-based zoning. Use-based zoning (i.e., Euclidean, or conventional zoning) is focused on regulating activities and uses (e.g., residential, commercial, industrial), typically keeping each use separated from the other. The use-based approach is the main system of the many Zoning By-laws across Canada, and could remain helpful for regulating simple, straightforward development. However, as some Zoning By-laws are continually modified and becoming increasingly more complex over time, the effectiveness and applicability of use-based zoning is being re-considered.

The **City of Edmonton**, for example, is currently exploring ways to introduce performance-based standards in appropriate zones. To ensure the right tool is being used to achieve a particular desired outcome, the City is developing a 'made-in-Edmonton' hybrid zoning by-law to employ a variety of different zoning tools. Although Edmonton's municipal interview confirmed the by-law's predominance on form-based and use-based provisions, it is expected to include components of performance-based standards where determined appropriate. This effort is being made to reduce prescriptive regulations, and instead choose where and when to regulate the outcome of each individual building within their urban surroundings.

One alternative to conventional performance standards is form-based zoning. Form-based zoning, which is further discussed in Section 4.5.2, focuses on the form and massing of buildings but provides more flexibility in the activities and uses that take place within the buildings. Form-based zoning is useful for supporting well-designed buildings and streetscapes, while providing adaptability for future changes.

### Applicability to Ottawa

The City of Ottawa may wish to consider alternative approaches to performance standards, such as hybrid zones and performance-based zones, though these concepts have not yet been widely adopted in Canada.

#### 4.4.6 Agriculture-related Provisions

Zoning by-laws can play an important role in preserving and protecting agricultural lands by prohibiting non-agricultural uses. In addition to provisions for traditional (rural) agriculture, recent interest in locally sourced food, food security, and healthy communities have led many municipalities to explore provisions for urban agriculture.

### Best Practices

Through the **City of Edmonton's** ongoing Zoning By-law review, the City intends to simplify its zoning regimen for agricultural lands by consolidating three (3) zones into just one (1). While agricultural uses will be the primary purpose for the zone, certain secondary uses (similar to "on-farm diversified uses" in the Ontario context) will be

### Montreal's Approach to Urban Agricultural

The Quebec government ministry of municipal affairs issued a Guide on urban agriculture. Although this publication presents legal tools which are closely related to that province's framework, it shows various examples of how planning and regulatory tools can be integrated into the zoning by-law to complement it – like architectural site plans, conditional uses, plans, conditional uses, overall development plans, etc.

permitted conditionally, such as agri-tourism (e.g., corn mazes, petting zoos), farm-based retail, farm-based cafes, or restaurants, etc., though limited in scale. These are similar provisions to the permitted provisions for 'On-farm diversified uses' where a lot has an agriculture use as a principal use under the City of Ottawa Zoning By-law.

Edmonton's Zoning By-law review also proposes to minimize barriers for urban agriculture / urban farm businesses. Commercial urban farming occurring outdoors or within existing buildings would be allowed in most zones in the new Zoning By-law without a development permit. It was confirmed through Edmonton's municipal interview that by permitting uses, the only barrier to development would come with requiring a building permit. A specific form of urban agriculture – urban beekeeping – was addressed in the **City of Winnipeg** in 2016 when the City amended their Zoning By-law to permit urban beekeeping.

In the **City of Montreal**, within the Ville-Marie borough territory, indoor and outdoor plant agriculture projects, as well as beekeeping, are regulated through a conditional use approach. Assessment criteria refer, among others, to the compatibility of uses (preferably not adjacent to residential uses), the project's appearance and integration, the facility of maintenance or the strategic location such as corner sites or adjacent to an important roadway. In the Rosemont Petite-Patrie borough, urban agriculture is slightly more permissive. An agricultural market gardening (fruits and vegetables) or horticultural activity use is authorized in certain zones, either in open ground, in greenhouses, on rooftops, or non developed plot, along with many storage regulations. This use is limited to a maximum 500 m<sup>2</sup> surface area when residential family use is allowed in the permitted zones, but it is possible to increase that surface area capacity through a conditional use approach.

The **City of Vancouver** permits varying forms of urban farming, a type of urban agriculture. The City has separated its use into two classes: Class A is directed at the use of land, with or without a principal building, for the cultivation of fruits or vegetables for sale, or simply, permitted in residential districts; and Class B encompasses the use of land or premises for the cultivation of fruits or vegetables for sale, and of which part or all of the use may take place in a greenhouse or other structure and may include onsite sales, or again, permitted in commercial and industrial districts. The City restricts the size of an urban farm operation (individual parcel or multiple, non-contiguous parcels if operated as an integrated unit) to a maximum of 0.7 ha, below the 0.8 ha threshold, and permits the use based on locations and types: small lot residential yard space, large lot industrial/commercial land, public land school and city land, and indoor gardening.

In addition to adopting an urban farming definition and regulations into the Zoning and Development By-Law, the City also adopted a set of Urban Farming Guidelines to assist staff in considering applications for urban farms. The by-law also makes the distinction of urban farm differing from gardening. On an urban farm, fresh food is grown primarily for sale, or the food produced is primarily consumed by someone other than the growers. Urban farms may be operated on a for-profit, non-profit, and/or a social enterprise model. As a result, business licences would be required for urban farming, which would allow the urban farm to sell and produce.

The **Halifax Regional Municipality's** approach to regulating urban agriculture is through a series of requirements including signage requirements, the processing of urban agriculture products, and greenhouses. Additionally, keeping of bees is permitted as an accessory use in every zone but is subject to a maximum number of hives depending on the lot size and setbacks, and must be registered with the Nova Scotia Department of Agriculture. Keeping of chickens is permitted as an accessory use to a permitted use in any zone, is limited to ten (10) hens per lot and must be kept in a fenced area or structure.

### **Applicability to Ottawa**

The City of Ottawa could consider reducing the number of agricultural zones, which currently total nine (9), when including sub-zones. It is noted that the City's Zoning By-law already widely permits urban agriculture. The City's zoning by-law also currently permits a range of agriculture-related and on-farm diversified uses, in accordance with provincial policy. In an effort to encourage more opportunities for urban agriculture, the City should take a proactive approach and further explore opportunities to permit

additional uses of urban agriculture in their zoning by-law, starting with developing a framework for regulating food production indoors in urban areas.

#### 4.4.7 Natural Heritage / Natural Hazards

Ensuring that development is not directed to areas where natural heritage and natural hazards exist is an important function of most zoning by-laws. Through this review, it was found that there are common approaches to regulating natural heritage and hazards.

##### Best Practices

The **City of Edmonton**, **City of Saskatoon**, and **City of Vancouver** have all taken similar approaches by applying specific zones to natural areas and parklands based on the intended level of development, activity, or preservation. These zones range from natural area protection to major parkland destinations within the city.

In cities that contain significant natural features like Calgary's Bow River Valley, environmental protection zones are used to preserve natural areas. Generally speaking, the most effective regulation of natural heritage and natural hazards are prescribed through a layered policy approach that utilizes policy within targeted zones, overlays, and ultimately supplementary regulation.

An effective example of this layered approach has been done by the **City of Regina**. While specific environmental reserve (ER) land uses support natural habitats and prevent pollution, several overlays and direct control districts (equivalent to site-specific exceptions) apply. The City's Aquifer Protection Overlay Zone prescribes three levels of sensitivity to varying lands and details performance regulations within each. This overlay is intended to protect the Regina aquifer system and ground water resource from contamination from development activities. The Flood Overlay Zone restricts development in areas of the City that under current conditions are subject to periodic flooding and accompanying hazards. The Flood Fringe Overlay Zone then reduces flood losses by prescribing performance regulations and special review procedures for the development of residential and non-residential structures. This approach to overlays is then supported by several other municipal and provincial regulations.

The **City of Edmonton** has taken a similar approach in their in-effect by-law (Zoning By-law 12800) and intends to carry this approach into their ongoing by-law renewal. The City's open space policies are layered and complex, as they are expected to be in accordance with the Natural Area Management Plan (By-law 18941). The policies ensure decisions about development in natural areas, the river valley, and open spaces balance preserving natural areas and providing access and amenities. Although some regulation comes through the Zoning By-law, most of the decisions regarding open space planning and development occur outside of the Zoning By-law.

Several zones exist to establish protection and conservation of natural resources. The Natural Areas Protection Zone (NA) for example, exists to preserve, conserve, and restore identified natural areas. Regulations within this zone, including development setbacks are detailed within the Natural Area Management Plan.

Protection Overlays are also used to provide regulations intended to address specific development issues related to safety, hazard or environmental protection. Additional and overarching risk mitigation overlays will be created to support the policy directives of supporting documents as apart of the zoning by-law renewal. These include the Floodplain Protection Overlay and the North Saskatchewan River Valley and Ravine System Protection Overlay. These protection overlays are further guided by The North Saskatchewan River Valley Area Redevelopment Plan.

##### Applicability to Ottawa

The City of Ottawa's current approach to regulating natural heritage and hazards through zoning, using overlays and environmental protection zones, is comparable to other jurisdictions reviewed.

#### 4.4.8 High-Performance Development Standards - Climate Change and Resiliency Requirements / Renewable Energy

Ensuring that development targets energy efficiency is not pervasive throughout zoning by-laws. Density and height exclusions are more commonly used to provide 'bonus' height or floor area for energy efficiency features. In discretionary or large applications, such as for a rezoning application, standards become more commonly used.

##### Best Practices

In 2020, the **City of Vancouver** made amendments to their zoning by-law to mitigate density impacts as a result of the increased floor space for zero emission mechanical equipment, or additional roof thickness required for additional insulation in many zero emission assemblies. To enable this, an exclusion of 2.3 m<sup>2</sup> per dwelling unit from floor area ratio calculations is granted to accommodate zero emissions mechanical equipment for heating or hot water. For residential buildings of three storeys or less, an additional 0.15 metres in height is permitted if the roof contains at least 0.35 m of insulation.

Beyond zoning requirements, in Vancouver, all rezoning applications are required to meet near zero emission standards or low emissions targets. This requirement can be met by constructing to Passive House, CHBA Net Zero Homes, and similarly stringent standard. For rezoning projects, construction cost premiums for zero-emissions buildings will be incorporated into the rezoning evaluation process for items like community amenity contribution fees. For Vancouver's conditional approval development permit applications, residential projects may also qualify for a 5% Floor Space Ratio increase if the following criteria are met:

- Certified Passive House or an International Living Future Institute Zero Energy standard project.
- Development Permit project in a District Schedule Zone.
- Project with 6 or more residential units.

For the **City of Montreal**, in the Plateau Mont-Royal borough, specific roof coverage requirements apply for the construction of a new building or the volume change of an existing building. When any roof has a slope of less than 2:12 (16.7 %), only the following exterior roof materials are authorized: (1) a green roof; (2) a material with a solar reflectance index (SRI) is of at least 56, with a professional certification, such as a white, grey, or pale material; (3) a combination of the previous coverings.

Similarly, in the **City of Gatineau**, a green roof section is required in all developments where the building's roof slope is very low (less than 17%), provided that the roof is made of incombustible materials. The outfitted green roof is required to have a minimum surface area equivalent in proportion of the building footprint:

- 2 000 to 4 999 m<sup>2</sup>: 20%
- 5 000 to 9 999 m<sup>2</sup>: 30%
- 10 000 to 14 999 m<sup>2</sup>: 40%
- 15 000 to 19 999 m<sup>2</sup>: 50%
- 20 000 m<sup>2</sup> and more: 60%

#### Vancouver's Green Energy Directives

The City of Vancouver has an individual Zero Emissions Building Plan to transition the city towards zero-emissions buildings. It also has a Vancouver Buildings By-law with separate energy efficiency requirements. The City of Vancouver has requirements related to electric vehicle charging stations. Vancouver achieves this through their Parking By-law, requiring generally 1 in 10 stalls be outfitted for vehicle charging.

Throughout many of the by-laws reviewed, building height requirements had exclusions for roof top solar panels. This enables development to take place in a manner which would not preclude the use of renewable solar energy, with panel heights acting as 'bonus' space.

The **City of Edmonton** is looking to adopt selected best practices from **Minneapolis**, Minnesota as a part of their review of their Zoning By-law. This would include adopting a point system for 'Alternative Amenity Standards' for planned unit developments. This system includes a point system for requiring green roofs, shared bicycle or vehicle parking, natural site restoration, historic preservation, meeting sustainable building guidelines, adaptive reuse opportunities, energy efficiency standards, and enhanced landscaping or stormwater management features. The benefit of a point system is its flexibility to developers in being able to choose the most suitable actions for their development based on their analysis and proposed use. The point values could also be easily amended or adjusted within the Zoning By-law priorities change over time.

#### **Applicability to Ottawa**

The City of Ottawa could consider a mix of performance-based standards, and energy-efficiency bonus opportunities within their Zoning By-law for energy efficiency requirements, the most applicable being the City of Vancouver's approach to requiring energy efficiency targets for infill developments to be applicable to the City of Ottawa, or the point system adopted by Minnesota for larger developments. It shall be noted that these approaches use legislative frameworks that are different than what is available in Ontario. These standards are typically the purview of the Building Code and therefore may not be implementable through Section 34 of the *Planning Act* (Zoning By-laws) as zoning by-laws currently do not have jurisdiction over such standards.

#### **4.4.9 Last-Mile Industrial Uses**

Regulations related to "last-mile facilities" typically refer to industrial uses such as "warehousing" or "distribution facilities" within most Zoning By-laws. Last-mile warehouses facilitate the movement of goods in the supply chain to the final destination. While "last-mile" facilities provide great opportunity to increase e-commerce and employment, the impact on the surrounding area is an important consideration. Last-mile facilities often require large warehouse facilities, considerably larger parking areas, and need to be situated near the consumer base (proximity to densely populated areas). This can result in challenges by residents who may oppose creation of industrial sites as they are known to increase noise pollution and traffic congestion.

#### **Best Practices**

As last-mile facilities are a new concept, limited testing has been completed to determine a best practice; however, the direction it seems to be heading in, is similar to the **City of Calgary** and **City of Mississauga**.

The City of Calgary created a Goods Movement Strategy (2018). This guide addresses provisions for warehouse distribution sites, also known as last-mile facilities, such as amazon fulfillment centres. These uses are permitted within the City of Calgary. By having a strategic approach, it will help the City support the goods movement industry and improvements to the transportation network while promoting a vibrant economy.

The **City of Mississauga's** approach to regulating "last-mile" facilities is instead of creating a specific zone or definition, the definition of "warehouse/distribution facility" was amended to permit this type of industrial use.

#### **Applicability to Ottawa**

The City of Ottawa has already focused on specific industrial areas (along truck routes, proximity to highways) for this type of use. The first Amazon fulfillment centre in Carlsbad Springs is located next to Highway 417 and a second one proposed in Barrhaven will be next to Highway 416. Ottawa could consider amending the "warehouse" definition similar to what the City of Mississauga has done to limit this use to strategic areas.

#### 4.4.10 Character

Character is a term that often garners significant interest and can carry significant weight when used to describe what should, or should not, be permitted in a community. Historically, guidelines and by-laws themselves have been developed as a reaction to the perceived loss of a city's, or community's, stock of historical buildings. However, the term character is now often used to describe a pattern of layouts, orientations and patterns that exist in a community. This definition of character, in many instances, defines a particular look and feel that exists at a certain point in time, ensuring that a community retains the look and feel. In some instances, however, the use of 'degradation of existing character' (or similar such terms), has slowed the evolution of communities or the application of good planning principles. This is particularly evident when character has been used to resist development that has no other defining significant impact on a community. To help address this challenge, municipalities have drafted guidelines to define the components of character. Often dependant on the age of the city's housing stock, character guidelines are approached in many different ways across Canada in an effort to preserve and maintain unique characteristics of neighbourhoods as they relate to aesthetics, history, lot size, prevailing streetscapes, built form, and building typologies.

##### Best Practices

Owing to its well-preserved built environment and the importance placed on maintaining it, the **City of Montreal** offers a great example of the regulation of character within a zoning by-law. As further mentioned in Section 3.4 regarding the City of Montreal's approach to the built environment, the Plateau Mont-Royal Borough has a global approach to character based on an urban design area overlay with a focus on the valuation of the various buildings' original architectural components. For example, if an individual has a desire to renovate their duplex that has no front setback, they are required under the zoning provisions to respect (or to choose between a limited array of prescribed possibilities) specific architectural features in accordance with existing building typology. Although no definition of character or building appearance exists in the Borough's Planning By-law, the definition of an "original architectural component" ("composante architecturale d'origine") sets the underlying basis for the document's approach:

"Any exterior part of a building, notably cladding, crowning, establishment, eave/projection, or opening that was part of this building when it was built."

The regulation's guiding principle is to foster the preservation (or reinstatement) of a building's original architectural components. To implement this, the Planning By-law defines 11 architectural typologies (example: types of duplex, triplex, townhouse, apartment building, etc.), each of those providing adapted specifications on various considerations (such as, massing/volume, siting, facade materials, design of the façade). Those serve as standards for permitting applications throughout all the borough territory (it is not limited to a few sectors). It should be noted that this character-oriented approach has been successfully implemented as a result of the development of a comprehensive heritage and architectural study, along with many consultation processes and heritage awareness campaigns.

In another example, the **City of Winnipeg** Downtown Zoning By-law, a portion of the Downtown is zoned as the "Character Sector". The Character Sector is an area of Downtown where a fine-grained mix of uses is encouraged, which is obliged to respect the built heritage of the Sector. Further, to respect the built heritage, these uses are required to meet a specific set of development standards thereby allowing for the City to maintain the character in this Sector.

The **City of Saskatoon** and the **City of Winnipeg** use overlay regulations to preserve character. In both cities, the Architectural Control District ("ACD" Overlay) provides development standards to preserve the physical character of an area and to promote a selected design theme. The ACD Overlay is applied to certain Direct Control Districts that exist for specific areas (e.g., Broadway Avenue commercial district in Saskatoon). The ACD Overlay is intended to reinforce the desired character at the street level and ensure that new development complements existing heritage buildings in the neighbourhood.

Rather than creating a specific character zone, the **City of Hamilton**'s amended the "Heritage Character Zone" to enforce certain built form character regulations for new developments where construction and/or alteration to the façade of the building are proposed (refer to Section 4.5.3). During the Municipal Interviews (Section 5), the City of Hamilton recognizes that the enforceability of this provision may be an issue as it extends beyond the scope of the Zoning By-law. No definition of character or special areas are provided in the Zoning By-law outside of overlay zones. Similarly, in **Halifax Regional Municipality**, although the Zoning By-law contains no definition of character, Special Areas are used to achieve the same effect. For example, the minimum lot area in the North End Halifax 2 special area is 185 square metres, and it is 743 square metres in the Armview Special Area. Certain mature neighbourhoods also have "Special Area" designation with additional requirements to keep character. These Special Areas provide specific regulations for items like lot frontage, minimum lot area, and lot dimensions (depth and width). This method regulates the rhythm of individual streetscapes while leaving some room for individual landscape architects to work – work within the existing context of infill sites by requiring a professional stamped landscape plan.

The **City of Edmonton**'s current Zoning By-law 12800 does not include a definition for character, but does enable Special Areas and Overlays for neighbourhood specific areas. For example, Edmonton's Quarters Overlay applies to all the land zoned (DC1) Direct Development Control Provision within The Quarters Overlay boundary area. The Overlay provides regulations to achieve the objectives of *The Quarters Downtown Area Redevelopment Plan and Urban Design Plan*. Power is given to the Urban Design Plan through development regulations stating that, "building facades shall incorporate architectural designs or features that characterize the particular precinct theme envisioned in the *Quarters Downtown Urban Design Plan*". Development regulations also ensure historic resources are protected by stating that, "municipally, provincially, or federally designated historic resources on the Register of Historic Resources in Edmonton shall be retained and incorporated into any redevelopment", and that the new design of development on the site shall conform to the regulations set out in "*Standards and Guidelines for the Conservation of Historic Places in Canada and The Statements of Significance*". To further enforce this, the zoning by-law states that all modification and/or alteration shall be reviewed and approved by the Development Officer in consultation with the Heritage Officer and Alberta Culture and Community Spirit. This overlay goes even further by applying architectural controls, which are described qualitatively to define the expectations of maintaining and preserving exposed building facades. Although this by-law stands to be succeeded by the end of 2022, the City intends to carry this practice through to its updated Zoning By-law by maintaining this overlay and others like it, with additional efforts being made to protect character by introducing several Heritage and Built Form Overlays.

### Applicability to Ottawa

In 2012, Ottawa City Council adopted Zoning By-law No. 2012-147 to address the fit of new infill development within the inner urban neighbourhoods of the city. The by-law was appealed to the Ontario Municipal Board (OMB), as it was then referred, which directed City staff to refine the definition of the term "character", which had been defined as "the recurrence or prevalence of patterns of established

### Character Guidelines

A prevailing approach seen across municipalities like Victoria, Toronto, and Calgary is to utilize non-regulatory Character Guidelines dedicated to specific areas or neighbourhoods of the city. These guidelines are often supported by community engagement and background studies. In the City of Calgary, the original intent of the Guide for Local Area Planning was to legally enable Local Area Plans to guide development and growth in the community, particularly around those neighbourhood's aesthetic character. Given the guide failed to pass, yet acknowledging the importance of its original intent, planners at the City still intend to meet the standards of each Local Area Plan as closely as possible, when processing development permits.

building setbacks, site layouts, orientation of the principal entranceway to the street, incidental use of lands, and landscapes that constitute a streetscape, based on identified and confirmed land use attributes.”

In 2014, Ottawa City Council endorsed the revised By-law and the OMB appeals were settled in 2015, after which the by-law came into full effect. It resulted in the creation of the Mature Neighbourhoods Overlay and the requirement for a Streetscape Character Analysis to be completed for new low-rise residential development within its boundary. The revised by-law defined streetscape character as being comprised of four attributes: the use of the front yard and corner or side yard; the orientation of the front door; walkways and driveway; and the type and the location of parking. This by-law has subsequently been amended to provide further refinement, most recently in 2020

Character has been argued in a variety of ways across Canada, with no one municipality standing out as a clear leader in best practice. The City of Ottawa has taken a consistent approach in applying guidance around character by using overlays or special areas. Overall, the application of character is difficult to implement as it can be so subjective, given that, in Ontario, there is only so much that can be considered through Section 34 of the Planning Act.

Jurisdictions without appeal options have attempted to reduce opportunities for character discretion in their zoning by-law because of the inability to withstand scrutiny through appeals. Areas without appeal board powers, or limited appeal powers, such as the **City of Vancouver** have extensive use of discretionary powers within their zoning bylaws, as the regulator has ultimate (or nearly so) decision-making powers. Since Ontario has extensive appeal powers for private developers, we recommend character be ‘hard coded’ into tailored neighbourhood zoning, rather than attempting to create an individual definition or method of interpretation open to discretionary interpretation. The recommended example of this is **Halifax Regional Municipality**’s use of special areas or in the cited municipality’s use of overlays to designate additional requirements to maintain character.

## 4.5 Zone Regulations

### 4.5.1 Minimum and Maximum Standards

Minimum and maximum standards are the primary method of regulating building form within most Zoning By-laws. These standards typically relate to building form (e.g., heights, setback, etc.) and lot requirements (e.g., lot areas, lot widths, etc.).

#### Best Practices

The following are typical minimum and maximum standards observed in by-laws reviewed:

- **Yards or primary lot setbacks** are commonly regulated through a minimum provision expressed in metres (m).
- **Lot area** is regulated through a minimum provision in square metres (m<sup>2</sup>).
- **Building** is measured in metres and is typically a maximum measurement provision.
  - In **St. Louis** there is a minimum and maximum heights used under their Form Based District Requirements for Forest Park. This is provided both in stories and feet allowed for Building Height.
  - In **St. Louis** there is a separate maximum height provision used under their Zoning Ordinance. This is for all non-building structures.
- **Tower Floor Plate Area** expressed as a maximum in m<sup>2</sup> is commonly used either in discretionary or as-of-right applications.

- **Floor Area Ratio (FAR) or Floor Space Ratio (FSR)** expressed as a numerical value relative to the site upon which it is located.
- **Parking Requirements** is typically expressed as a minimum number of stalls required per building area or by estimated number of patrons for assembly uses.
- **Building Width** requirements were commonly used in urban by-laws to maintain building forms that were not out of scale relative to surrounding uses. This is often used to regulate the length of a building along a street to prevent one building from overpowering the streetscape.

The following are some noteworthy variations to typical minimum and maximum standards:

- **Ceiling Floor Heights** – In **St. Louis** minimum and maximum floor-to-ceiling heights are used under their Form Based District Requirements for Forest Park. Other examples, such as in **Halifax Regional Municipality**, only apply a minimum height.
- **Bonus Building Heights** – In **Halifax Regional Municipality** there is a maximum pre-bonus building height and a maximum post-bonus building height where density bonusing provisions have been applied. Density bonusing provisions apply to developments over 2,000 m<sup>2</sup> including as-of-right developments (not requiring a rezoning).
- **Area Thresholds for Permitted Uses:** In the **City of Regina**, certain land uses that would otherwise be discretionary within a zone are permitted as-of-right if they are below a specific Gross Floor Area (GFA) (m<sup>2</sup>) threshold. This allows for small-scale uses to be permitted without requiring approval of a Zoning By-law Amendment by Council. For example, in Regina's Light Industrial Zone (IL), Food and Beverage Restaurants with a GFA of less than 300 m<sup>2</sup> per unit are permitted. After a use exceeds the threshold, they become discretionary uses that require approval of a Zoning By-law Amendment in order to be permitted within the zone. In addition to meeting the area threshold, the use must not result in an increase in intensity of the use and there must be no public opposition. It is the discretion of Planning staff to determine if Council approval is required.
- **FAR and FSR Exclusions** – The **City of Vancouver** and **City of Montreal** exclude inner wall areas from FSR/ FAR calculations to encourage environmentally sustainable building technologies such as passive house designs. The City of Vancouver also excludes for character houses, the area under steeply sloping roofs, or existing covered porches, to encourage retrofit, rehabilitation and continuous upkeep.

The **City of Vancouver** and other jurisdictions reviewed commonly uses maximum floor space ratio in their zoning requirements. Vancouver also uses minimum floor space ratio occasionally, such as in the FC-2 and I-2 Zones for False Creek Flats, and where minimum floor space ratios are used to encourage industrial uses in the mixed industrial/residential community intended for the False Creek Flats area. Conditional uses in Vancouver's Chinatown Historic Area, HA-1A Zone also requires a minimum non-residential floor space ratio, to continue to provide commercial space options for culturally important commercial uses in an area experiencing development pressures to add residential units.

- **Maximum Lot Width** – The **City of Vancouver** regulates maximum lot width through a minimum provision in feet, normally as a minimum measurement. In some highly urban areas with a fine-grained lot pattern, measurements for maximum lot width were observed to maintain an interesting pedestrian-scaled building fabric.
- **Residential Unit Size** - The **City of Vancouver** imposes minimum area requirements for dwelling units expressed in m<sup>2</sup>.
- **Maximum Parking Spaces** – The **City of Regina** provides a maximum number of parking possible in the Office-Use Zone (OA) for all land uses. Parking above these maximums may be provided if the parking stalls are provided above or below-grade or a fee of \$7,000 per additional parking stall is paid to the City. The OA Zone is a unique zone in Downtown Regina that abuts a residential subdivision. The purpose of this provision is to deter landowners from creating parking

lots and structures with surplus parking that is viewed as undesirable by the adjacent residential neighbourhood.

- **Uniformity** – In **St. Louis** is a maximum-to-minimum illuminance at grade-level permitted for lighting fixtures placed within the sidewalk zone.

### Applicability to Ottawa

If density bonusing is considered (as is currently the case under Part 19 of the City of Ottawa's Zoning By-law), two sets of maximum heights could be contemplated, for pre- and post-bonus heights. Fees could also be considered for as-of-right developments over a certain size, rather than solely for rezoning and by-law changes. Ottawa could consider adopting streetwall height requirements similar to what Halifax Regional Municipality has done. Area thresholds for permitted uses could be considered to allow for uses below a certain size within zones as-of-right such as urban agricultural uses within residential or institutional zones.

### 4.5.2 Form-based Standards and Elements

Form-based standards regulate the shape, dimensions, and overall form of buildings and their urban surroundings. In the Canadian context, this can be in addition to regulating categories of land use.

#### Best Practices

Both the **City of Edmonton** and **Halifax Regional Municipality** (Regional Centre) prescribe additional form-based criteria according to building typology (low-rise, medium/mid rise, and high rise / tower development).

Commonly used requirements for form-based standards include provisions for shadowing and massing impacts on parks and streets as well as step back requirements (or setback requirements for portions of buildings above a certain height). Both Halifax and Edmonton have transition zone policies, where corridor and higher development potential zones need to maintain a larger setback from lower density, established residential neighbourhoods.

Below is Section 121 of the **Halifax Regional Municipality's** Regional Centre Plan Draft Package B document for the Downtown District (DD) Zone. Setbacks are variable depending on the abutting zone, with Established Residential (ER) Zones having variable building heights depending on building height categories (typologies).

#### **Side and Rear Stepbacks**

*121 (1) Subject to Subsection 121(2), where a lot abuts an ER-3, ER-2, ER-1, CH, PCF, or RPK zone, the wall of any main building facing such zone shall have a required side or rear stepback at a height between 6.0 metres and 11.0 metres, as measured from the lowest finished grade on that side of the main building, of at least:*

- (a) 0.0 metres for low-rise buildings;*
- (b) 2.5 metres for mid-rise buildings;*
- (c) 6.0 metres for tall mid-rise buildings; or*
- (d) 6.0 metres for high-rise buildings.*

*(2) The rear stepback under Subsection 121(1) is not required if an entire main building has a minimum rear setback of:*

- (a) 8.5 metres for mid-rise buildings;*
- (b) 12.0 metres for tall mid-rise buildings; or*
- (c) 12.0 metres for high-rise buildings.*

The **City of Edmonton** and **Halifax Regional Municipality's** form-based requirements also have requirements to encourage active frontages at grade. The intent of these overlay requirements is to activate and animate edges to encourage pedestrian traffic in areas that have higher visibility, and areas along mass transit routes or in close proximity to mobility hubs. In Edmonton, the City is proposing to require that the grade-level of multi-residential development be constructed to a commercial development

standard to enable the future conversion of ground floor units. Halifax has specific requirements for grade-oriented units to have individual entrances to pedestrian priority streets. Halifax also regulates streetwall height with the intent of defining building massing in the pedestrian and public realm.

The **City of St. Louis** has two form-based overlays in their zoning by-law (ordinance), the newer of the two being the Forest Park Southeast Form-Based Code. It is a prescriptive hybrid code approach, using form-based and use-based zoning methods, having:

- Building Envelope Standards for matters like height, build-to-lines, setbacks, minimum building frontage occupying build-to-lines, first floor ceiling heights, upper floor ceiling heights, building typology, and parking locations, and maximum parking provisions.
- Building Development Standards regulating building typology, materiality, massing, articulation, outdoor space, access, and frontage types, and architectural standards (including roofs, fenestration, lighting, equipment, signage).
- Use regulations.

While the **City of St. Louis** has a fairly prescriptive overlay approach to development standards, the concept of using form-based overlay zoning areas is similar to Halifax Regional Municipality's but is more prescriptive. While St. Louis' requirements are more in-depth, the format provided allows for easier filtering of the body of the by-law's text into relevant sections for a particular development of interest.

The **City of Arlington, Virginia** has implemented two form-based codes that apply to neighbourhoods and commercial centres. Requirements for building heights, building, and parking placement, historic facades, windows, balconies, and other architectural features are clearly defined and illustrated. Standards for public sidewalks, street trees, parking and parks, civic greens, town squares, affordable units, and energy-efficient buildings are also included. For example, the form-based code requires that small apartment buildings and townhouses fronting specified streets must include either a stoop that is no more than 5 feet deep and no more than 6 feet wide or a front porch between 7 and 9 feet deep, and that ground story awnings and canopies shall project a minimum of 5 feet from the façade. The City states that these codes allow for more predictable development outcomes which are aligned with their collective vision for the future.

Presently, the **City of Edmonton** is proposing a hybrid code approach to its updated Zoning By-law, consisting of form based and use based zoning methods, and is currently engaging on this topic. In interviews with City of Edmonton, the Senior Planner confirmed that while the City is exploring form-based elements, they are also finding its code to be overly prescriptive and restrictive. Given the City is intent on removing barriers within the by-law and allowing for greater simplicity and flexibility, the Planner noted that form-based code doesn't always mesh with the idea of simplicity. By using form-based code predominantly in Mixed Use zones to shape Nodes and Corridors in transition areas, and other performance model elsewhere, transition areas can be more form focused to include characteristics like active frontages, commercial ground floors, and step backs after x-x-number of storeys.

### Applicability to Ottawa

The City of Ottawa could consider transition setback requirements and design requirements for active frontages on pedestrian priority streets within the Corridor designation and adjacent Evolving Neighbourhoods Overlay areas of the new Official Plan. However, it is noted that many such requirements have already been implemented in certain zones such as Arterial Mainstreet zones.

Based on WSP's experience in Halifax, it should be noted that form-based requirements without variation provisions can be extremely limiting to building design, particularly in areas with irregular lot configurations.

### 4.5.3 Colour and Materiality

Regulations related to colour and materiality typically address exterior aesthetic elements of a building, for example the surface treatments that can be used on building's façade or a portion of the façade such

as cladding, glazing, or brick. In Ontario context, there are few Zoning By-laws that regulate material and colour of buildings or structures. The ability to regulate ‘character’ of buildings or structures is set out in the *Planning Act*, subsection 34(4); however, character is not defined.

### Best Practices

In the **City of Hamilton**, Zoning By-law 05-200 regulates exterior building cladding for the first three building storeys within its Heritage Character Zone. Specifically, the By-law requires that these stories be finished with one or a combination of no more than two of the following materials: brick; concrete panels; stone block, stone veneer, or artificial stone; stucco; or, metal and metal panels, excluding aluminium siding or any metal variant thereof.

In **Gatineau** and **Montreal**, although pertaining to climate change and resiliency standards, these cities regulate roof materials in order to mitigate heat island effect. Moreover, in the case of the Plateau Mont-Royal borough (City of Montreal), colors and materiality are strictly regulated in the Planning By-law 01-277 throughout the landscape units approach, where any new buildings or major building alterations are compelled to respect or resume the original architectural components of the said building and/or the landscape unit characteristics.

Decorative architectural features such as window and door frames, sills, lintels, surrounds, and cornices, are excluded from these requirements. In the case of properties designated under the *Ontario Heritage Act*, alternative materials are permitted as approved through the issuance of a Heritage Permit.

In the **City of Vancouver**, the Zoning By-law within the Downtown Zones (HA-1, HA-2, HA-3, and DD Zones), a number of architectural detail provisions are prescribed. Separate guidelines often exist for the zone, the type of use, and what community area it is in. The City of Vancouver was the only by-law to regulate exterior colour of buildings in one of its Historic Districts (Zones). The HA-3 zone for Yaletown exterior finishing materials limits masonry, excluding tile or concrete block and colour must be a natural earth-tone colour or white as the main colour.

In the **City of Miami**, the Zoning Code ‘Zoning By-law’ a number of architectural detail provisions are prescribed in majority of zones. It regulates these provisions to ensure facades are compatible with the surrounding neighbourhood character and in some zones implement variations through art, glass, or architectural treatments and materials of a design. The City of Miami goes as far as regulating roofing materials (e.g., light-coloured, high albedo, etc.) and architectural details on parking garages where facades shall have architectural treatments designed to be compatible with neighbouring buildings. Ramps, stairwells, and any other portion of a garage should be buffered with the use of decorative grilles and screens, landscaping, and other varied materials.

### Applicability to Ottawa

The City of Ottawa could consider regulating the colour and or materials in some zones or areas such as Heritage Conservation Districts. The City of Hamilton serves as an Ontario precedent for such requirements. That being said, while other approaches in cities such as Gatineau and Montreal seem noteworthy and commendable, these jurisdictions use legislative frameworks that are different than what is available in Ontario.

## 4.5.4 Trees, Landscaping, and Permeability Requirements

Trees, landscaping, and permeability requirements, sometimes referred to simply as landscaping requirements or as planting requirements widely vary across municipalities, however their purpose remains the same. Landscaping requirements are used to protect, conserve, restore, and enhance a city’s natural features and ecosystems. Landscaping can enable creative, innovative, and environmentally friendly features that enhance and define public and private spaces, and provide economic value. When properly executed, landscaping can also promote compatibility between land uses by reducing the visual, sound, and lighting impacts of different uses.

Depending on the zone or district, tree, landscaping, and permeability requirements are employed through varying levels of performance. Typically, landscaping requirements are most commonly applied

within zones, or general provisions, as a minimum standard; however, interest in incentivising green standards and landscaping are being considered, such as through a points system currently being explored by the City of Edmonton, further discussed in 4.4.8.

In some cases, municipalities have identified issues with their current methods of calculating landscaping requirements across various zones within their zoning by-laws and have taken to creating work around documents for these provisions. At the City of Edmonton, landscaping is required to comply with the City Design and Construction Standards, which have different requirements than the Zoning By-law. In Victoria and Toronto's case, both cities use supplemental regulations to support their by-law, such as with the Toronto Green Standard, or Victoria's Design Guidelines. An advantage to this is that while by-laws sometimes lack in visual detail, these documents are more likely include beneficial illustrative components, or more detailed parameters particular to the zones. Some may argue another level of regulation in a separate document adds confusion and could lead to ministration. Preference and approach vary and should be determined by the municipalities and their users.

### Best Practices

Permeability requirements are typically zone-specific. As is common with most municipalities, the **City of Edmonton** approaches its permeability standard as a percentage of the total lot area. The City's current by-law makes note of saying the area of a building coverage developed with a green roof is not to be included within the calculation of impermeable material. Except for where development takes place as a part of a Multi-unit Project Development, for Single Detached Housing, Semi-detached Housing and Row Housing, the area covered by impermeable material shall not exceed 70% of the total lot area.

At the **City of Vancouver**, the by-law distinguishes which materials are considered impermeable and permeable. Other materials outside of this concise list are at the discretion of the Director of Planning. When measuring quantities of landscaping required, the **City of Calgary** uses a size approach to landscaping, indicating the size of the container required for the planting.

In the **City of Montreal**, within the Plateau Mont-Royal borough, the approach is to limit area dedicated to parking spaces and instead foster landscaping and tree planting in yards where parking is permitted. Thus, an outdoor parking area (including drive aisles and turnarounds) must not occupy more than 50% of the yard surface area. A minimum of 50% of the yard not being used for parking must be vegetally covered from the ground. Furthermore, in a yard where a parking area is developed, one tree must be planted. When a parking area has three or more stalls, one additional tree must be planted for every 50 sq. m of non-built surface area.

The **City of Calgary** requires new homes to plant trees within one year and maintain those trees for a minimum of two years after the development completion permit has been issued. The number of trees depends on lot width, and existing deciduous or coniferous trees count towards the fulfillment requirement. While Calgary suggests top tree species for the city's variable climate and weather conditions, **Miami, Florida** strictly regulates specific trees in their Waterfront District.

Recognized for 25 years as "Tree City USA" and known for its high quality of life, the **City of Carmel**, Indiana is a quickly growing suburb of Indianapolis. Much of the City's beauty is derived from its street trees; a success attributed to the City's Urban Forestry program. What makes Carmel unique is that unlike other municipalities, the urban forester position is housed within the Planning and Zoning Division. The City's urban forester, backed by the Urban Forestry committee, is responsible for preserving and

### Additional Landscaping Design Guidelines

The City of Victoria has approached their provisions to trees and landscaping through two design guidelines (Downtown Core Area and Multi-Unit Residential, Commercial, and Industrial), that are regulated during the development permit process. Similarly, Toronto uses their Toronto Green Standard to set development standards for landscaping site design, standards which as expected to be met by any new development application.

increasing the number of trees in the community and setting specific tree planting requirements for landscape plans, as well as being responsible for assisting the City in the development and administration of the landscaping standards within Carmel's Unified Development Ordinance (Zoning/Subdivision Regulations).

The City of Carmel advises those trying to develop an urban forestry program of their own to take a customised and standardized approach. Their urban forester advises not to leave the options up to the developers and contractors on how they want to grow an urban forest. The community relies on the urban forester's expertise and ability to set standards. By taking the guesswork out of the contractors and labourers, the city will have greater success achieving its goals.

### Applicability to Ottawa

Ottawa's approach to landscaping requirements should be flexible enough to fit the needs and circumstances of each particular community, yet strict enough to take bold steps in building its own urban tree inventory. Ottawa has forestry personnel embedded directly into the planning department in a similar fashion and for similar purposes as Carmel, which is to provide direct input on tree matters into planning application discussions. This integration could be expanded more proactively in development of new land use regulations and in assessment of new development proposals. A detailed tree ordinance, similar to Carmel, Indiana's approach can provide clear guidance for planting, maintaining, and removing trees from streets, parks, and other public places. Similarly, providing strict guidelines on preferred varieties, and advising local tree related specialists such as forestry professors, nursery operators, arborists, etc., can prove invaluable to a community.

## 4.5.5 Density Targets and Requirements

Zoning by-laws generally provide density targets and requirements either through a set number of units or commercial area per hectare of development site, or through a more general FAR requirement where a maximum ratio of floor area to lot area applies.

### Best Practices

Maximum floor area ratio requirements were almost universally adopted by the jurisdictions reviewed. This means that prior to the adoption of zoning by-laws, reviews needed to be undertaken for infrastructure planning purposes prior to the adoption of the zoning by-law. This enabled the by-law to be drafted in a manner where infrastructure reviews indicated that there was sufficient servicing for the proposed zoning to be allocated.

Most jurisdictions applied maximum FAR calculations as well as maximum height requirements. Approximately half of jurisdictions reviewed regulated only maximum FAR, assuming developers will attempt to build to the maximum development potential whenever possible.

Two jurisdictions vary from this:

- **Quebec City** notably also adopted minimum requirements in units per hectare applicable for residential uses, and minimum floor areas in m<sup>2</sup>.
- The **City of Edmonton** is proposing to apply a 35 dwelling units / hectare minimum requirement in low rise residential zones as they undertake their zoning by-law review.

### Applicability to Ottawa

In urban areas where there is a high degree of development and intensification demand, or in suburban and rural areas where intensification may be desirable, regulating minimum density or FAR requirements may be the ideal method to encourage a desired development form.

## 4.6 Residential Zones

### 4.6.1 Residential Housing Typologies

In the Ontario context, Zoning By-laws have traditionally regulated residential density and built form based on housing typologies such as single-detached (“single family”), semi-detached, duplex, and townhouse. This approach is very prescriptive in nature and is complicated by emerging approaches to gentle densification such as additional residential units (e.g., basement apartments, coach houses / laneway suites).

#### Best Practices

Most jurisdictions reviewed continue to regulate low-rise residential density by regulating residential building types such as single-detached (“single family”), semi-detached, duplex, and townhouse.

In the **City of Montreal**, the approach to regulating residential housing typologies varies depending on the borough and, by extension, their predominant urban form. In the borough of Ville-Marie (downtown area and adjacent neighbourhoods), only three (3) residential zoning categories apply, based on the number of units permitted (H.1: 1-2 units; H.2: 1-8 units. H.3: above 8 units). This approach emphasizes management of density (along with specific form, height, and density standards) and the interface with various other uses.

In comparison, the Plateau Mont-Royal (central neighbourhood) has seven (7) residential zoning categories (H.1: 1 unit; H.2: 2 units; H.3: 3 units; H.4: 4-8 units; H.5: 8-12 units; H.6: 12-36 units; H.7: more than 36 units). This approach is reflective of the borough’s broader cross-section of architectural housing typologies (duplex, triplex, missing middle) which is intended to be protected and enhanced.

In the **City of Edmonton**, the traditional approach to residential typologies is proposed to change as part of the City’s ongoing zoning by-law review. Eleven of the current Zoning By-law’s residential zones utilize typologies based on types of building such as single detached dwelling, semi-detached dwelling, etc. in specific zones like “small scale infill development zone” or “urban character row housing zone”. In multi-unit residential zones, the three housing typologies (low / medium / high rise apartment zones) are categorized in terms of height and density, and the two remaining residential typologies refer to rural residential and mobile home categories.

In the new Zoning By-law, residential zones will be consolidated from 16 to five, namely two residential zones (Small Scale Residential Zone and Low-Rise Residential Zone) and three mixed use zones (Mixed Use 1, Mixed Use 2, and Comprehensive Site Zone). These proposed new zones are less architecturally oriented but much more focused on general urban layout, the planning context, and the relationship with other uses, allowing for a greater variety of housing typologies to take place. The Small-Scale Residential zone will include tiny homes, garden suites, single detached, semi-detached, duplex, row housing, and small apartment. Low Rise Residential Zone may include fourplex, row housing, stacked row housing, courtyard apartment, low-rise apartment, mid-rise apartment. Mixed Use Zones will allow residential as an overall permitted use and regulate based on forms of low to high rise buildings. Whether low, medium, or high-rise building are permitted will be determined entirely upon location within or along a designated node or corridor, which are separated by height and density benchmarks. For example, Mid-rise dwelling units may have a maximum base of 10 storeys (unless the building contributes to a public amenity incentive, which would allow for 12 storeys), with a minimum floor area ratio of 150 people/and or jobs per hectare within a District Node. Other regulations relating to built form, materiality, performance requirements, etc. still apply.

In the **City of Vancouver**, the zoning and development by-law is made up of 33 specific residential districts distributed in three subgroups: single detached houses and duplexes (eight districts); duplexes and multiple dwellings (11 districts); multiple dwellings (14 districts). Each district has a distinctive set of outright or conditional approval uses and various regulation standards. The three residential subgroup names refer to both building typologies and building density, or number of units. The residential building typologies are not sharply defined. For instance, the by-law does not make a distinction between semi-

detached and duplex forms, making it necessary to carefully consider each residential district's regulations.

In the **City of Denver**, the Zoning Code (zoning by-law equivalent) is organized by Neighbourhood contexts, where specific zone districts apply. In this perspective and for each zone district, the housing typologies are referred to through a labelled code which indicate the Dominant Building Form and Character that is derived from the existing and desired built types. The various Dominant Building Form and Character labels are:

- SU (single unit)
- TU (Two Unit), RH (Row Housing)
- MU (Multi Unit)
- RO (Residential Office)
- RX (Residential Mixed Use)
- MX (Mixed-Use)
- MS (Main Street)

Following these labels and always for each zoning district, other standards' labels are added with respect to the Minimum Zone Lot Size in square feet (ex: A= 3 000; B= 4 500; C= 5 500; F= 8 500; H=10 000, etc.) and Maximum Building Height in stories (ex: 2= 2 stories; 2.5= 2.5 stories; 5= 5 stories; 12= 12 stories, etc.). Therefore, these additional code labels – as well as alternative standards in some cases – will influence directly and indirectly the regulation framework and the design opportunities regarding housing typologies.

### Applicability to Ottawa

The Cities of **Montreal**, **Edmonton** and **Vancouver** demonstrate a number of possible considerations for modernizing and simplifying the regulation of housing typologies and residential density. The City could consider a unit-based approach as in Montreal, or taking a similar approach for low-density housing (e.g., 2-unit dwellings) only, as in the **City of Vancouver**.

## 4.6.2 Non-residential Uses in Residential Zones

Most zoning by-laws permit a limited range of non-residential uses to locate in residential zones, for example, home-based businesses. Other types of non-residential uses that are permitted in some municipalities include bed and breakfasts, childcare businesses, and urban agriculture. Permitting a wider variety of non-residential uses in residential zones is one method of encouraging the development of 15-minute neighbourhoods that are more walkable and connected.

### Best Practices

In some cases, municipalities impose conditions on non-residential uses within residential zones. In the **City of Montreal**, offices and medical clinics are permitted in the residential zone within Montreal's central neighbourhood on the condition that they are less than 200 m<sup>2</sup> in size. In the **City of Toronto**, the retail stores are permitted within apartment buildings with at least 100 units on the condition that there is only one retail store and that the retail store does not extend beyond the first storey. The **City of Victoria** permits non-residential uses including office, personal services, and restaurants in the Mixed-Use Residential zone, on the condition that they are not located above the first storey and do not exceed 50% of the floor area.

There is potential to permit non-residential uses as-of-right within residential zones. This is currently being studied by the **City of Edmonton** as part of the Edmonton Zoning By-law Review, which proposes to permit restaurants and retail shops in its new Small Scale Residential zone.

## Applicability to Ottawa

The City of Ottawa's zoning by-law already allows for bed and breakfasts, home-based businesses, and home-based daycares within its residential zones. In addition, areas of the city zoned Local Commercial allow non-residential uses in predominantly residential areas. The City could consider permitting a wider range of non-residential uses in residential zones based on compatibility certain being met. These could include a cap on maximum floor area, or permission of such uses only in certain types of buildings such as mid- to high-rise apartments.

### 4.6.3 Multi-unit housing in Low-Density Residential Zones

Traditionally, Zoning By-laws have established low-density residential zones where only single-detached dwellings are permitted. While intended to preserve dominant character and built form, single-detached zoning effectively precludes intensification, gentle or minor in nature, by prohibiting multi-unit ("multi-family") housing such as semi-detached dwellings, townhouses and three-unit dwellings. This presents a challenge for municipalities where there is a need to increase the housing supply within the urban boundary.

#### Best Practices

Due to the increased demand for housing, some municipalities have shifted away from zoning that only permits detached dwellings, and instead permit some form of multi-unit dwelling across all residential zones. In the **City of Hamilton** Downtown Zoning By-law, where there is only one residential zone, a range of multi-unit dwelling types are permitted, including semi-detached, duplex dwellings, multiple dwellings (three or more units) and townhouses. The **City of Vancouver** permits two-unit dwellings within its lowest-density residential zone (referred to as a 'district'), the RS-1 Zone. It should also be noted that an increasing number of municipalities, including the **City of Toronto**, **Halifax Regional Municipality** (Regional Centre), and the **City of Vancouver** permit secondary dwelling units within their lowest-density residential zones.

In the **City of Minneapolis**, the Zoning code (zoning by-law equivalent) lists 8 residential districts distributed into 3 broad categories: (1) Low density districts (4 districts: R1, R1A, r2, R2B); (2) Medium density districts (2 districts: R3, R4) and (3) High density districts (2 districts: r5, r6). Within all of these residential districts, dwellings typologies will be either labeled as Permitted uses (P) or Conditional uses (C), the latter having to comply with required findings or specific conditions.

Generally, in the Low-Density districts, the permitted residential typologies are single or two or multiple family dwellings if limited to 3 units. Cluster development is authorized as a conditional use. Medium and High-density districts permit a multiple-family dwelling of 4 units or more. They are however subjected to Specific development standards, i.e., supplemental regulations to address the unique characteristics of certain land uses, where a specific attention is brought to outdoor children's play area. These 2 broad categories also authorize as a conditional use Planned unit Development, i.e., a large-scale integrated development, often including two (2) or more uses, planned and developed under unified ownership or control. In summary, multi-unit housing of 4 units or more can be permitted but under additional assessment such as specific development standard or a planned unit development, and possible involvement from the City planning Commission.

## Applicability to Ottawa

The City of Ottawa should consider increasing flexibility of housing types by permitting multi-unit housing as-of-right in low-density residential zones This could be focused on, but not limited to, certain areas such as those within the Evolving Neighbourhood Overlay of the new Official Plan that are in close proximity to transit corridors and mainstreets. Such an approach would facilitate infill in urban areas without the need for a Zoning By-law amendment.

### 4.6.4 Missing Middle

The concept of the 'Missing Middle' has gained traction in many municipalities in recent years. The term refers to medium-scale housing forms such as townhouses, walk-up apartments, or courtyard housing.

These housing types tend to be less common in cities across Canada, yet are more financially attainable and can be conducive to changing demographics, lifestyles, and income levels. Providing a variety of housing within a neighbourhood also allows people to stay in the same area and choose the housing form that meets their needs through different stages of life.

### Best Practices

The **City of Edmonton**'s zoning by-law renewal is taking a holistic approach to address the Missing Middle challenge through increased flexibility and fewer residential zones. The intention is to create housing diversity for a range of different users in a single residential zone, controlling form instead of how residences are defined among use. Of Edmonton's two proposed residential zones, Low-Rise Residential Zone was directly intended to enable the development of "Missing Middle Housing," which can range from row housing or courtyard housing to four to six storey apartment buildings. Permitted residential uses in this new residential zone are further detailed in Section 4.6.1.

In these residential zones, the scale and size of the building will be controlled through the use of Floor Area Ratio, which limits how big a building can be based on the total amount of floor space compared to the size of the site. Setbacks, landscaping, parking location, and design requirements will generally still apply. Design requirements such as articulation and stepbacks will remain to provide a transition from adjacent shorter buildings and ensure impacts from the massing of the building are addressed.

The City's Missing Middle Zoning Review (2019) also led to several by-law amendments to medium-scale zones in an effort to permit more opportunities for the development of various medium-scale housing options in Edmonton. The amendment introduced the use of Multi-Unit Housing, defined based on the number of dwelling units on-site rather than by the form of the building or how the units were arranged. It also removed maximum densities from a number of zones, along with minimum site area and width requirements, and increased maximum floor area ratios in some zones. For example, by allowing the minimum site area requirement of 110 square metres per dwelling unit in medium density zones, two unconsolidated 33 feet (20.12 metres) wide lots (809 square metres) could be developed to have:

- Three dwelling units on each lot to yield six dwelling units;
- A stacked rowhouse format (three units above, three units below); or
- Three-unit row house with three dwelling units in the rear of the site to yield the same six dwelling units.

During neighbourhood-level community planning exercises, the **City of Vancouver** Zoning By-law has had a number of medium density and townhouse specific residential zones added over its history, mostly near to, or along transit corridors. The City's most recent example of this was in the RM-9, RM-10, and RM-11 Zones. These zones were designed to foster compact neighbourhoods that support walking, cycling and transit use. Density provisions are tied to which street the lot has frontage on, with multi-unit uses only permitted on major transit streets, or where there is significant frontage. Numerous options exist for rowhouse / townhouse forms of development, including stacked townhouses within these RM zones.

### Applicability to Ottawa

In order to address the missing middle challenge, the City of Ottawa could consider establishment of zones specifically oriented to these forms of housing. Alternatively, the City could introduce increased flexibility into its other residential zones to allow for more housing types and focus on form over use.

#### 4.6.5 Equity and Inclusion

Equity and inclusion have become widely-discussed priorities in the realm of land use planning and zoning. Regulation and permission for housing oriented to identifiable groups (i.e., supportive housing and group homes) as well as separation of single-detached residential uses from multi-unit residential uses are among equity and inclusion considerations.

## Best Practices

Supportive housing is generally defined to be permanent housing for people who need assistance to live independently and may house people who are elderly, have disabilities, have addictions, or have mental health issues. In the **City of Edmonton**, supportive housing is a key priority of the City's Affordable Housing Investment Plan (2019-2022). In 2019, an amendment was made to reduce barriers to Collective and Permanent Supportive Housing by removing occupancy limits and building design requirements for group homes and lodging houses (lodging house refers to a house in which rooms are rented). In addition, in 2020, an amendment was enacted to permit Supportive Housing developments in several additional zones in the by-law. The amendment also created two new use definitions for supportive housing and limited supportive housing.

The City of Edmonton is approaching its ongoing zoning by-law review as an opportunity to further advance equity in Edmonton, including but not limited to:

- Removing the differentiation of community-supported living arrangements in all residential zones to allow different ways of living together
- Creating more flexible zones to provide more attainable and affordable types of housing
- Creating a by-law that is more approachable in its presentation and easy to understand.

Additionally, the City of Edmonton has created a Gender-Based Analysis (GBA+) Equity Toolkit to consider the unintended social impacts of their zoning by-law regulations and considering concepts of equity and diversity when drafting zoning provisions, including:

- Acknowledging assumptions and biases at the regulation writing stage
- Identifying social inequities and identity factors
- Listening to community perspectives
- Exploring equity measures that have been or can be taken

In addition to provisions for supportive housing, an equity and inclusion lens can also be applied to the way that zoning by-laws regulate, and segregate, various housing typologies (e.g., single-detached, semi-detached, townhouses, and apartments). For example, permitting only single-detached housing in certain desirable areas may not be inclusive to less affluent socio-economic groups, given the high cost of this housing type. While there can be legitimate planning justification for limiting density in certain areas, permitting marginally denser forms of housing (e.g., semi-detached, and duplex dwellings) alongside single-detached dwellings can generally be regarded as more inclusive than zoning which exclusively permits single-detached dwellings. The **City of Montreal** (Boroughs of Ville Marie and Plateau-Mont-Royal By-laws) and the **City of Vancouver**, are examples where two-unit dwellings are permitted in the lowest-density residential zones, and no zones permit exclusively single-detached dwellings.

### Applicability to Ottawa

The City of Ottawa can approach its zoning by-law review as an opportunity to further equity and inclusion goals. The City should apply its Equity and Inclusion Lens as part of the review to consider the equity and inclusion impacts of zoning for uses such as single-detached dwellings (e.g., Residential First Density Zone).

#### 4.6.6 15-minute Neighbourhood Provisions

The concept of 15-minute neighbourhoods, 15-minute districts, or 15-minute cities comes from the notion that every complete neighbourhood should be able to provide its residents with everything they need within 15 minutes of walking, cycling, or transit. This urban concept has popularized as cities make efforts to move away from car dependence, and instead look to create more amenity-rich, healthy, walkable communities. Although often difficult in cities that historically separate uses within zones, many are managing to successfully enable these models by integrating flexible use provisions into their zoning by-

law. Despite there being several variations of this concept, the common themes of the 15-minute neighbourhood model are typically proximity, diversity, density, and walkability.

### Best Practices

Many municipalities are using their zoning by-law as a tool to start shaping 15-minute communities, namely by setting density requirements, and permitting more uses within a variety of zones or districts. As part of the **City of Edmonton**'s goal of building better neighbourhoods, or a community of communities, one target is to create 15-minute districts throughout the City. Edmonton's new zoning by-law approach starts with allowing more businesses, services, and amenities closer to where residents live. A wider variety of uses will be permitted in residential zones, particularly around hubs of activity. These hubs of activity, or local nodes, will further create opportunities of connection and support for its residents.

Edmonton's approach also includes offering more and different kinds of housing. The by-law renewal will follow the lead of Edmonton's Municipal Development Plan, the City Plan, which focuses much of its residential growth within its designated nodes and corridor areas, where taller and denser buildings are expected to be located. This combined with permitting redevelopment of 'missing middle' housing to include townhouses, small apartment buildings, tiny homes, courtyard communities, and other new types of housing will achieve a diverse housing supply. Having a variety of housing within a neighbourhood is thought to allow many people to stay in the same area and choose the housing form that meets their needs throughout different stages of life. Existing efforts to encourage diversity in neighbourhoods are taking form through the permitted use of accessory residential suites such as secondary suites and garden suites. Growing a variety of housing also means allowing for enough people to live in the neighbourhood so that transit, public utilities, and other services can be supported and successful themselves.

The **City of Vancouver**'s RM-9, RM-10, and RM-11 zones were specifically designed to foster compact neighbourhoods that support walking, cycling and transit use. The City has achieved this by attaching density provisions to which street the lot has frontage. For example, multiple family uses are only permitted on major transit streets, or where there is significant frontage. To encourage density building among these zones, Vancouver is offering enhanced infill opportunities for low operational cost housing through a conditional use permit in any zone up to six units until the end of 2025 as part of its Climate Emergency Action Plan.

The **City of Montreal** has gradually adopted the 15-minute neighbourhood approach in most of its boroughs with respect to the applicable parking standards near transit lines. In boroughs where transit is within certain meter radius thresholds, parking requirements are less so to encourage the use of active or public transportation.

Montreal's Mercier-Hochelaga-Maisonneuve borough is currently serviced by nine subway stations. The Zoning By-law stipulates that the minimum required parking stalls ratio would be 100% reduced (in comparison to the conventional ratio applicable elsewhere) when a building occupied by a residential family use, having less than seven residential units is situated within 250 meters radius distance from subway access. Likewise, the minimum requirement would be reduced 50% for a building (all combined uses) located in a 500 m radius, and respectively 25% for any building occupied by a residential family use located between a 500 m and a 750 m radius away from a subway station. Similar provisions apply with respect to the maximum required parking stalls ratio, which is reduced 50% when a building occupied by a residential family use is located within a 500m radius distance from subway access. A 25%

### 15-Minute Neighbourhood Models

The City of Edmonton's inspiration for 15-minute neighbourhoods came from Paris, France, and Minnesota, Minneapolis. Edmonton conducted internal case studies on how the provisions were best executed to explore feasibility within their own city. As with all urban planning models, use and adaptability is city specific.

reduction applies to that maximum ratio for the same situation when the building is beyond a 500 m radius distance but less than 750 m from subway access.

### Applicability to Ottawa

Creating diverse and amenity-rich communities should be a goal of all municipalities; however, many municipal zoning by-laws impede such efforts, rather than aid. It is recommended that the City of Ottawa implement the principles of 15-minute neighbourhoods within its new Official Plan by permitting a wider range of non-residential uses in existing residential zones, permitting a wider variety of housing densities near and around corridor areas, and exploring development incentives or subsidies for progressive developments that enable 15-minute neighbourhoods to occur in desired areas.

## 4.7 Review Components

### 4.7.1 Engagement and Consultation as a Part of Zoning By-law Reviews

Public engagement, sometimes called public consultation, is a keystone of successful zoning by-law renewal. While each province and municipality set their own requirements for citizen engagement, zoning affects all residents of a community and thus city-wide engagement and communication approaches are common. Popular engagement techniques include open houses, charettes, surveys, and workshops throughout the development of a project.

#### Best Practices

Best practice in public engagement and consultation generally is to engage residents and stakeholders on decisions they have influence over, while maintaining communication throughout the project. Transparency on engagement and decision through clarity on how citizens will be engaged and reporting back on engagement through a take-away document such as a 'What We Heard' report is key to maintaining citizen engagement throughout a project.

**Halifax Regional Municipality's** engagement method for the development of its Regional Centre Land Use By-law (Package A) is a fine example of how engagement should and can directly influence the formation of a municipality's by-law. Engagement for the by-law took place over four years, beginning in 2016, and ending in early 2019. When consultation began in 2016, the municipality launched with an Online Portal, which included Online Mapping Tools and opportunities for the community to engage in various surveys. This paralleled a Kick-Off Open House, followed by Neighbourhood Theme Workshops, Scenario Workshops, a Scenario Open House, Sidewalk Conversations, Educational Engagement sessions, Stakeholder meetings, Pop-ups, and Open House Sessions. These various engagement techniques built a foundation for the development of various background materials, including What We Heard reports, which were intended to assist the project in an efficient back-end drafting phase of the by-law itself.

The by-law team took this preliminary engagement information into great consideration when producing background material. These background materials, alongside various input studies, would work in tandem in an effort to guarantee the success of the by-law. Input studies that were involved in the development of the by-law included:

- Market Land Values by Value Area for Proposed Density Bonusing Program
- Backgrounder for the Centre Plan Project
- Halifax Housing Needs Assessment
- Quantifying Cost & Benefits of Alternate Growth Scenarios
- Density Bonusing Study

Throughout its drafting phase, the municipality continued to host open houses, regularly meet with oversight committees, conduct online surveys, update website materials regularly, host individual storefront for public drop-ins, conduct industry workshops, and offer one-on-one interviews.

The **City of Hamilton**'s current Zoning By-law review has used Bang the Table software, a digital public engagement portal, to serve as their project website. Bang the Table provides a tailored project website that contains project information, documents for download, project timelines and opportunities for the public to submit their ideas to inform the Zoning By-law. This digital engagement platform has assisted the City of Hamilton with carrying out virtual engagement when in-person activities have been restricted due to COVID-19 restrictions.

The **City of Edmonton**'s engagement approach, currently ongoing, is to engage at each stage of their Zoning By-law Renewal Initiative, including leveraging engagement data originally collected during The City Plan (Edmonton's Municipal Development Plan) engagement. Online engagement data and tools are housed on a City-wide engagement platform, Engagement HQ (hosted by Bang the Table). Due to COVID-19 restrictions, many engagement activities have been conducted virtually. The Zoning By-law Renewal Initiative project team is supported by City public engagement advisors as well as hired engagement consultants to deliver a comprehensive engagement plan. The City of Edmonton's Public Engagement Policy is focused on engaging citizens around key project decisions and sharing engagement findings and resulting decisions in a What We Heard report. Key engagement activities for Edmonton's Zoning By-law Renewal Initiative include:

**Pop-up engagement events:** In 2018 and 2019, the City of Edmonton held city-wide engagement events across the City, offering the public an opportunity to engage on a variety of topics at the same time. The Zoning By-law team attended seven pop-up events to gather preliminary information about the Zoning By-law Renewal Initiative, including understanding issues with the current zoning by-law, discussing use-based vs. Euclidean by-law approaches, and generally categorizing what should and should not be regulated in the new by-law.

**Workshops:** Early in the project, the project team joined the City Plan team for a series of five workshops hosted around the city, and independently hosted a "deep-dive" workshop for stakeholders who were highly interested and invested in the project. Participants were asked to provide input on what elements should be considered for inclusion in a new zoning by-law.

**Stakeholder Group:** The Zoning By-law Renewal Initiative has a group of key stakeholders including local developers, institutions, and community groups who meet regularly to provide input on the initiative's work. Content provided to stakeholders mirrors public information, but discussion is focused to meet stakeholder's needs and level of understanding.

**Discussion Papers:** As the initiative kicked off with Phase 1: Research and Foundations, the City released a series of 12 discussion papers that explore various topics and zones and provide the preliminary thinking and direction for the new zoning by-law's regulatory framework. Topics included Commercial and Industrial Zones, Climate Resilience and Energy Transition, Overlays, Residential Zones, and Special Area Zones, among others. The discussion papers were posted four at a time on Engaged Edmonton in July, August, and October 2020. Discussion papers were also presented via digital engagement information sessions and recordings were posted online. Each discussion paper included instructions and opportunities to provide feedback via Engagement HQ, described below.

**Engagement HQ Tools:** For each discussion paper, citizens were offered a variety of ways to provide feedback on the topics of interest to them. A quick poll offered a surface-level method of gauging reaction to each paper. A short survey asked more specific questions about each discussion topic. Finally, an open forum and Q&A tool allowed citizens to take a deep dive into a topic and provide their thoughts and feedback in detail, and to see what others' thoughts were on the topic of interest.

**Workbooks:** For Phase 2: Develop and Build, the City is currently inviting all Edmontonians to provide feedback on three different topics through a series of three workbooks: Approach to Zones; Approach to Uses; and Approach to Residential Uses. Workbooks are posted on the Engaged Edmonton platform, where they can be completed and returned to the City. Two accompanying workshops are offered via Eventbrite for each topic. Questions being asked at this phase include, "What are your thoughts on the City's proposal to reduce the total number of residential land uses in the Zoning By-law?" and "What are your thoughts on the City's proposal to regulate use based on common land use impacts? What about the proposal to support predictability and transparency by changing discretionary uses to conditional uses?"

**Insight Community:** The City of Edmonton also manages a citizen panel, the Insight Community, which all residents can sign up for to engage with a multitude of projects online. Each month, members of the Insight Community receive several surveys to complete if they are interested. The Zoning By-law Renewal has access to the Insight Community for topics where they would like feedback from a broad range of Edmontonians.

**Communication:** Throughout the project, communication has been open between the project team and Edmontonians, who can sign up for the Zoning By-law Renewal Newsletter on the landing page. The Zoning By-law Renewal Initiative team also invites Edmontonians to attend ongoing webinars throughout the project. The project website includes a portal to 'Share Your Voice' where the city invites citizens to 'submit your ideas' via a General Feedback Form powered by Google Docs.

It was discovered through municipal interviews with City of Edmonton staff that although the approach to engagement has been comprehensive and robust, the By-law Renewal team expressed desire to have had given more time for consultation with stakeholders, namely how different groups and stakeholders are impacted by the use and regulations of the zoning by-law. Working through the project itself has then revealed that while there was much effort given to mixing different forms of engagement with both internal and external stakeholders, this unpredictably resulted in significant time being taken away from drafting and testing. The By-law Renewal team members therefore suggest time and efforts be allocated to the back end of the project, to account for drafting and testing of processes such as useability and applications with each of the impacted stakeholder groups.

### Applicability to Ottawa

A successful zoning by-law results from engagement that considers end users' needs and is reflective of a community's vision and values. Many municipalities find that while city-wide engagement is important, zoning attracts a niche-group of interested residents who may be best reached via targeted stakeholder and industry engagement in addition to a city-wide approach. It is therefore recommended that in addition to a conventional inclusionary approach to engagement, which makes special consideration for the infrequent user, the City of Ottawa take special notice on how different groups and stakeholders will be impacted by their own processes through the prospect of a revamped zoning by-law. Stakeholder engagement should be described in the City's Public Engagement Strategy or make up part of its Project Management Plan so that all relevant stakeholder groups are identified and effectively engaged.

## 4.7.2 Appeals to New Zoning By-laws

Different jurisdictions have taken varied approaches to creating segmented or incremental changes to their Zoning By-laws to focus areas for improvement or change and limit the risk of appeals to a larger project.

### Best Practices

In the **City of Vancouver**, under the Vancouver Charter, there is no opportunity to appeal a zoning by-law or amendment to a zoning by-law, such as through a rezoning application. There is a Board of Variance to consider matters where the enforcement of the zoning by-law would cause undue or unnecessary hardship arising out of peculiarities in the site or special circumstances connected with the development. When adopting new Zoning By-laws, the City of Vancouver has typically focused on select areas to add or modify zoning to intensify development as part of a district community planning process. As part of the renewal of their Zoning By-law, the City has been incrementally amending sections, which is possible in their by-law due to the relatively small number of cross-references in sections of the Zoning By-law.

As with the **City of Edmonton**, under Alberta's Municipal Development Act, the only opportunity to appeal the zoning by-law is if a regional municipality argues on grounds that the by-law does not comply with a regional plan. This is similar for the **Halifax Regional Municipality**, where the merit of appeals is based on a lack of conformance to development policy. In interviews with Halifax Regional Municipality, their method to adopting a 'two package' approach to their Zoning By-law allowed them to focus on high-priority development areas first. This approach also allowed engagement regarding established

residential areas to occur in a focused manner following adoption of other zoning regulations. Halifax Regional Municipality Staff felt this approach would be advisable for the adoption of future Zoning By-laws outside of their Centre Plan area.

In an effort to create a more user-friendly work around document to supplement the land use by-law at the **City of Calgary**, administration began the development of The Guide for Local Area Planning. When the document was taken to council in the summer of 2021, it was denied and therefore not passed as a regulatory document, largely due to its lack of community consultation as apart of its development. Although this document was not passed, the City intends to implement the guidebook as closely to a regulatory document as possible. This is a case where a supplementary document to support an existing by-law can be refused by council.

### **Applicability to Ottawa**

The ability for appeals is dictated by provincial enabling legislation. Without changes to enabling legislation – the *Planning Act*, there is little opportunity for Ottawa to adopt best practices from other jurisdictions regarding the ability for appeals. We would recommend Halifax Regional Municipality’s ‘two package’ geographic adoption approach to their Zoning By-law as a best practice which Ottawa could consider.

## 5 Municipal Interviews

In order to fully understand the effectiveness of the approaches reviewed in the Interim Report, telephone interviews were undertaken with municipal staff representatives from the following municipalities:

- City of Hamilton
- City of Victoria
- Halifax Regional Municipality
- City of Edmonton
- City of Regina
- City of Saskatoon

The jurisdictions chosen for interview are based on the currency of the in-effect by-law, noteworthy initiatives, and ongoing / recent reviews.

Staff members from these municipalities were carefully selected either based on their involvement in the review itself, or if not available, by an individual who is intimately involved with the practice and use of the zoning by-law in effect.

The following Section is an overview of the municipality's review process, while more detailed responses to best practices are discussed in Section 4 as they correspond with each municipality. Each municipality was questioned on whether there were any challenges implementing their zoning by-law, what their target budget was for the project, and if they could speak to any lessons learned along the way.

### 5.1 City of Hamilton

The City of Hamilton municipal interview was conducted with two members of the City's Zoning By-law Reform team. From 2006 to present day, the City of Hamilton has been making amendments to their Zoning By-law. The City of Hamilton has taken an incremental approach to their Zoning By-law review by amending the Hamilton Zoning By-law in phases. As an example, the City is currently updating its residential zone provisions.

#### Implementation Challenges

An implementation challenge identified by City of Hamilton staff is regarding the accumulation of new provisions that have yet to be consolidated. This is due to the City of Hamilton's incremental approach to their Zoning By-law where additional provisions are added with every section of the Zoning By-law that is amended and passed. While the incremental approach has allowed the City of Hamilton to respond to planning issues as they arise, it has meant that the Zoning By-law provisions passed since 2006 have not been reviewed and consolidated as a whole.

#### Lessons Learned

Overall, the City of Hamilton's incremental approach has been successful. However, City staff noted that when working in phases, it can be challenging when direction is received from Council to address a matter earlier than scheduled in the work plan. The concern with this is that by addressing a certain matter ahead of schedule, a precedent may be set prior to the applicable zoning provisions having an opportunity to be fully reviewed.

Another lesson learned was regarding the value in establishing a robust methodology at the beginning of the review project because it acts as justification for the structure of the review process. Complimentary to this, the City of Hamilton emphasized the value of assembling a team of dedicated staff to work on the Zoning By-law review.

## 5.2 City of Victoria

The City of Victoria's municipal interview was conducted with the Zoning By-law 2018 lead senior planner. The Zoning By-law 2018 was a three-year review for the downtown core of Victoria. It was notably a best practice through their reduction of zones and user-friendliness.

### Budget Allocation

In 2013, the City of Victoria hired a consultant to complete the zoning by-law review; however, City staff quickly realized this was not a good approach and decided to complete the review themselves. Starting from scratch in 2015, the review team was comprised of a senior planner, a zoning technician, and a lawyer. With only a small team and only one of the members solely working on the project, this directly impacted the time length of the review. Overall, the budget was \$60,000 for the consultants to complete the review, but little money was spent due to City staff taking over the project. In total, around \$20,000 was used outside of the operational budget (staff time and in-house legal support).

### Approach

The approach to reducing the number of zones from 70 to four was to complete an analysis of almost every parcel independently and determine which zone it best fit. Throughout the analysis, staff looked at all site-specific zones, determined its use and could it be designated a new zone, etc. The difficulty of this approach is that it took a significant amount of time analyzing every parcel and to ensure properties weren't "down-zoned" or "up-zoned", due to the fact many parcels dated back to the 1960s.

The approach to creating a user-friendly zoning by-law was to separate the administrative and general definitions, as mentioned in Section 4.1.3. This allowed the by-law to be easily interpreted and avoid confusion between the definitions. The zones used unambiguous language and a 'hybrid' model (same layouts, tables, etc.) which each of them followed to maintain consistency throughout the document. This approach will be used when reviewing the Victoria's Zoning By-law (outside the downtown core).

### Lessons Learned

The biggest takeaways from the review were to create a team with more than five people, where at least some individuals have extensive knowledge of the original by-law and are solely working on the review. Within that team, it is imperative that there is legal support and an engagement lead that will assist with clear, simple, and straightforward implementation.

It is Victoria's recommendation to Ottawa to start their by-law renewal with a team of individuals who will solely be working on the update through a phased approach.

## 5.3 Halifax Regional Municipality

The Halifax Regional Municipality (HRM) municipal interview was conducted with two members of the Centre Plan team. Centre Plan Land Use By-law was separated into two phased packages; package A focused on non-established residential areas, and package B dealt with all matters that did not work ideally in package A, primarily regarding zoning for residential areas, employment lands (institutional and industrial), parks, and community facilities.

### Budget Allocation

While the "pre-work" began in 2015, the drafting of the by-law itself began in 2017. Although the review is currently ongoing, the interviewees estimated the budget was around \$200,000 for consulting fees for individual tasks, excluding staffing time for 4-5 years for 4-8 staff members.

### Lessons Learned

Throughout HRM's ongoing land use by-law renewal process, interviewees learned that resourcing is critical. Originally, the review team consisted of four staff; however, that was not enough. Currently, there is eight staff dedicated to 100% of plan review excluding GIS and engagement support. It was noted that it was imperative to have a dedicated GIS member on the team and strong input from a legal team, as this sped up the legal reviews throughout the project. All team members should have strong technical

skills and experience with the previous by-law(s). Even though the project was expected to be completed Fall of 2020, the interviewee noted the additional year as a result of COVID-19 was helpful for quality checking and ensuring Package B was completed.

Additional lessons learned were to establish the rules regarding nomenclature (numbering, wording, etc.) before beginning to draft, as this will assist in pre-determining tasks. HRM also advises the value of taking a phased approach, which includes individual timelines for zoning by-law segments. This approach will help with the overall development and approval of the Zoning By-law.

## 5.4 City of Edmonton

The City of Edmonton's municipal interview was conducted with the Zoning By-law Renewal Initiative's Senior Planner. While the project is not anticipated to wrap up until September 2022, a current account of ongoing experiences can prove particularly useful to the City of Ottawa.

While the project began in late 2018, actual momentum didn't build until late 2019. Due to several team lead turn overs, start up was delayed for the first year. This directly impacted the budget of the project through the challenge of carrying previous years' remaining budget to the next. The project also experienced setbacks relating to budget cuts of 25% as a result of the Covid-19 pandemic. Although the project is currently under budget, the Senior Planner noted they anticipate significant resources being needed in the implementation phase of the project.

### Lessons Learned

Throughout Edmonton's ongoing Zoning By-law renewal process, various unforeseen challenges revealed themselves. Staff noted that with undertaking a full re-write of the by-law, new considerations, particularly with stakeholder needs, shifting policy outcomes, and district planning policy are continually being discovered. Even though the project as a whole will have taken 4 years, the interviewee expressed desire to have an additional year to draft and test the by-law. With one year remaining in the project's development, the drafting and testing phases are proving challenging as they relate to each of the stakeholder groups. With the Zoning By-law touching on 76 different lines of service within the City of Edmonton, the Senior Planner explained many of their department specific processes are imbedded within in their own policies and procedures. Testing and consultation with these groups to properly consider each of their needs has proven time consuming. At the same time, many developers rely on the streamlined processes of the by-law and want to be included in consultation as policies shift. Unpacking these many aspects of the by-law adds layers of complexity and a level of detail not initially considered. It is therefore Edmonton's recommendation to Ottawa to start their by-law renewal with a very clear sense of purpose from the beginning, and to ensure enough time is dedicated to the by-law's back-end implementation.

## 5.5 City of Regina

The City of Regina interview was conducted with a City staff member from the Planning and Development Services Department. The City staff member was part of the team that worked on the 2019 City of Regina Zoning By-law review, which took place from 2015 to 2019. The project consisted of a comprehensive review that repealed the previous Zoning By-law, which dated back to 1992.

### Implementation Challenges

The main implementation challenge identified by City of Regina staff was that some users of the Zoning By-law had trouble adjusting to and understanding the new provisions in Zoning By-law. This challenge is understandable because of the comprehensive nature of the review that was intended to modernize previous 1992 Zoning By-law and bring Regina's Zoning By-law into conformity with the updated Official Plan (City of Regina Official Community Plan, 2013).

Another implementation challenge faced by Regina was with regards to the capacity of Council members to provide comments on new Zoning By-law prior to Council approval. This issue stemmed from the fact that Regina's new Zoning By-law was being repealed and replaced all at once. Since the new Zoning By-law was approximately 700 pages long, it was difficult for Council to consider the changes prior to

approval and develop recommended amendments. In response, Council made the decision to approve the new Zoning By-law and direct staff to make any necessary amendments to address outstanding issues post-Council approval.

### **Lessons Learned**

Regarding the lessons learned in the review process, the City of Regina advised on the value of taking an incremental approach to the development and approval of the Zoning By-law. This contrasts with the approach taken by the City of Regina, which consisted of a review of all of the Zoning By-law sections at the same time. Looking back, simultaneously reviewing the sections was not ideal for a comprehensive review because City staff found the reviewing the entire document to be overwhelming and were concerned that they were unable to address specific details during the review.

Another lesson learned was the importance of having standalone sections or chapters for landscaping, screening, and parking provisions to simplify the amendment process. Through having standalone sections or chapters for these provisions, amendments can be made to one set of provisions apply across zones or subzones. This contrasts with the City of Regina's current format which has separate landscaping, screening, and parking provisions for each subzone.

## **5.6 City of Saskatoon**

The City of Saskatoon interview was conducted with a City staff member from the Planning and Development Department who is currently working on the current review of the City of Saskatoon Zoning By-law (2019 - Ongoing). The Zoning By-law review consists of a comprehensive review of the existing Zoning By-law (City of Saskatoon Zoning By-law No. 8770). The Zoning By-law Review project is focusing on updating the contents of the provisions; the format of the Zoning By-law is not expected to change.

### **Budget Allocation**

A budget of \$1 million dollars was originally allocated for the current Zoning By-law Review project. Additional budget is currently being requested to fulfill the original scope. The City of Saskatoon was unable to disclose the additional budget request at the time of interview.

### **Lessons Learned**

Since the City of Saskatoon is currently reviewing their Zoning By-law, the City staff member advised on number of lessons learned to date. The first lesson is to plan for 'scope creep' in advance. Since Saskatoon's Zoning By-law Review project began in 2019, there have been several unexpected subjects which have arisen that were not planned for in the original scope, for example RV parking. Since these subjects were not considered in the original project scope, the City of Saskatoon had to make the decision to either a) incorporate the subject into the existing scope, or b) decide not to include the subject in the Zoning By-law review and instead include it in a separate project. The instances of scope creep may have been avoided by setting aside resources to address miscellaneous issues during the project.

Another lesson learned is regarding being mindful of the project scope approved by Council while engaging with stakeholders at the project onset. City of Saskatoon staff found it challenging to respond to stakeholders about how their needs would be addressed in the Zoning By-law after the project scope had been approved by Council.

Lastly, if the amendments to the Zoning By-law are being completed in batches, the City of Saskatoon recommends the leaving housekeeping changes to the end. As the zoning amendments are released errors are likely to be caught after the fact. Leaving the housekeeping changes until the end will allow for all errors to be addressed all at once before Council approval.

## 6 Conclusion

This Report primarily examines a range of approaches to key zoning topics from a total of fifteen (15) Canadian jurisdictions and seven (7) American jurisdictions. When exploring international best practices, this Report closely examined varying niche components to build on previously identified zoning topics. The research and baseline information explored in this Report will serve as the foundation to assist the City of Ottawa in undertaking its Zoning By-law Review by drawing on best practices and avoiding pitfalls experienced in other jurisdictions.

Ottawa finds itself in an interesting position, once its newly adopted Official Plan is approved. There is a great opportunity for the City to restructure its planning regulatory framework with many possible directions. Executed correctly, this will become a project of great pride and success for the City, with benefits to be observed throughout the Planning, Infrastructure and Economic Development Department. Planning recommendations can be streamlined, and future approaches to amendments and studies can be harmonized. Relationships within and between business units can be evaluated and refreshed as required.

Regardless of the scope chosen by the City, by-law reviews are detail-oriented projects that take considerable time and effort. The level of analysis needed to make informed, supportable recommendations requires a commitment to ensuring that the simplification of the Zoning By-law remains a priority. As suggested by many of the staff interviewed from other jurisdictions, WSP recommends ensuring the project is adequately staffed, and senior management is available when required to understand preliminary recommendations and to give direction to the by-law review team. The investment will provide a tremendous rate of return, as a successful Zoning By-law review will work cohesively with other planning documents, lead to orderly change and the efficient provision of services throughout the City of Ottawa.