Special thanks to Alain Miguelez, Urban Planner for the City of Ottawa, for his contributions to this guide.

This project was funded by Canada Mortgage and Housing Corporation (CMHC). The content and editorial quality of this report, and the view expressed herein, are the exclusive responsibility of the authors. CMHC is not liable in any way for the use readers make of the information, equipment and techniques described in this report.

This research received support from Mitacs under the Mitacs Accelerate program.
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Introduction

This guide on accessory dwelling units (ADUs) is the result of a partnership between Arpent, a not-for-profit urban planning firm, and Canada Mortgage and Housing Corporation (CMHC). Its purpose is to provide guidance and support for municipalities interested in this type of dwelling. Drawing on the experience of both U.S. and Canadian cities and on an extensive scientific literature review, this guide aims to promote good practices and the adoption of enabling ADU regulations in Canada.

First, we will present the history of ADUs in Canada and the benefits associated with them. In the second section, we will discuss a few commonly agreed-upon general principles of ADUs—specifically, regarding the zones to prioritize for their development, their overall design, their insertion into a variety of environments and several regulatory lessons from U.S. and Canadian cities. We will conclude with a case study on a public consultation held by the City of Ottawa prior to the adoption of its enabling ADU regulatory framework. Readers of this guide will learn about the benefits and basic principles of ADUs and be better equipped to push for new enabling regulations.
History

Although ADUs have experienced a recent surge in popularity, this type of dwelling has existed in Canada since the 19th century. It has taken such forms as servant houses, coach houses, former stables and temporary houses refitted into a permanent apartment, and small apartments for young couples in large houses.

The main reason behind ADUs’ longevity is the economic crisis of 1929 and the housing shortage following World War II, which caused the phenomenon to become widespread. At the time, the Canadian government directly encouraged people to remodel their homes and create this kind of unit.

However, during the 1950s and 1960s, several factors contributed to their disappearance. Economic prosperity, the growing popularity of cars and federal homeownership policies drove families to settle in newly developed suburbs. This trend freed up urban dwellings for the less wealthy, and so there was less need for ADUs.

At the same time, municipalities started adopting zoning and building regulations. With the more prosperous times, ADUs were officially prohibited in the bylaws of most municipalities, especially in the suburbs, where single-family detached homes reigned supreme.

ADUs made a comeback in the recession and economic stagnation of the 1970s. From their former place in city centres, they moved to the basements of suburban homes, refurbished garages and backyard buildings. Since the 1990s, the uncertain economic climate and significant demographic changes have caused Canadian households’ interest in ADUs to climb steadily. Municipalities are also starting to take a closer look at them because of their many benefits.
Benefits

In Canada, the cities of Vancouver, Calgary, Edmonton and Ottawa, along with almost every municipality in Ontario, allow some types of ADUs. These cities chose to allow these dwellings because of the many benefits they offer, which include:

They meet a range of housing needs

With an aging population and homeownership out of reach for young people, ADUs can meet the needs of several demographics. This type of dwelling makes it easier for seniors to stay in their homes and for low-income households to gain access to homeownership and affordable housing.

They promote intergenerational and multi-family arrangements

In Canada and the U.S., more than half of ADUs are set up for a family member, which points to a growing need for such arrangements.

They optimize collective infrastructure

By channelling urban development into areas that are already served by public infrastructure ( sewers, water, roads, schools, etc.), ADUs optimize their use, which translates into major savings for municipalities.

They create additional income for both cities and homeowners

ADUs help bring in more tax revenues for cities and generate rental income for homeowners. Conversely, overly restrictive urban planning regulations discourage the construction of ADUs and keep existing ADUs part of an informal economy, which represents a missed revenue opportunity. In addition, the presence of well-integrated ADUs in a neighbourhood slightly increases the average property value.¹

They reduce urban sprawl and foster sustainable cities

ADUs can be a key element in policies to transition toward a more sustainable city. They are a means of bringing soft densification to existing neighbourhoods, which reduces pressure on natural and agricultural areas by redirecting real estate development away from them. In addition, by increasing the number of residents in an area, they make it possible to reach critical density thresholds that enable better public transit service and an improved range of local businesses and services.

The inclusion of ADUs in our territories can bring significant benefits; however, to enjoy these benefits, municipalities will need to target the appropriate areas to prioritize ADU construction, agree on a few basic ADU principles and determine how they want to enact new enabling regulations.

¹Several studies have shown that infill development brings a marginal increase in property values. The case of Edmonton, which has authorized ADUs for several years, corroborates this data. See Fischel 2001a, 2001b; McConnell and Wiley 2010; Gratton 2011; Brown and Watkins 2012; Salvador 2017.
This section draws on the experience of the cities of Vancouver, Ottawa, Toronto, Edmonton, Portland, Seattle and Santa Cruz, as well as on an inventory of scientific literature, to lay out some of the commonly agreed-upon key ADU principles.

First, we will propose some tools to identify areas with high development potential and a few basic design principles that transcend the specificities of each environment. Then, we will highlight issues specific to urban, suburban and rural contexts and several regulatory lessons learned from the experience of the seven cities we studied.
In order to maximize the benefits of ADUs in urban and suburban contexts, municipalities must target areas with high receiving potential. Here are some elements to take into account.

1 | Available space

First, an initial assessment must identify areas with a high number of open or underutilized spaces suitable for UDAs. In particular, the ratio of built to unbuilt environments and existing vegetation cover must be taken into account.

Map: Bird’s-eye view of a sector with detached, single-family homes.
Source: Arpent, 2018
2 | Infrastructure capacity

Second, the areas to prioritize are those that are over-equipped with grey infrastructure (water, sewer, roads, etc.) and public facilities (schools, parks, hospitals, etc.). Adding ADUs to those neighbourhoods optimizes the use of this expensive infrastructure and helps fund its maintenance through the collection of additional property taxes.

Neighbourhoods where actual density is lower than the planned density because of the general decrease in household sizes are also good targets. In those sectors, infrastructure is subjected to lower loads than expected, and so it can accommodate the extra density brought about by the construction of ADUs.

Illustration: Sewer (brown) and water (blue) systems are important infrastructures to consider when analyzing potential ADU receiving environments.
Source: Arpent, 2018
Finally, the decision to add ADUs must take into account the proximity of public transit infrastructure. Areas with existing train or subway stations and rapid bus line stops must be prioritized. ADUs can also be used to increase density in and around transit-oriented development (TOD) areas, enhancing their use and profitability.

The increased land use density that comes with the construction of ADUs is also an incentive and an opportunity to improve the public transit offer in areas where it is lacking. For example, municipalities can increase bus service and encourage car-sharing services in residential neighbourhoods to facilitate access to train, subway or tram stations.

Map: The surroundings of a train station. Within a 15-minute walk of this public transit station is a large number of low-density areas that could accommodate ADUs.
Source: Arpent, 2018
Design | *Respecting the receiving environment*

Once priority areas have been identified, a few generally agreed-upon ADU design principles provide an overall idea of which forms to prioritize.

1 | **Smaller size**

Fundamentally, an ADU must be proportionately smaller than the main dwelling. Usually, the living space of an ADU is less than half that of the main house. Depending on the environment in which it is inserted, it will take up between 15 and 50% of the free area on the lot. The ADU’s smaller size maintains its status as “accessory” to the main building and means the unit will not occupy a disproportionate part of the available area.
2 | Smooth integration

An ADU must fit seamlessly into the surrounding neighbourhood. This involves respecting the size and siting of other buildings. That being said, innovative and contemporary architecture has produced several examples of successful integration. In this spirit, although some regulations require ADUs to be consistent with the design of the original house, most of the cities studied preferred to leave some latitude in the architectural design of ADUs.
3 | Privacy

The regulations we studied highlighted the importance of protecting the privacy of occupants and neighbours. ADUs must be sited properly on a lot and have a sufficient setback and dedicated access.

In addition, the placement of its openings (doors and windows) must take into account the siting of neighbouring dwellings and yards. Skylights and dormers, for example, can provide good natural lighting without compromising privacy in the neighbourhood.

4 | Environmental considerations

Several environmental and climate-related considerations are mentioned in the regulatory frameworks studied. Whenever possible, ADU construction should not involve cutting down mature trees or endangering a fragile ecosystem. In some cases, a site drainage plan may be required. In the same vein, several requirements can be imposed to promote sustainable development.

For example, a vegetated setback may be required between an ADU and public roads. Green roofs, green walls and landscaping can also be encouraged for their esthetic quality and their role as thermal and hydraulic (runoff) regulators. Design requirements (such as the use of a passive solar system and thermal mass) can be included to reduce dependence on air conditioning and heating. Finally, if a parking space is a necessity, it should be uncovered and permeable in order to mitigate runoff and heat island effects.
Reflections on the optimal insertion of ADUs must take the specific characteristics of each environment into account. Urban planning departments can look to a handful of guiding principles in urban, suburban and rural areas for guidance.

**Urban environments**

These need original solutions tailored to dense fabrics—solutions that blend into each neighbourhood's style and comply with access requirements for emergency services. It is easier to insert an ADU in a dense area when it is accessible through an alley, which was the strategy adopted in Toronto and Vancouver. This possibility makes ADUs easier to access and enables them to occupy a larger area.
**Suburban environments**

Here, dwelling types and lot sizes vary greatly depending on when they were developed. Neighbourhoods built between 1950 and 1970 are often made up of large lots with small bungalow-style houses. Building a detached ADU (DADU) may then be the simplest and most cost-effective option, since it avoids having to modify the main building, as would be the case with the construction of an attached ADU (AADU). DADUs are usually permitted to occupy between 40% and 60% of the backyard.

If residents are apprehensive about a zoning change that would allow DADUs to be added to backyards, cities can proceed in phases by first allowing development on corner lots, as the City of Ottawa chose to do. In neighbourhoods built between 1980 and 2000, free space on the lot is often smaller, while the main dwelling is often larger. In such sectors, building AADUs and subdividing rooms inside the house to create accessory units (AUs) is the best course of action.
**Rural environments**

Although rural areas offer plenty of space, the main concern of the relevant authorities is to prevent ADUs from becoming a way to circumvent agricultural land and natural area preservation measures. Some provincial regulations require the installation of a separate septic tank and disposal field when the main building is not connected to the municipal sewer system. These developments represent significant environmental, technical and financial constraints in the construction of an ADU.

However, a number of strategies can be considered in order to adapt the strong demand for ADUs to the particular context of agricultural sectors. For example, the City of Ottawa’s urban planning department, in tandem with the Ottawa Septic System Office, developed a procedure to authorize the implementation of a smaller disposal field if a geological study produces favourable results.
Once key designing and siting principles have been determined, the finer details of municipal regulations can be explored. Although contexts vary by region and municipality, overall ADU regulatory principles remain the same. Building on the experience of Vancouver, Ottawa, Toronto, Edmonton, Portland, Seattle and Santa Cruz, this section highlights several regulatory lessons that will empower elected and municipal officials in the process of enacting enabling regulations.
1 | Flexibility

Having recognized that overly stringent regulations tend to keep ADUs part of an informal economy, the studied cities now opt for more flexible regulatory frameworks that adapt to a wide range of projects. Several restrictive standards were slackened or eliminated when ADU regulations were updated, which resulted in a notable increase in the number of projects built and declared.

2 | Incentives

All the studied cities have some form of financial incentive for the construction of ADUs. Generally, ADUs are exempt from the development and/or service fees normally collected by the municipality for new constructions, which represents savings of several thousand dollars per project. In Edmonton and Santa Cruz, the regulatory framework for ADUs is part of a housing affordability and homeownership promotion policy. In both cases, additional financial incentives are available under certain conditions.

1 In Edmonton, between 2006 and 2016, the Cornerstones program covered 50% of construction costs up to $20,000 subject to certain conditions such as the requirement to rent out the ADU below market price to an eligible household for at least five years.
3 | Minimum area

The development of an enabling regulatory framework for ADUs usually involves amending building and zoning bylaws to allow for the construction of smaller dwellings. It is interesting to note that the first draft of some of the bylaws studied included specific minimum areas for ADUs. When these bylaws were updated, all the cities in our study either reduced these requirements or completely removed them.

4 | Evaluation process

To avoid undermining the viability of ADU projects and laying a heavy administrative burden on the City, the process to evaluate a project and issue a building permit must be quick and simple. The studied cities now try not to resort to a long and costly derogation process. If the project respects existing regulations, its construction is permitted as of right.
### 5 | Occupancy requirements

Of the seven cities studied, only Edmonton and Santa Cruz chose to maintain requirements relating to the occupancy of the ADU or the main building by the owners. In addition, none of these municipalities require a family link between the occupant of the main building and the occupant of the secondary dwelling. Most of them now allow the construction of an ADU in the backyard and of a dwelling unit in the basement on a single lot.

### 6 | Parking requirements

The requirement for parking spaces calls into question the financial and technical feasibility of ADUs. Parking spaces have mostly been removed from the regulatory frameworks studied, especially in urban areas and areas that are well served by public transit. Where certain requirements are still in force, the construction of uncovered outdoor parking spaces that are permeable to rainwater is preferred.
7 | Disposable fields and septic tanks

ADUs are very popular in rural areas. However, the need to build separate septic systems may prevent the project from coming to fruition due to their cost and the space needed for a disposal field. Nevertheless, several solutions exist to overcome this obstacle. For example, the City of Ottawa sometimes waives regulatory requirements when soil studies are favourable.
The experience of Canadian and U.S. cities that have developed enabling ADU regulatory frameworks shows that social acceptability is a fundamental issue in the process. A new development project in a residential area is always likely to face “not in my backyard” (NIMBY)-type backlash, exacerbated in the case of ADUs because not only do they represent something new and unknown, they also challenge the deeply rooted idea of “one lot, one residence.”

Given the sensitive issues around ADUs, it is strongly recommended to carry out an awareness-raising campaign and a public consultation before starting the regulatory framework update process. For example, the City of Ottawa successfully carried out a consultation exercise in the fall of 2015 before adopting a new enabling ADU framework in the fall of 2016—an exercise that won it an award for planning excellence from the Canadian Institute of Planners in 2017. This last section draws on this example to guide the reflection of decision makers and professionals wanting to conduct an education and consultation process before adopting an enabling ADU regulatory framework.
1 | Depoliticizing ADUs

Ottawa’s urban planning department was in charge of the regulatory amendment project. The City viewed ADUs first and foremost as a technical matter. By entrusting the urban planning department with it, the City depoliticized the issue and ensured that the process would move forward independently of any political uncertainties.

2 | Holding an internal reflection process

Before starting a public consultation process, the City first sought information on the basic technical considerations of ADUs. A collaboration between the urban planning and buildings departments identified the technical issues involved in the construction of ADUs in different types of built environments.

3 | Public consultation

In a representative example, the City of Ottawa chose to hold public consultations before developing an enabling regulatory framework. The urban planning department wanted to inform the public, learn from local communities and build consensus on fundamental principles before looking into the technical details internally. Using this approach, Ottawa was able to take an open, listening stance, receive the concerns of residents and work with them to find appropriate solutions. To optimize the consultation process, the City of Ottawa chose to proceed in two stages:

**Stage A** | The first step of the consultation was held electronically. The reader-friendly information materials published by the City introduced residents to ADUs and their associated key terms and overall principles. Residents then had the opportunity to voice their opinions on the issue using electronic means.

**Stage B** | The second step involved integrated consultations in which various local bodies such as community organizations and neighbourhood associations were called upon. This let the City combine stakeholders’ fine knowledge of their communities with the know-how of professionals.

It should be noted that this consultation was held in the spirit of ongoing dialogue with those organizations, which were already familiar with the urban planning department’s objective of promoting infill development. They did not view the ADU regulatory framework as a surprise but rather as a concrete soft densification tool that they could help steer. Although Ottawa’s case study may serve as inspiration for many municipalities and agglomerations in developing their regulatory framework strategy, some municipalities do not have the internal resources needed to conduct a similar exercise. In such a case, the decision to call upon the expertise of external urban planning professionals will be decisive for successfully carrying out a public consultation and a regulatory amendment project.
Conclusion

The purpose of this guide was to stimulate reflection among elected officials and urban planning professionals and to provide tools to support the development of an enabling ADU regulatory framework.

The history of ADUs shows that they have been around for a long time and that their recent popularity is the result of the Canadian public’s changing housing needs. ADUs’ many benefits are encouraging an increasing number of Canadian municipalities to establish a framework around them in order to promote their development. Having identified a few key principles of ADU integration, we have concluded that their development must be prioritized in certain areas to generate maximum benefits. General principles of design, siting and regulation have highlighted best practices and laid the foundation for an enabling regulatory framework. And finally, Ottawa’s experience shows that it is desirable to start a public education and consultation process ahead of adopting an enabling ADU regulatory framework.

Of course, this guide could not cover the entirety of this complex and occasionally ambiguous topic. Still, past experience shows that a well-crafted enabling ADU regulatory framework can help municipalities optimize their infrastructure, generate additional revenue, meet changing demographic needs, create affordable housing without significant outlay, encourage intergenerational arrangements and transition to more sustainable cities and communities.

To conclude, by presenting the benefits of ADUs and identifying best practices, we hope to have contributed to a better understanding of the issues related to the construction of this type of housing. Ultimately, we hope decision makers are encouraged to take action!
Agents of change...

Municipalities are not the only entities promoting the potential of ADUs as a soft densification tool. In Québec, Arpent supports urban development stakeholders to promote the smooth integration of ADUs into our cities. In collaboration with many partners, including Canada Mortgage and Housing Corporation (CMHC), the urban planning firm held the First Québec Forum on the Future of Accessory Dwelling Units in February 2018. The event attracted over a hundred participants, including several elected representatives, builders, urban planning professionals and residents, who came to learn about ADUs and discuss their potential in Québec.

Arpent

Arpent is a not-for-profit urban planning firm that offers a wide range of land use planning services. Its mission is to assist municipalities, land owners and citizens in the consolidation of their territory to better meet the current and future needs of communities.

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References

If this topic is of interest to you, we recommend consulting the two reports on ADUs available free of charge on the Arpent website. Below is a full bibliography of the documents we used.


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