Alternatives to Long-Term Care & Housing: Environmental Scan

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Executive Summary

Overview

In response to the shortcomings of the current paradigms guiding housing and care, the City of Waterloo and the Age-Friendly Waterloo Multi-Agency Advisory Committee put out a call to search for alternative housing options for older adults. A team of graduate students from the University of Waterloo responded to this call and conducted the following environmental scan to support the development of approaches to housing and care that facilitate comfort, dignity, and autonomy for older adults.

This report:

- Provides a conceptual framework explaining the existing and alternative approaches for housing and care, focusing on the promises of an emerging approach called aging in community.
- Presents the findings of an environmental scan for alternative housing and care models that facilitate aging in community; and
- Identifies barriers and opportunities for implementing these models in the City of Waterloo.

Key Findings

1. **Aging in Community**: There is a distinction between the emerging approach of aging in community and the more common approaches of aging in place and aging in care. In aging in community models, older adults are better integrated into their communities and are valued members of their communities. These models fill in the gaps of aging in place and address the shortcoming of aging in care by targeting isolation and loneliness and providing social networks of care.

2. **Community-Led Implementation**: The City of Waterloo has a suite of tools at their disposal to encourage models that can realistically facilitate aging in community. However, to implement aging in community models, community interest must either be pre-existing or stimulated though policy and program facilitation. The City of Waterloo's primary role for implementing aging in community models is to remove existing policy and regulatory barriers, provide fiscal support, and/or partner with NGOs.

3. **Zoning Bylaw Barriers**: Restrictive zoning was a common barrier to implementation for most housing and care models under the aging in community approach. While the *City Form* section within the City of Waterloo's Official Plan provides a supportive foundation for aging in community models, numerous zoning bylaws weaken this supportive foundation. These zoning bylaws are primarily those that prohibit or restrict the existence of mixed-use neighbourhoods, especially those located in low-density areas.

1.0 Introduction

Within the City of Waterloo there are currently two main approaches to providing care and housing for older adults. This has caused an either/or scenario to occur, where either an older adult remains in place, typically within their home; or they move into an environment that offers them care, often within a facility. This is a difficult choice to make as individuals have attachment to the place they call home (Hwang, 2019; Rowles & Chaudhury, 2005). Yet, unmet needs, structural barriers, and social isolation can create unsafe environments that push individuals out of their homes and into care (Blachard, 2013; Weeks et al., 2020; Park et al., 2019). An overlap between these two approaches also exists, where care is provided within an individual's home. While this approach overcomes some of the shortcomings within the other approaches listed, it remains largely unresponsive because of a lack of service coordination (Picard, 2021). Furthermore, a lack of age-friendliness in the built environment makes it difficult for individuals to meet their needs as they age in their home, in care facilities or in between.

The COVID-19 pandemic has demonstrated the shortcomings of this either/or scenario, as older adults remain isolated either within their homes or care facilities. Individuals within both settings have experienced decreased access to social-emotional and health-care support, contributing to catastrophic COVID-19 related death rates for older adults (CDC, 2021; Science Table, 2021). The impacts from the COVID-19 pandemic also demonstrate that housing and care are only part of the picture to providing environments that facilitate successful aging.

This report provides an overview of the landscape that exists for housing and care for aging, with a specific focus on an approach deemed *aging in community*. To locate alternative forms of housing and care, it is important to understand the landscape of approaches that exist and to understand the differences between them. Aging in community is an emerging approach that provides alternative and more equitable models to housing and care for aging. This approach aims to overcome the shortcomings associated with both aging in place and aging in care, while specifically addressing the risks highlighted by the COVID-19 pandemic, such as isolation and loneliness. A secondary approach is also covered within this report, deemed *aging in embedded care*. This approach includes the aforementioned factors, however it is more applicable for those with greater care needs, as it combines aging in care approaches with aging in community.

The remainder of this section will provide an overview of the five different approaches to housing and care for aging. Following this section, the research methodology is described, which details the geographical boundaries and search strategies used. Following the methodology, seven different aging in community models for housing and care are outlined. These outlines include the model's benefits and limitations, along with examples that highlight how they operate. The following section aims to situate these models into the City of Waterloo context by analyzing how these models may face barriers or can be facilitated by policies, regulations, fiscal supports, and partnerships in Waterloo. The last section of this report recounts the general findings of the environmental scan and provides possible next steps for the City of Waterloo.

1.1 Overview of the Five Housing and Care Approaches for Aging

There are five approaches to providing housing and care for older adults. Aging in place and aging in care represent the two most distinct approaches. Aging in community has been identified as a third, emerging approach that aims to address the shortcomings of aging in place.

It also contributes to the same overarching goal of allowing aging to occur within the place that an individual is emotionally attached to, which causes aging in community to be connected to aging in place. There is an overlap between aging in place and aging in care to create a fourth approach of aging in place-based care; and an overlap between aging in community and aging in care to create a fifth approach of aging in embedded care. No overlap exists between aging in place and aging in community. Instead, a blurred boundary exists between these two approaches because aging in community is still becoming its own separate approach based on community integration, while still incorporating the various facets of aging in place.

Figure 1. Approaches to Housing and Care for Older Adults
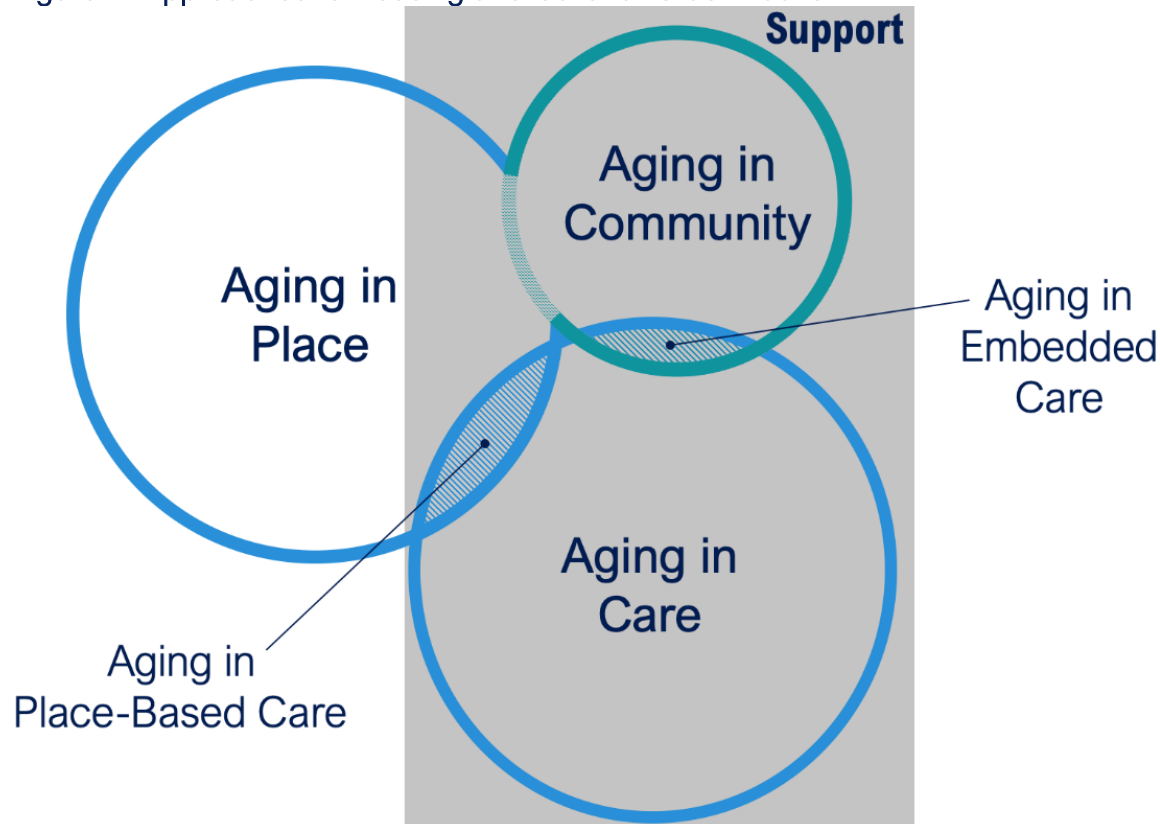
1.2 Three Broad Approaches to Housing and Care for Aging

The aging in care approach developed first. This approach developed in response to the mismatch that individuals experience when their environment no longer matches their capabilities (Wahl et al., 2012; Week et al., 2012). As an individual ages, their abilities change. This often leads to a situation where an environment that was once a good fit for an individual, gradually or suddenly becomes a poor fit. To overcome this poor fit, an individual moves to a new environment that provides them a better fit. While this approach to housing and care provides relief for a poor environmental fit, it is also premised on age segregation, as older adults are expected to move into homes that are exclusively meant for the elderly. This segregation limits an individual from being fully integrated into a broader community, which often leads to isolation and loneliness (Blanchard, 2013). Other shortcomings of this approach include limits to the quality and flexibility of care an individual can receive due to the institutional nature of these settings (Roberts & Pulay, 2018; Ziemba et al., 2009).

The aging in place approach developed in response to the shortcomings of aging in care. This approach is premised on movement prevention, as it aims to prevent individuals from moving into a new environment. While this approach is not centred on segregation, it does not actively prevent isolation and loneliness. This lack of active prevention often results in individuals experiencing isolation and loneliness, which is also associated with a lack of age-friendliness found within urban settings (Ronzi et al., 2020). Furthermore, individuals may experience a lack of access to supports that meet "smaller" or infrequent needs such as household and seasonal chores like lawn care or vacuuming (Martin et al., 2019; Rosenwohl-Mack et al., 2020). While this lack of access may seem insignificant, it has been identified as one of the primary causes leading to dissatisfaction with aging in place living arrangements. Issues of affordability and awareness also contribute to a lack of access for aging in place supports (Martin et al., 2019).

The aging in community approach is the third broad based approach. It represents less conventional models. This approach can be understood as a better way to age in place as older adults are viewed as a part of the general community (Ronzi et al., 2020). The primary factor that defines this approach is an integration into the general community by providing a social network of care that aims to fill in the gaps associated with aging in place. Aging in community focuses on integration, as opposed to aging in place which focuses on movement prevention. Therefore, this approach specifically targets the isolation and loneliness often overlooked in the aging in place approach, while also overcoming the shortcomings of aging in care.

1.3 Description of the Five Approaches to Housing and Care for Aging

Aging in Care
Aging in care provides age segregated housing where care can be administered. This approach provides environments that accommodate older adults as they experience declining physical capabilities (Degenholts et al., 2006). An array of housing and care types are offered under this approach, including retirement homes, continuing care retirement communities, and long-term care homes (Closing the Gap, 2019). Movement into these facilities often coincides with the death of a partner, the inability to perform household upkeep and/or worsening health (Martin et al., 2019; Weeks et al., 2012). In these facilities, social interaction among residents is often promoted through activities. However, many residents find this social interaction to lack intimacy and deep meaning, and aspire to remain connected with friends, family, and the broader community (Addae-Dapaah, 2008). There is also a lack of autonomy and agency over care provision as these settings require centralized administration (Roberts & Pulay, 2018). Providing personalized care within these settings can be difficult to achieve due to chronic understaffing and/or residents living in the wrong type of housing (Mahoney & Gok, 2009; McFadden & Lucio, 2014; Park et al., 2019; Ziemba & Perry, 2009). These qualities frequently contribute to older adults preferring to remain in place rather than move into a retirement home or care facility (Glass, 2014; Kaye et al., 2010; Seifert & Schelling, 2018).

Aging in Place
Aging in place is centred on keeping older adults within the ordinary housing market and preventing movement into a retirement home or care facility (Martens, 2018). This allows individuals to remain within the place where their personal world has been created (Golant, 2015; Hwang, 2019). Successful aging in place requires an environment to be responsive to the changing needs of those who are aging, yet this can fail to occur if information about support and/or access to support is limited (Rosenwohl-Mack et al., 2020). Within this approach a lack of community integration and

social connection can cause individuals to experience both social and physical isolation as care and greater community involvement becomes increasingly inaccessible with age and declining physical capability (Blanchard, 2013; Martin et al., 2019). LGBTQ+ individuals, ethnic minorities, Indigenous elders, renters, and low-income individuals are more vulnerable to experience this shortcoming due to real or perceived threats of discrimination and/or an inadequacy of targeted support (Channer et al., 2020; Martin et al., 2019; Rosenwohl-Mack et al., 2020; Weeks et al., 2012).

Aging in Place-Based Care
Aging in place-based care is beneficial for keeping individuals in place longer as support becomes integrated into their living environment and their emotional ties to place remain unsevered. Yet, this approach is still largely unsuccessful in addressing broader community integration as it does not target the social isolation often experienced when individuals age in place (Blanchard, 2013). This approach can look like individuals moving into care facilities that are located within their neighbourhood (Ziemba & Perry, 2009). Another example of aging in embedded care is home care, where care such as bathing and meal preparation are provided for an individual within their home (Closing the Gap, 2019; Paying for Senior Care, 2020). Fragmented service provision is frequently experienced within the approach, which often makes this approach inaccessible and difficult to navigate (Pichard, 2021).

Aging in Community
Aging in community provides pathways for sustainable social networks that are responsive to individual needs, while also empowering individuals to be directly involved in meeting their own and other's needs (Channer et al., 2020; Wiles & Jayasinha, 2013). A primary facet of this is community integration, where older adults are integrated into the broader community instead of being segregated into specific environments (Ahrentzen & Steiner, 2019). Through this approach autonomy and rich social networks can be fostered, as both environmental fit and social-emotional well-being guide the implementation of housing and care (Addae-Dapaah, 2008; Au et al., 2020; Hart & Biglieri, 2018). Instead of individuals experiencing solo and/or segregated aging journeys; friends, family, and neighbours support each other as they age (Blanchard, 2013; Ermer & Proulx, 2019). This allows older adults to maintain a greater sense of purpose within society as they experience opportunities to "give back" and shed the stereotype of being a "burden", which often produces decreased self-esteem and low social-emotional well-being (Mahoney & Gok, 2009; Martin et al., 2019; Ronzi et al., 2020; Rosenwohl-Mack, 2020; Wiles & Jayasinha, 2013). This builds on the aging in place approach, as a feedback loop occurs between social-emotional connection to community and attachment to place (Au et al., 2020; McFadden & Lucio, 2014; Ronzi et al., 2020). When this feedback loop is strong, individuals can more readily experience resiliency and interdependence as they assert agency over their environment and care (Wiles & Jayasinha, 2013). This agency is a primary factor in determining whether an individual chooses to remain in a positive, familiar setting or is trapped in an unsuitable/undesirable environment (Rosenwohl-Mack, 2020).

Aging in Embedded Care
Aging in embedded care occurs when age-segregated care facilities are embedded within a broader community. This can look like retirement villages where some level of care is provided to residents, while the building remains integrated into neighbourhood design (Martens, 2018). This enables a sense of belonging to the greater community especially when this design is supplemented with age-friendly policies that ensure older adults are incorporated into the social makeup of a place (Channer, 2020). Aging in embedded care provides an option for an aging in

community approach that responds to older adults who require care beyond what is typically provided in aging in community approaches. Through this approach, increased levels of care are provided that do not diminish focus from community integration.

2.0 Research Methodology

There are two key objectives of this report. First, to conduct an environmental scan of the literature for housing and care models that facilitate aging in community, and second, to identify barriers and opportunities to implementing these approaches in the City of Waterloo.

2.1 Environmental Scan

For the environmental scan our initial geographic scope was limited to literature from Canada and the USA to maintain a comparable cultural and policy context. Following a review of this initial scope, Denmark was also included within the search, as this country is a recognized international leader of enabling the aging in community approach (Picard, 2021).

For each model identified, we reviewed its key characteristics and relative strengths and weaknesses. Specific examples of each model were then explored using the following criteria:

- **Location:** Municipality, Province or State, Country

- **Overview of Project**: What are the key characteristics of the project or initiative?

- **Development and/or Administration**: How was the project developed and/or how is the project administered/managed/implemented? Who was/is responsible for this?

- **Enabling Policies/Regulations/Fiscal Support:** What federal/provincial (or state) and/or local policies and/or regulations enable or support the project? How is the project fiscally supported?

2.2 Assessment of Implementation Opportunities and Barriers Strategy

Following the identification and overview of aging in community models and specific examples, the literature was reviewed to identify how municipalities can implement these models locally using policy and other support mechanisms within their jurisdiction. For each model, we identified which specific mechanisms are needed for their implementation, as well as considerations for the design of these mechanisms. Following this, we reviewed the City's Official Plan and Zoning Bylaw to identify supportive and impeding policies and regulations and identified potential fiscal supports and partners that the City could consider for implementation.

2.3 Search Strategy

Academic and grey literature were drawn from the following databases: The Journal of Housing for the Elderly through Taylor & Francis Online; Google Scholar; Omni; and SCOPUS.
The keywords used in the literature search include: Accessory Dwelling units; ADUs; Age segregation; Age-friendly cities; Age-friendly community; Age-friendly housing; Age-Integrated Communities; Aging in care; Aging in community; Aging in place; Alternative housing options; Care facilities; Care institutions; Co-housing; Cohousing; Co-sharing; Elderly housing; Infill Housing; Intergenerational Housing; Intergenerational Living; Long-term care; Multigenerational housing;

Multigenerational living; Naturally Occurring Retirement Communities; NORC; Nursing Homes; and Pocket Neighbourhoods.

3.0 Housing Models that Enable Aging in Community

The findings from our environmental scan will be presented in the sections below. A general overview and definition of each model will be given, along with its associated benefits and limitations. Existing examples for each model are given to further illustrate how the models operate.

3.1 Cohousing

Co-housing is a form of housing tenure with shared community features, while still maintaining a certain level of privacy. Specifically, co-housing units typically consist of individuals in private dwellings, clustered around communal spaces. Private dwellings are fully equipped with individual kitchens, bathrooms, and bedrooms – comparable to conventional apartment complexes. However, co-housing complexes also offer additional spaces for communal use, such as recreational spaces, communal kitchens, and living spaces or "common houses". Co-housing works to fulfill individual needs for privacy and space while encouraging active participation within a community. Ownership of co-housing units can vary greatly. Some co-housing units are owned privately by an organization or individual party and are rented out. Others may be owned collectively by members under a co-operative structure. Alternatively, some co-housing communities may operate like condominiums, where individuals hold ownership of their personal units in addition to shared ownership of common property. It is important to note that co-housing is not exclusively aimed towards seniors. Co-housing communities are also suitable and attractive to a diverse range of individuals and families. However, for the purposes of this review, the co-housing model is explored from the perspective of housing older adults.

Benefits	Limitations
• Residents can control the intensity, frequency, and type of care which they receive. • Community atmosphere allows residents to seek informal care and support from neighbours and community members when necessary. • Mutual assistance reduces the effects of social isolation and loneliness. • Alleviates the burden on family members and caregivers who may not be able to provide the type, intensity, and frequency of care required.	• Co-housing models may over-emphasize group participation at the expense of residents' personal lives. • Ambiguous expectations amongst residents to participate in group activities can cause tensions to arise between residents, especially towards residents who do not meet those expectations. • Cannot accommodate the needs of residents who may require more intensive forms of health care, as onsite medical resources and staff may be limited.

Example: Hesperus Village

Location	Vaughan, Ontario
Overview	Hesperus Village is a 77-unit senior co-housing residence that was created by a group of seniors in 1987 using the architectural philosophies of Rudolph Steiner, renowned philosopher, and founder of Waldorf schools. It has a variety of studio, one bedroom, and two-bedroom units with rent-geared-to-income options, along with shared indoor and outdoor spaces for residences to gather, socialize, and cook together. Hesperus Village shares a campus with the Toronto Waldorf school and the Rudolf Steiner Centre, allowing for interaction with different age groups.
Administration	The founding members formed a not-for-profit organization, and a volunteer Board of Directors currently has oversight over fiduciary responsibilities and the operations of the residence. Care is provided through North York Seniors Centre and Pegasus Therapeutics Medical Clinic. Residents who are interested in living at Hesperus Village must apply and are currently placed on a waitlist. Paid staff manage day-to-day operations.
Enabling Policies/ Regulations/ Fiscal Support	The founding members raised funds to purchase the land adjacent to the school with their non-profit charitable status. Hesperus Village is considered a group home and was built in a residential zone (R4) that permits the development of group homes.

Source: Kalvari (2020)

Example: Harbourside Cohousing

Location	Sooke, BC
Overview	Harbourside Cohousing is a 31-unit senior co-housing community comprised of older adults who want to foster social interaction, community, and affordability. It was founded on the principle of co-caring (providing mutual assistance to each other) to facilitate aging well in community, and the participatory development process (Rodman, 2013).
Administration	Property owners co-own shared amenities, such as the Common House (a shared housing facility that is used for group dining, meal preparation, storage, and other uses). Harbourside Cohousing is a strata property (condo) under BC's Property Act. All owners are on the council, which encourages tenant participation (consensus-style decision making instead of voting) and members pay the same strata fees, despite varying property prices per individual units (Watson, 2016). Units can be privately owned or rented by the owner and are sold at market rates when they become available (Watson, 2016).
Enabling Policies/ Regulations/ Fiscal Support	The project received funding and loan support from Canada Mortgage and Housing Corporation (CMHC), including a $10,000 seed funding grant, a $50,000 grant to cover development application costs, and a $10,000 interest-free loan (Watson, 2016).

Source: Canadian Senior Cohousing (2021)

3.2 Pocket Neighbourhoods

Pocket neighbourhoods are a group of smaller residences that are clustered around a shared open space (VandenBrink, 2019) (see Appendix 2.0). Pocket Neighbourhoods facilitate aging in community because the units are designed to foster social interaction between neighbours. They are organized around communal spaces which allows residents to develop and maintain social relationships. The concept, created by Architect, Ross Chapin, and Developer, Jim Stoules is a set of design principles that together are intended to promote a sense of community among residents (Liddell, 2015). Pocket Neighbourhoods are often described as being a neighbourhood within a neighbourhood. They are intentionally designed to promote social interaction and connection through specific design principles (see Box 1.0).

Box 1.0

1. Connection to community amenities, services, and green space.
2. Incorporate energy efficient design and technology.
3. Human Scale: space is proportioned in relation to human dimensions and optimized for human use.
4. Each neighbourhood should be no larger than 8-12 residences within close proximity to one another.
5. Cars and traffic do not invade the neighbourhood.
6. "Active rooms", like main entrances and front porches, face one another.
7. Windows are placed intentionally to layer in privacy.

Source: Ross Chapin Architects (n.d.)

While Pocket Neighbourhoods include a specific set of design elements, the general idea reflects other planned housing communities like the Working Men's Cottages in Brooklyn New York, The Sunnyside Garden Apartments in New York, Radburn in New Jersey, and the Bungalow Courtyards in California (VandenBrink, 2019). Pocket Neighbourhoods share some of the same principles as co-housing, like shared common spaces and agreements to share responsibilities and resources (Clark, 2020; Liddell, 2015).

Benefits	Limitations
• Integration into wider community (Holden et al., 2019). • Communal spaces allow for social interaction (Liddell, 2015). • Facilitates multi-generational living (PBS, 2015) • Can be built using modular housing technology, which may assist with affordability (Bullard, 2020). • Pocket Neighbourhoods residences with more affordable rates may allow for a reduction in municipal and provincial expenses associated with subsidy programs (Holden et al. 2019; Bullard, 2020). • Allows for the inclusion of a room or suite for a caregiver.	• Not specifically designed for older adults or aging, therefore limited academic literature on how pocket neighbourhoods may help or hinder age-friendly planning. • There is no consensus about whether energy efficient technology in pocket neighbourhoods is more "affordable" for residents (Liddell, 2015). • Pocket Neighbourhoods can contribute to sprawl if they are not specifically incorporated into official or secondary plans as a form of intensification (i.e., through the development of infill sites).

Example: Aurora Pocket Neighborhood	
Location	Ithaca, New York
Overview	The Aurora Street Pocket Neighborhood is a cluster of 6 residences that has been constructed on 2 neighbouring lots. Residences are designed to be facing one another and resources and responsibilities are shared amongst the residents. The Pocket Neighborhood is within walking distance of community amenities and services in the Fall Creek neighbourhood.
Administration	The Pocket Neighborhood is cooperatively owned and managed by the residents. The lots were initially owned by two individuals who worked together to build four additional cottage style residences on their respective lots.
Enabling Policies/ Regulations/ Fiscal Support	The Aurora Pocket Neighborhood was funded through the collective contributions of the residents.

Sources: Dwyer (2013); PBS (2015)

3.3 Second Units

Second units or accessory dwelling units (ADUs) are commonly known by a variety of names and can take different forms, including accessory apartments, secondary/additional dwelling units, second residential units/suites, laneway homes, garden suites, in-law suites, or "granny" suites (See Appendix 3.0). However, the physical form and regulations surrounding iterations of second units will vary among different municipalities. Such units are "self-contained" and typically feature a private or separate entrance, private bathroom, kitchen facilities, as well as sleeping and living areas. Second units are constructed on the premises of a primary residence as an additional dwelling unit. They can be constructed as an extension to an existing home, a detached structure on the property, or they can also be a converted space, such as a basement apartment. The literature includes second units as an option for housing older adults as a form of aging in community (Ahrentzen & Steiner, 2019), as well as aging in place. This model is representative of aging in community as older adults can live near family members, as is the case with "in-law" suites. Such units provide access to social interactions, relative independence with reliable supports nearby, as well as the advantage of having assistance or care when needed. Second units can also offer older adults an opportunity to age in a more affordable and alternative housing model (Chapple et al., 2017).

Benefits	Limitations
• Older adults can retain kinship ties if the unit is on a family member's property. • Financial hardship and social isolation can be mitigated; property maintenance costs can be shared or reduced (Goodbrand et al., 2017). • Increase housing stock and increase diversity of housing options.	• Financial constraints could impact potential for renovation or construction in the absence of loans or grants. • Some older adults can still experience isolation if residents of the premises are not home often. • Unit design could become problematic if it does not allow for easy mobility or accessibility. For example, if the unit is in a basement with a steep or narrow staircase.

- Relatively more affordable than buying a condominium unit and other forms of housing.
- Encourages gentle or hidden density without major changes to neighbourhood character (Koehn, 2017).
- Public acceptance is relatively high (Center for Public Impact, 2016).

Example: An Award-Winning ADU Program

Location	Santa Cruz, California
Overview	The City of Santa Cruz's ADU ordinance passed in 2002, which updated the zoning ordinance, created design standards, and an integrative permitting process. The city's ADU program has been recognized for offering incentives to residents to ease the process of applying for and constructing ADUs. Incentives for ADU development include creating public awareness about the benefits of ADU's to property owners, financial supports, expanded lot size for the new units, and guidance from the city during the permitting process.
Administration	The municipality provides ADU design suggestions (developed by architects), an ADU loan program, and a wage subsidy for hiring newly graduated trades and builders, among other incentives. An expedited permit process is available to homeowners who choose an architect-developed design suggestion. This award-winning program combines design options, permitting, technical assistance and financing in an integrative and streamlined manner which encourages ADU development. With the City's preapproved plans program, applicants can purchase plans from the city, which helps save both time and money.
Enabling Policies/ Regulations/ Fiscal Support	Financial incentives are available for construction or permits, such as permit fee waivers for homeowners if the resident(s) of the *new* unit are a low-income household, such as older adults on a fixed income. More recent updates to the ADU zoning regulations includes that units are now permitted on multi-family and mixed-use properties, in combination with other existing residential uses.

Sources: Bhatt & Ryan (2015); City of Santa Cruz (2003); EPA (2004)

Example: Progressive Zoning Reform

Location	Portland, Oregon
Overview	The City of Portland has recently taken steps to update their zoning in an effort to address housing affordability. In the process, it is reportedly one of the most significant zoning reforms in US history. With the city's new "residential infill project", which includes second units/ADUs, more diverse and affordable housing options are made possible to allow this form of housing in traditionally low-density residential zones (see Appendix 3.1). Public confidence or acceptance of these changes is also relatively high, quelling fears of resident opposition or NIMBYism.

Administration	The program is administered by the City of Portland. This zoning reform was six years in the making and the city has changed the rules as one of the ways to address housing affordability. They want to help create additional and affordable housing options for the changing circumstances and needs of residents.
Enabling Policies/ Regulations/ Fiscal Support	Second unit financing incentives include a development charge waiver program with a 99% approval rating. The waiver program incentivizes homeowners to build ADUs to add diverse and affordable housing options in Portland. Another enabling policy was an end to mandatory parking for additional units. The Residential Infill Project seeks to increase housing choices in several single-dwelling zones, while also limiting the construction of very large new single-family dwellings.

Sources: Andersen (2020); Center for Public Impact (2016); City of Portland (n.d.); City of Portland (2019)

3.4 Naturally Occurring Retirement Communities (NORCs)

The term "naturally occurring retirement community" (NORC) has been used since the 1980's (Hunt & Gunter-Hunt, 1986). NORCs are communities where the majority of residents are over the age of 60, but in which this was not explicitly designed or planned for. NORCs may develop in three ways: (1) numerous adults move into a community and age in place; (2) older adults remain in a community while younger residents move out; or (3) numerous older adults migrate into a community (Hunt & Gunter-Hunt, 1986; Masotti et al., 2006). NORCs exist in various forms, including apartment neighbourhoods, condominiums, and/or single-family homes.

NORCs exist on a spectrum of NORC *to* Healthy NORC, wherein the political, social, and physical environments of NORCs vary (Masotti et al., 2006). Healthy NORCS are vibrant communities characterized by a large population of residents who are physically and socially active, and as a result, represent an example of aging in community (Masotti et al., 2006). A healthy NORC requires accessible and walkable access to amenities and services, as well as an adequate public transit system with access to key destinations.

The inclusion of "senior-friendly" programs, such as Support Services Programs (SSP), contribute to an active community environment and ensure sustainability (Bedney et al., 2010; Masotti et al., 2006). The NORC-SSP model centres around community level interventions (Bedney et al., 2010). It aims to provide flexible and integrated health and social services through community partnerships (Ivery et al., 2010). Elements include coordination of on-site healthcare, social services, activities, along with forming partnerships to connect residents to service providers, businesses, government, and organizations (Bedney et al., 2010). NORC-SSPs demonstrate active involvement of older adults and caregivers in decision-making processes about care, while also utilizing community characteristics to deliver services (Ivery et al., 2010).

Benefits	Limitations
• Enables active environments and social interactions between residents (Masotti et al., 2006).	• May go unnoticed as not directly marketed towards elderly populations (Hunt & Gunter-Hunt, 1986). • Non-healthy NORCs may lack coordinated support services and opportunities for

- Allows residents to live independently while encouraging a neighbour-helping-neighbour environment (Guo & Castillo, 2012).
- Provides an opportunity for the implementation of support programs that can be targeted and cost efficient (Masotti et al., 2006).
- Provides opportunities for private sector investment to respond to senior's needs, which can benefit a local economy (Masotti et al., 2006).

socialization and recreation (Hunt & Gunter-Hunt, 1986; Guo & Castillo, 2012).
- Depending on the location, immediate health care in case of emergency may be unavailable (Guo & Castillo, 2012).

Example: Cherryhill, A Healthy NORC

Location	London, Ontario
Overview	Cherryhill is made up of 13 compact rental apartment buildings which are constantly evolving to meet the changing needs of its older residents. It is strategically located close to the downtown core and Western University and is well connected through public transit and an accessible bus shuttle service. The community has walkable access to a mall with a variety of essential services, including healthcare and a place for social gatherings. The design of the community features extensive green space and walking paths.
Administration	The apartments are managed by the property owner, Esam Group Ltd. A variety of health and social services are provided via the Cherryhill Aging Program, a collaboration of residents, researchers from the Western University, local businesses, and community organizations.
Enabling Policies/ Regulations/ Fiscal Support	The Ministry of Health and the Canada Foundation provided research funding support to expand the shared learning partnership and apply the research to other NORCs.

Source: Kloseck et al. (2010)

Example: NORC at Ellison Park Apartments

Location	Rochester, New York
Overview	This NORC-SSP provides seniors the opportunity to age in their own apartments with the support of a community social worker. The community social worker collaborates with residents and various community members to coordinate a diverse range of health, social, and recreational care services (including transportation, in-home assistance with laundry and housekeeping, in-home personal care, counseling, navigating health and/or insurance systems, educational programs, and social events).
Administration	NORC at Ellison Park Apartment complex is collectively managed by Jewish Family Services and a property manager. A Resident Advisory Council, comprised of senior residents and social workers, addresses the needs and concerns of community members and helps determine programs and activities.

Enabling Policies/ Regulations/ Fiscal Support	Programs and services are made possible through the financial contributions from the New York State Office of Aging, Jewish Family Services, and Eastwood Management. Service provision is regulated by the New York Consolidated Law, Elder Law Section 209.

Source: Jewish Family Service of Rochester (n.d.)

3.5 The Village Model

Villages are member-based, grassroots organizations formed for the purpose of providing support and services to older adults. Village members want to "change the paradigm of aging" (V2V Network, n.d.), and they are typically governed and run by older adult members of the "village". Therefore, the basis of the village model is a network that supports and enables older adults to age in community, while simultaneously aging in place. Village networks connect their members to a range of services, assistance with non-medical needs, recreational activities, and transportation. Social, cultural, and educational activities or programs also play a role in building a greater sense of community while also reducing isolation (V2V Network, n.d.).

Older adults can age in a place of their own choosing through the existence of a Village Model. In this network, they have access to programs to remain active, healthy, independent, and can also access any needed supports and tools in their communities. Research has shown that older members tend to have better health and quality of life benefits from the Village because of their membership and participation (Graham et al., 2017). The model can be replicated, with a *Village 101 Toolkit* available online, and there are currently 267 active Villages in the US (V2V Network, 2021).

Benefits	Limitations
• There is a greater sense of autonomy, as older adults choose the type of programming and services they want through their own organizational efforts. • A Village can be made up of familiar neighbours, or it is also an opportunity to get to know older adults in the neighbourhood in order to minimize isolation.	• As this is a member-run program, it will require the will and the organization of local older adults and partner organizations to develop their own grassroots initiative.

Example: Beacon Hill Village	
Location	Boston, Massachusetts
Overview	Village services include help from staff, volunteers, and other strategic partners, such as service providers. The village promotes a range of programs and activities to ensure that older adults stay active. Programs include exercise and wellness, social gatherings, resources for safety and independence, skills workshops, arts and culture, as well as excursions. As the village is membership-led, they encourage members to make suggestions to program offerings which reflect the interests and requests of their membership base.

Administration	The village has non-profit and nongovernmental status and is developed and governed by older adults themselves (as volunteers and staff).
Enabling Policies/ Regulations/ Fiscal Support	Members pay an annual fee (up to $675 – $975 per year) for the services provided by the village. Low-income households and individuals may qualify for a reduced annual fee ($110-160). As this model is service and program-based, there are no land-use related policy barriers to consider.

Source: Beacon Hill Village (2020)

3.6 The Danish Model: Multi-Purpose Nursing Homes

Multi-Purpose Nursing Homes combine aging in community and aging in care approaches to create a community-based approach for older adults with greater care needs. Multi-Purpose Nursing Homes enable residents to receive the formal care they need while also creating opportunities for them to develop deep and meaningful relationships with other residents, caretakers, and community members. This emerging approach draws heavily on design practices to integrate and reduce the physical and social segregation of older residents from the broader community. A special emphasis is placed on housing design, ensuring Multi-Purpose Nursing Homes are aesthetically congruent with the design of surrounding structures – drastically reducing the separation of seniors from the community. Moreover, the physical form of Multi-Purpose Nursing Homes also plays a functional role in providing care for older adults. Creating multi-functional spaces and providing a mix of public and private spaces allow residents to maintain a level of independence and agency within the facility. Multi-Purpose Nursing homes are often equipped with communal spaces, such as kitchens and leisure spaces available to everyone. However, residents are also divided into smaller "units" and share spaces only accessible to the members of said unit.

Benefits	Limitations
• Residents can develop meaningful relationships with care providers, other residents, and the broader community. • Personal Service Workers (PSW) can provide personalized care for residents. • Mixture of private/public and multi-functional spaces allows residents to personalize the level of engagement with others, while maintaining a certain level of privacy. • Multi-Purpose Nursing Homes structures are typically integrated within pre-exiting communities – limiting the extent of segregation from community and facilitating community interaction.	• PSWs can only provide residents with care equivalent to North America's level-one care. Care may not be sufficient for residents who require more intensive forms of care.

Example: Plejecentret Lillevang	
Location	Farum, Copenhagen
Overview	The Plejecentret Lillevang Nursing Home is composed of four buildings with twenty-four units in each building. Each unit is subdivided into three smaller self-contained "families" – where individual bedrooms are clustered around a

	kitchen, bathroom, and a living room only accessible to family members. Residents have individual bedrooms, and couples can request adjoining rooms. Each family has a personal, full-time, live-in personal support worker (PSW) who does not circulate between other families. Communal spaces are also available within the unit for residents who value the opportunity to interact with those outside of their family. In the centre of the Plejecentret Lillevang community is a senior's day care centre, hairdresser, dentist, and rehabilitations centre which serves surrounding communities, in addition to the Plejecentret Lillevang Nursing Home. This creates opportunities for older adults to interact with the community outside the facility.
Administration	Each unit is managed by permanent central staff. Residents are responsible for monthly fees which include their room, meals, heating, and cable.
Enabling Policies/ Regulations/ Fiscal Support	Depending on the resident's circumstances, both financial and care needs, the Danish government may cover all or a portion of the associated costs.

Source: Shiner (2020)

3.7 Intergenerational Housing

Intergenerational housing is any housing model that supports a multigenerational housing arrangement (Matter Architecture, 2019). Multigenerational living environments are those where a diverse mix of people of different ages live together and share life experiences and skills (Zhong et al., 2020). As a result, this approach resolves issues older adults encounter while living in aging in care facilities or when aging in place (Arentshorst et al., 2019). Intergenerational housing facilitates aging in community by providing the means for older adults to develop meaningful community connections while increasing interdependence and healthy active aging (Matter Architecture, 2019). According to Statistics Canada, multigenerational living arrangements, which are households with two or more generations of related adults living together (Matter Architecture, 2019), are on the rise as one of the fastest growing household types in Canada (Matter Architecture, 2019). Factors contributing to the rise of multigenerational households is a combination of economic realities, a growing aging population, increased housing costs, cultural norms, and different ethnocultural compositions (Matter Architecture, 2019).

There are various kinds of intergenerational housing schemes, each tailored to meet the diverse needs and support the lifestyles of the individuals living there. The diversity of each housing scheme means that there is no universal form of multigenerational housing (Matter Architecture, 2019). Multigenerational housing schemes and programs include purpose-built accommodations, the utilization of accessory dwelling units on main residences, as well as co-housing and congregate housing. Support from community partners such as non-profit organizations, universities, and businesses help facilitate intergenerational programming activities and housing options (Ministry of Finance, 2018).

Benefits	Limitations
• Scalability: elements of multigenerational living can be incorporated into other housing models such as co-housing or into	• Housing models that incorporate intergenerational living can face incompatibility issues amongst residents who live together,

assisted care facilities (Matter Architecture, 2019).	especially true in co-housing cases (Neighbor to Neighbor, 2020).
• Depending on the housing model, it provides a comprehensive and holistic form of care that addresses the social, cultural, and economic issues that community members face, especially older adults (Arentshorst et al., 2019).	• For some multigenerational households, home sharing represents increased expenses rather than savings (Ministry of Finance, 2018).
• This model addresses housing unaffordability and makes use of "empty" housing stock (Matter Architecture, 2019; Ministry of Finance, 2018).	

Example: HomeShare Program

Location	Larimer County, Colorado
Overview	The HomeShare Program is a roommate finder that incorporates elements of intergenerational living into the home-rental model pairing 55+ older adults (HomeProviders) with other adults (HomeSeekers) together. In this program, older adults who are homeowners offer low cost or free accommodation to a tenant in exchange for doing light housework. These housing arrangements are bound together by informal agreements between participants (Ministry of Finance, 2018).
Administration	The program is administered by Neighbor-to-Neighbor (N2N), a non-profit organization that specializes in meeting individuals' primary housing needs. A compatibility pairing process pays particular attention to the participants' needs, lifestyle choices, and interests. Each HomeSeeker must meet the eligibility guidelines, and final decisions are made between participants. The N2N screening process focuses on participant eligibility, with features to ensure safety and security for all participants.
Enabling Policies/ Regulations/ Fiscal Support	Administration costs of the program are supported by N2N's budget, which is publicly and privately funded. An absence of restrictive regulations enables the living arrangements supported by the program.

Source: Neighbor to Neighbor (2020)

Example: McMaster Symbiosis

Location	Hamilton, Ontario
Overview	An intergenerational co-housing program that aims to improve social inclusion among older adults. The program pairs university students who need an affordable housing solution with older adult homeowners who have a spare room to rent.
Administration	The program is directed by Soumeya Abed at McMaster University and was launched by the School of Graduate Studies. It is open to all McMaster students and older adults (55+) in the Greater Hamilton Area. There are two rental options for students: (1) free room (in return for light housework and support around the house); and (2) a low-cost room. A participant pairing

	process considers and matches participants based on needs and preferences, and both parties sign a personalized co-housing agreement. This document represents a mutual agreement between the two parties. Within the co-housing agreement, the terms of rent and living expectations are discussed and agreed upon to allow for harmonious cohabitation.
Enabling Policies/ Regulations/ Fiscal Support	A SPICES (Student Proposals for Intellectual Community and Engaged Scholarship) grant was secured for administrative support to launch the program. An absence of restrictive regulations enables the living arrangements supported by the program.

Source: McMaster Symbiosis (2018)

4.0 Facilitating Aging in Community in Waterloo

Section 3 presented several models for aging in community, along with aging in embedded care. This section provides an overview of how the City of Waterloo could facilitate these models using the suite of tools at its disposal. This includes 1) implementing supportive policies and/or removing policy and regulatory barriers that would otherwise prevent an initiative from moving forward; 2) providing financial support or land for local projects; 3) and/or partnering with organizations for funding and service delivery. A high-level overview of the type of supports the City of Waterloo can leverage for facilitating aging in community is provided below.

Policy and Regulation Support	
Official Plan	A municipality's Official Plan (OP) describes the long-term vision and growth and development objectives for the community and sets out policies relating to land use and community improvement to meet those objectives. To facilitate aging in community, an Official Plan should recognize this as a priority, and include policies that promote a flexible and adaptive built environment, integration, and mixed-use development.
Zoning Bylaw	Zoning bylaws regulate the use of land; the number, size, height, density, and lot coverage of buildings on a site; and the amount of parking required on each site. Often, these regulations prevent neighborhoods from adapting as demographics change and prevent neighbourhoods from accommodating a range of household and housing typologies. As a result, zoning bylaws present barriers to most aging in community models.
Guidelines	Aging in community models can be supported via age-friendly design guidelines and/or green design standards.

Fiscal Incentives and Support	
Reduced/ Waived/ Deferred Fees and Charges	To help reduce the costs for new development projects that facilitate aging in community, a municipality can consider waiving the planning and permitting fees during the development application process. Deferring, reducing, or exempting development charges can also be considered.
Municipal Loans/Grants	Using a Community Improvement Plan (CIP), a municipality can provide loans or grants to direct and/or stimulate private sector investment that meet the OPs stated objectives. Though CIPs are commonly used for brownfield rehabilitation or façade

	improvements, the *Planning Act* enables municipalities to use CIPs for a variety of improvement objectives, provided these objectives are referenced in an Official Plan.
Municipal Land	In addition to monetary support, a municipality can also use a CIP to prepare and/or sell land to a person or government authority for use in conformity with objectives laid out in the CIP, such as aging in community.

Partnerships	
Higher-order Governments	Though not directly under the purview of municipal authority, a municipality can direct project or initiative proponents to applicable grants or programs from higher-order governments that support aging in community.
Local Organizations & Institutions	Some aging in community models require initial or ongoing programming support. If a municipality is not set up to provide this type of support, they may be able to leverage or partner with organizations in the community that have the capacity to do so. This could include post-secondary institutions or local non-profit organizations. In addition to programming support, a partner organization or institution may have land that can be developed or redeveloped.

The housing models identified in this study are unique, thus their implementation strategies and support mechanisms are unique. The following sections outline which combination of support tools are needed to implement each model, including considerations for using/designing/changing these tools to harness their benefits and reduce potential drawbacks. Using this as a guide, the Region of Waterloo's Official Plan, the City's Official Plan, and the City's Zoning Bylaw are reviewed to identify supportive and impeding policies and regulations, as well as fiscal and/or partnership support.

4.1 Co-housing

Co-housing can be developed in various forms, making the implementation process unique and specific for each example. However, co-housing units are most commonly modeled after traditional apartment complexes. The implementation of apartment style co-housing models typically encounters barriers with height and density restrictions. Moreover, as these co-housing units do not always provide care to older adults, this consequently prevents them from gaining a designation as an assisted living facility. Land use considerations must also be considered.

Applying for bonuses may be considered to combat height and density barriers. However, the approval of these bonuses often requires a financial contribution to the community and/or designating a percentage of the initiative towards affordable housing use. This may prove difficult for emerging co-housing initiatives, which struggle financially with the large start-up costs associated with purchasing land and building appropriate infrastructure.

Comparably, retrofitting pre-existing housing stock for co-housing purposes also poses unique challenges. Privately-owned dwelling units repurposed for co-housing purposes may require a rental license. Minimal property standards and other requirements set forth within rental license bylaws may pose additional barriers to repurposing pre-existing housing stock for co-housing initiatives.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo/Surrounding Region (if applicable)	• The Waterloo Region Cohousing Project is an emerging co-housing development. It is important to note that this co-housing initiative is only tentatively set to be built on the outskirts of the Kitchener-Waterloo region.
Supportive/Enabling Policies & Regulations	• In the Region of Waterloo's OP, policy 3.A.1 directs its area municipalities to provide a range of housing forms, tenure, density, and affordability to meet the social, economic, and personal support needs of current and future residents. • In the City Form section of the City's OP, objectives include accommodating people at all stages of life and fostering a sense of community and belonging. • Though the zoning bylaw does not explicitly mention co-housing, the bylaw does not prohibit co-housing if individuals are living together as a single non-profit (i.e., a "household").
Policy or Regulatory Barriers	• The City Form section of the City's OP sets out maximum heights and densities (in the form of bedrooms/hectare) for all land use designations that permit residential use. This presents a barrier to new co-housing developments and retrofits of existing housing stock, as an Official Plan Amendment would be required to proceed if a project exceeds these maximums, even if the development fits the existing character of the neighbourhood. • Policy 9 in Section 10.1.2 of the OP allows the zoning bylaw to limit conversions of single-detached units to other dwelling types (such as duplexes or triplexes) and discourages zoning-bylaw amendments in low density neighborhoods. This policy limits the potential typologies of co-housing and may prevent a development from taking shape in an older adult's existing neighbourhood. • If a building is privately owned by an organization or individual(s) and rented to other occupants, the owner would need to apply for a residential rental license. Otherwise, this arrangement would be in contravention of the zoning bylaw. • Rental licenses within the City of Waterloo must be renewed annually. The possibility of having a rental license denied or additional conditions placed on it may present a barrier.
Potential Fiscal Supports	• To support new co-housing development or retrofits, the City could consider waiving planning and/or building permit fees, and/or reduce or waive the first time/renewal residential rental license fee (if required).
Potential Partners	• The City could explore potential partnerships with management companies in pre-existing buildings with a large population of older adults.

4.2 Pocket Neighbourhoods

To maximize the benefits of Pocket Neighbourhoods, they should be located near other services, opportunities, and amenities that improve the quality of life for older adults. To improve affordability, the literature suggests that residences within Pocket Neighbourhoods can be available for a more affordable price if constructed using modular housing technology. In addition, the incorporation of low carbon, energy efficient technology can reduce monthly utility bills for residents.

To accommodate pocket neighbourhoods, zoning bylaws may need to be adjusted to allow for multiple units on one lot and/or reduce side yard setbacks, either by changing the comprehensive bylaw or through a site-specific zoning bylaw amendment. The City of Calgary, AB and Nelson, BC are two Canadian municipalities that updated their comprehensive zoning bylaws to incorporate cottage-style pocket neighbourhoods as a form of intensification. In Calgary, pocket neighbourhoods are zoned as a "cottage housing cluster." The clusters can contain a minimum of 4 units and a maximum of 12, which surround a shared open space. Comparatively, the zoning bylaw in Nelson defines Pocket Neighbourhoods as "construction of more than one detached or duplex residential dwelling on a lot whereby the dwellings are concentrated to provide a shared open space." Several of the residential zones in Nelson allow for pocket neighborhoods, as long as a minimum of 15% of the lots is retained for outdoor space, and the footprint of the pocket neighbourhood is a minimum of 1300 m^2. The development of a new pocket neighbourhood within a municipality's built-up area is more likely to occur on a larger site, such as a former school.

To facilitate the design principles regarding energy performance, a municipality may want to incentivize energy efficient buildings with a policy tool such as a green development standard. Additionally, urban design guidelines should promote human-scale development, and allow residences to face one another around a common green space.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo/Surrounding Region (if applicable)	• Brighton Park Townhouses
Supportive/Enabling Policies and Regulations	• In the Region of Waterloo's OP, policy 3.A.1 directs its area municipalities to provide a range of housing forms, tenure, density, and affordability to meet the social, economic, and personal support needs of current and future residents. • The region is currently in the process of updating its OP, with a focus on supporting energy efficiency and mitigating climate change. • Objectives in the City Form section of the City's OP include accommodating people at all stages of life, providing unique neighbourhoods that offer a range of spaces for people to interact, and supporting efforts to manage environmental impacts. • Policy 10.1.2.1 in the City's OP supports a range of housing types and densities and commits to including a range of lot sizes in low-rise residential areas.
Policy/Regulatory Barriers	• Neither the City's OP nor the zoning bylaw makes mention of pocket neighbourhoods (or equivalent).

	• The City does not have policies or incentives in place to encourage energy-efficient residential homes.
Potential Fiscal Supports	• To support the development of a new, energy-efficient pocket neighbourhood, the City could consider waiving planning or building permit fees and/or development charges.
Potential Partners	• The City could recommend that pocket neighbourhoods are considered in the redevelopment of the former Kraus Lands.

4.3 Second Units

Second residential units are noted to be a form of affordable housing and are an opportunity for older adults to live in close proximity to family and community networks. This form of housing can also be an option for multigenerational or intergenerational living. Municipalities can facilitate these projects by streamlining the development review process and by providing recommended designs to residents. Furthermore, municipalities can permit the use of modular housing for unit(s) built separately from the primary residence (see Appendix 3.0). Trends of legalizing and incentivizing additional secondary units are on the rise. In the City of Vancouver, BC, one or more secondary suites have been built in one-third of all single-family homes (Bertolet, 2016). In Ontario, municipalities have the authority to permit more than one second residential unit, as reflected in the recent changes to the Planning Act, but this must be enabled in a city's zoning bylaw (Wood, 2019).

As the cost of building or retrofitting a space on private property could be limiting for some property owners, municipalities can help facilitate the process of adding second units by lowering the cost of permitting or building fees. In addition, a municipality could provide grants or loan programs to residents who wish to add a unit. Finally, removing barriers in the zoning bylaw, such as parking minimums, would also aid in encouraging the construction of second units.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo or Surrounding Region	• The City of Kitchener approved changes to their zoning bylaw to allow up to three additional residential units on a single low-rise residential property. This went into effect in 2020 (Bueckert, 2019) – mainly in a step towards improving affordability, which can also provide additional housing options for older adults.
Supportive/Enabling Policies and Regulations	• The Region of Waterloo OP specifically mentions secondary apartments and garden suites to be established as a form of "intensification" in residential areas to provide safe and healthy housing options (Region of Waterloo, 3.A.3). • Policy 10.1.2.3b in the Land Use section of the City's OP supports the permission of one ancillary detached residential unit on lots with a single detached house, semi-detached house or townhouse. • In the zoning bylaw, coach houses (laneway houses) are excluded from density provisions.
Policy/Regulatory Barriers	• The language in the OP regarding the "conservation" of low-density neighbourhoods may prevent the addition of gentle density in neighbourhoods.

	- In the definition section of the Zoning Bylaw, *second residential unit* is defined only as a unit located *within* a *principle dwelling unit*, and only one *second residential unit* is allowed in *a principle dwelling unit.* - Though the OP allows for ancillary (detached) secondary residential units, the zoning bylaw only permits these (defined as coach houses) if they are laneway suites, and only on 7 laneways as identified in the bylaw. In addition, these *coach houses* require their own parking spot.
Potential Fiscal Supports	- The Region of Waterloo currently provides funding for secondary suites, but their resources are limited to how much funding is provided by the federal and provincial governments via the *Investment in Affordable Housing Program* (Region of Waterloo, n.d.) - The City could consider providing loans or grants for second residential units using a CIP. Currently, there is justification for this in the OP, which supports the provision of incentives for affordable housing. - The City could waive/reduce planning and/or building application fees.
Potential Partners	- The City could connect with the University of Waterloo and Conestoga Architecture programs to create design templates to offer easier options for residents to build different forms of second units on their property to streamline the development process. San Diego County, CA currently has preapproved floorplans posted online (n.d.).

4.4 Healthy NORC/NORC SSP

NORCs emerge unintentionally and can therefore go unnoticed. A NORC can move along the spectrum towards a healthy NORC by adopting or modifying certain physical characteristics or support services (Masotti et al., 2010). Support Services Programs (SSP) and interventions are often necessary to ensure community cohesion, health, and sustainability. With increased collaboration between key stakeholders, the capacity for a NORC to develop into a healthy, active, and vibrant community increases.

Older adults will be more likely to remain in a community or relocate to communities which have features they consider valuable, such as a good quality of life, safety, accessible goods and services, and opportunities to be physically and socially active. To foster healthy NORCs, policies and regulations should support a mix of uses within neighbourhoods to increase walking accessibility to essential goods and services like grocery stores and pharmacies. Furthermore, municipalities can ensure policies are in place to increase pedestrian safety in neighbourhoods, such as traffic calming measures, accessible design, as well as keeping sidewalks well maintained, adequately lit, and clear of snow/ice in winter months. Lastly, municipalities can create and implement healthy and active aging plans and strategies, which promote walking and bicycle paths to points of interest and enhanced access to parks and recreation facilities.

To develop a NORC-SSP, municipalities can facilitate public-private partnerships with public health agencies and private sector stakeholders for the delivery of services. For cost effectiveness, services can be targeted to existing NORCs, rather than providing additional support services at a city-wide level. Municipalities can also create a NORC residential or mixed-use zone to formally recognize NORCs and easily target specific services and programs (Masotti et al., 2010).

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo or Surrounding Region	• Waterpark Place • The Laurentian Building (Queen Street) • Westmount Place
Supportive/Enabling Policies and Regulations	• In the Region of Waterloo's OP, policy 3.A.1 directs its area municipalities to provide a range of housing forms, tenure, density, and affordability to meet the social, economic, and personal support needs of current and future residents. • In the City Form section of the City's OP, objectives include accommodating people at all stages of life and fostering a sense of community and belonging. • The City's Older Adult Recreation strategy supports active living, volunteerism, and a variety of programming for diverse needs and interests.
Policy/Regulatory Barriers	• Though the realization of *complete communities* is listed as a basis of the City's OP, in the City Form section, *complete community* is envisioned at city level, not at the community or neighbourhood level. Therefore, seniors may still have to travel across the city to access the services they need, making it difficult to walk to these services. • In the zoning bylaw, most of the residential zones permit only low-density residential and restrict other uses (inc. R1, R2, R3, R4, R5, R6, R7, R8, and R9). • Residential mixed-use zones (RMU, RN-6, RN-8, RN-12) allows mixed-use, however these zones do not include detached houses, and are only found on select corridors in the City.
Potential Fiscal Supports	• To support a NORC-SSP, the City could consider direct program funding, from the operations budget and/or community benefits charges.
Potential Partners	• The University of Waterloo, Wilfred Laurier University, local businesses, property or apartment complex owners, and local NGOs.

4.5 The Village Model

The implementation of the Village Model (VM) can be established with little to no regulatory or policy changes. Although they are typically grassroots efforts among older adults, the City can help in setting one up by approaching community-based groups and not-for-profit organizations to present the possibilities that this model can have. It is at the City's discretion to determine whether there is administrative or financial capacity in the community to establish such a model, or multiple "villages" throughout the City. Partnering with local organizations such as the United Way (or other NGOs/volunteer groups) could help start such an impactful service for older adults in the City. Local VMs can form their own unique model for what works in the local context and then customize the supports and programs for the older adult demographic of a neighbourhood or area. This would be especially useful if implemented in areas which currently have significantly high concentrations of older adults. Although comparable to the SSP model attributed to NORCs, with regards to services

and programming, VMs are self-organized and self-funded. VMs pose low barriers to entry while providing diverse solutions and options to age in community.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo or Surrounding Region	• None identified thus far.
Supportive/Enabling Policies and Regulations	• The City's Older Adult Recreation Strategy supports active living, volunteerism, and a diverse suite of programming, which may be leveraged to spread awareness about and/or facilitate the creation of villages
Policy/Regulatory Barriers	• Not applicable, as the Village Model could be implemented in any neighbourhood in the City.
Potential Fiscal Supports	• The Village Model, as per the US example, is largely self-funded from membership fees. However, any sort of additional funding in the form of direct funding, government grants, community benefit or NGO contributions could be utilized.
Potential Partners	• Local NGOs

4.6 The Danish Model: Multi-Purpose Nursing Homes

The primary distinction between Multi-Purpose Nursing Homes and North American nursing homes is the focus on physical design. Multi-Purpose Nursing Homes recognize the need to prevent segregation while facilitating the integration of seniors within the broader community.
This is primarily done by designing a functional structure which facilitates interactions with residents, caregivers and other community members. Moreover, designers are cognizant of creating a functional space while maintaining a cohesive aesthetic with the pre-existing community.

Integrating older adults within the broader community requires opportunities to interact with those outside the facility. Creating multi-functional spaces which offer goods and services that are suitable to large demographics (beyond older populations) within these spaces or surrounding areas can help encourage these interactions. For example, *Plejecentret Lillevang* offers dental and personal care services. These opportunities could potentially be facilitated through mixed-use land policies, which could encourage and attract a more diverse range of businesses within the communities where seniors reside. Mixed-use land policies also contribute towards interdependence among older adults, by having a range of services available within or around their facilities decreases their reliance on caregivers.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo or Surrounding Region	• None identified thus far.
Supportive/Enabling Policies and Regulations	• The City Form section of the OP supports "accessible and visitable housing" in neighbourhoods.

	• In the Land Use section of the OP, policy goal 2 states that "housing geared towards seniors should be located within walking distance of schools, public transit, lands designated commercial, parks and recreational facilities and have convenient access to other community infrastructure".
Policy/Regulatory Barriers	• The current policies in the OP and regulations in the zoning bylaw prohibit mixed-uses in existing residential detached neighbourhoods. • The only primary residential zone that permits long-term care or assisted living is R9 – this type of use is not listed in permitted uses of R1-R8. Some mixed-use and commercial zones also do not permit government use and/or long-term care facilities.
Potential Fiscal Supports	• To support new multi-purpose nursing home development or retrofits of existing buildings, the City could consider waiving planning and/or building permit fees.
Potential Partners	• The City can put supports in place to ready a site for a multi-purpose nursing home. However, the design of the interior of the building is beyond the City's purview. Therefore, the City could consider partnering with aging in care delivery agents, such as the Government of Ontario or private developers/operators

4.7 Intergenerational Living

Realizing the benefits of intergenerational living can only be achieved by incentivizing multi-generation values with the use of citywide age-friendly policy and planning frameworks (Ministry of Finance, 2018). Since these models represent a departure from the conventional form of living, there will have to be a process of consumer exploration and education to encourage demand, where there is a clear understanding of expectations and realties by consumers (Ministry of Finance, 2018). Relying on the adage "build it and they will come," will be insufficient for implementation.

Due to the nature of intergenerational living, components of this living arrangement can be incorporated into the other models discussed above. Each model then could be further enhanced and customized to the needs of the individual. For example, the use of ADUs can offer the possibility for independent living while living close to loved ones and offering a degree of flexibility for the homeowner (Gardner & Nasserjah, 2020). The cohousing model is well suited for multigenerational living because it best incorporates principles of co-caring and the use of shared spaces that allow residents to connect with each other (Gardner & Nasserjah, 2020).

In Ontario, over 75% of older adult homeowners are estimated to suffer from an "over housing" problem, where homes contain more bedrooms than the homeowner needs (Ministry of Finance, 2018). Attractive features of multigenerational living that follow co-sharing models like the HomeShare program, include affordability and the use of existing housing stock. The new arrangement is often cost-effective for both the home provider and the tenant, and provides a use for otherwise unused bedrooms. Programs like HomeShare use informal living agreements instead

of leases under the Residential Tenancies Act (2006) because home providers are renting their primary residence. These HomeShare agreements are living contracts that stipulate the agreed upon terms and expectations between participants (HomeShare, 2021). However, HomeShare agreements may violate municipal rules or condominium corporation rules (Ministry of Finance, 2018). Municipalities looking to enable agreements like those used by HomeShare should identify and seek to remove such barriers and educate residents on the current bylaws and policies related to home-sharing.

Barriers and Opportunities in Waterloo	
Existing Examples in Waterloo/Surrounding Region (if applicable)	• None identified thus far.
Supportive/Enabling Policies and Regulations	• The City is part of the WHO's Global Network for Age-friendly Cities and Communities • The City's Older Adult Recreation Strategy encourages programs for adults of varying ages
Policy/Regulatory Barriers	• For programs like HomeShare, there are no land use policy/regulatory barriers, as the flexibility of this model allows for it to be implemented within any City neighborhood. However, if money exchanges hands between participants, the home provider will need to obtain a rental license. • If a multigenerational component is added to the other models discussed is this report, they would face the barriers that are associated with that model.
Potential Fiscal Supports	• The City could consider setting aside a small portion of its operating budget for administrative support of a HomeShare program
Potential Partners	• University of Waterloo, Wilfred Laurier University, local NGOs

5.0 Concluding Remarks

The findings from the environmental scan demonstrate that aging in community can be facilitated through a range of models. It is difficult to point to any one of these models as a leading example of a framework for the City of Waterloo to follow, especially because most models rely on context-specificity. For instance, the Village Model exemplified through the Beacon Hill Village example relies on older adult volunteers and organizers for the development and subsequent administration of programs that are utilized for both community integration and service provision. The Village Model suggests that a primary implementing factor for aging in community models is grassroots organizing and "bottom-up" initiatives that stem from community aspirations. This indicates that the City of Waterloo's primary role in providing housing for aging in community will not be in leading these efforts, but supporting them by reducing policy and regulatory barriers; providing fiscal supports or connecting communities to higher-order government grants and funding; and/or building relationships with non-government organizations such as the University of Waterloo, Wilfred Laurier University, property management companies, local businesses, and local non-profits. Additionally, a broader context of providing age-friendly environments is found throughout these

models as their success is often attached to policies and built environments that provide accessible transit, localized services and amenities, and walkable neighbourhoods. This indicates that while a focus on housing and care for aging in community is needed, broader age-friendly initiatives should also be implemented alongside these models.

Within the Waterloo context, consistent policy and regulatory tools have been identified as having the potential to both support as well as present barriers for the possible implementation of aging in community models. The Region of Waterloo's Official Plan policy 3.A.1, provides a foundation for undertaking these models, as it gives the directive for enabling broad housing provisions that attend to form, tenure, density and affordability. The City Form section within the City of Waterloo's Official Plan follows suit, with the objectives of fostering community by accommodating all ages; providing unique neighbourhoods that offer a range of spaces for individuals to interact; and supporting the pursuit of accessible and visitable housing (City of Waterloo, 2020a). However, the City Form section also provides a barrier in terms of the maximum heights and densities it permits for residential use. Another consistent barrier is found within zoning bylaws. These barriers include restricting most residential zones to low-density; residential mixed-use zones that exclude detached houses; providing only one residential zone (R9) that permits long-term care or assisted living facilities; limiting the permission of detached second residential units to laneway suites on only 7 identified laneways; prohibiting mixed used in existing residential detached neighbourhoods; and allowing zoning bylaws to limit the number of single-detached units that can be converted to other forms of units within low-density neighbourhoods.

Some of aging in community models exist (or are in the planning stage) within Waterloo and the surrounding area, such as the tentative Waterloo Region Cohousing Project and Brighton Park Townhouses. Furthermore, the zoning bylaw change recently implemented in the City Kitchener will more readily permit the creation of second residential units. It is recommended that supplementary research is conducted on the implementation of these initiatives. Additional recommended research to facilitate aging in community in the City of Waterloo includes conducting an analysis on the viability of these models, specifically in terms of affordability; conducting a demographic analysis that focuses on not only age but also gender and ethnicity; and reviewing the potential of community land trusts for project implementation.

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Appendix 1.0 Defining Features of the Three Broad Approaches to Housing and Care for Aging

Aging in Place

Home Based

Aging in Community

Social Network Based

Aging in Care

Service Based

Appendix 2.0 Pocket Neighbourhood Design Principles and Images

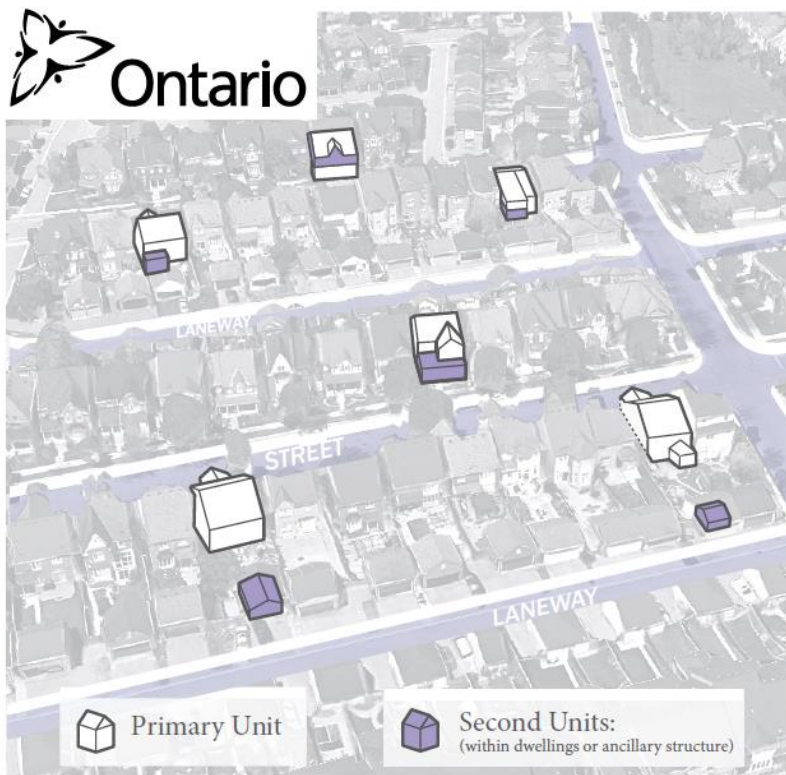*Source: Ross Chapin Architects (n.d.)*

Source: Douglas, J. (2013)
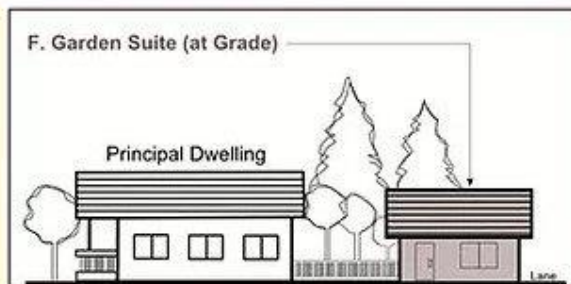
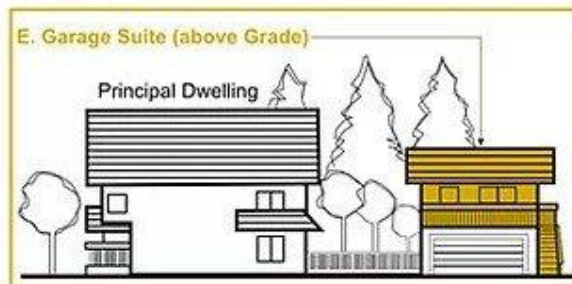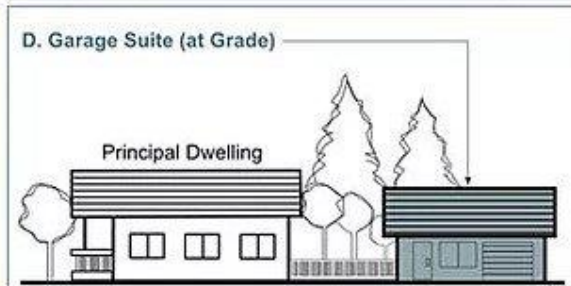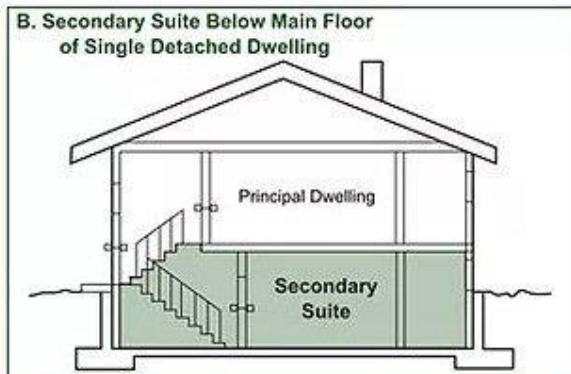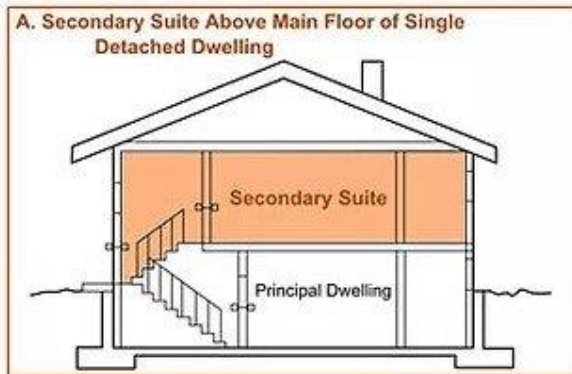# Appendix 3.0 Second Residential Unit / ADU Variations

Source: Salvador, A. (2017): A house and matching ADU in Edmonton, Alberta, Canada

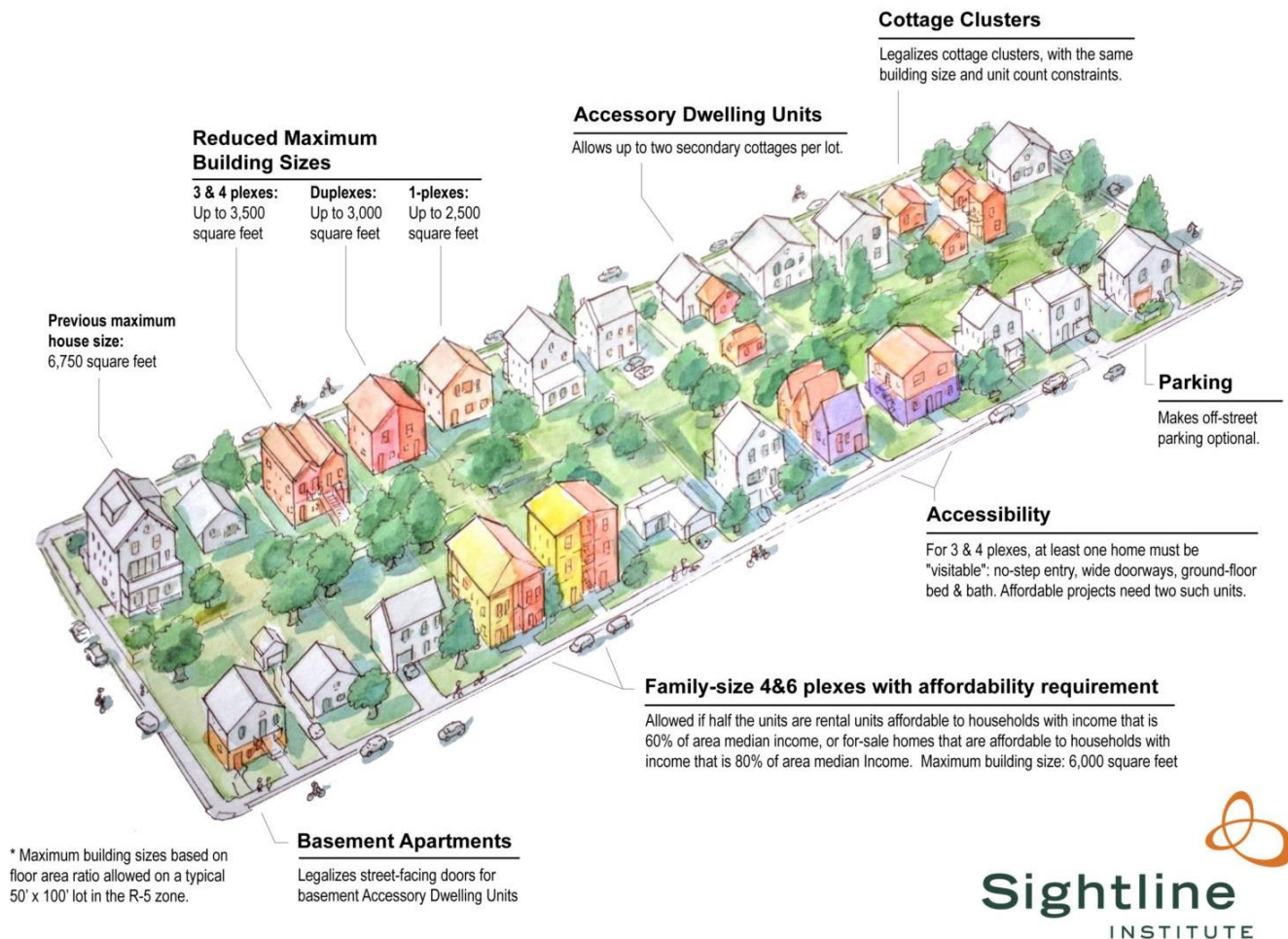Neighbourhood visualization of second units.

Source: Ministry of Municipal Affairs and Housing. (2017)

Source: Secondary Suites & Granny Flats: 17 Canadian Grants + 11 Renovation Tips. (n.d.)

Re-legalizing "middle housing" citywide

Cottage Clusters
Legalizes cottage clusters, with the same building size and unit count constraints.

Accessory Dwelling Units
Allows up to two secondary cottages per lot.

Reduced Maximum Building Sizes

3 & 4 plexes:	Duplexes:	1-plexes:
Up to 3,500 square feet	Up to 3,000 square feet	Up to 2,500 square feet

Previous maximum house size:
6,750 square feet

Parking
Makes off-street parking optional.

Accessibility
For 3 & 4 plexes, at least one home must be "visitable": no-step entry, wide doorways, ground-floor bed & bath. Affordable projects need two such units.

Family-size 4&6 plexes with affordability requirement
Allowed if half the units are rental units affordable to households with income that is 60% of area median income, or for-sale homes that are affordable to households with income that is 80% of area median Income. Maximum building size: 6,000 square feet

* Maximum building sizes based on floor area ratio allowed on a typical 50' x 100' lot in the R-5 zone.

Basement Apartments
Legalizes street-facing doors for basement Accessory Dwelling Units

Sightline INSTITUTE

Source: Andersen, M. (2020, August 11) - An illustration of housing options depicting Portland's residential infill project, legalizing the construction of many forms of housing, including ADUs, to provide affordable housing options. Image courtesy of Alfred Twu, Sightline Institute.