

# The Periodic Table of Housing Models for Aging Canadians



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This document has been prepared  
by SE Health on behalf of the Building  
with Mission project, a CMHC National  
Housing Strategy Solutions Lab

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# Executive Summary

So your organization is interested in pursuing a housing project to support older adults in your community, the question now becomes “what type of housing should you build”?

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## Before you dive in and consider different housing models, remember:

- Older adults are not a homogeneous population;
- Older adults overwhelmingly want to age [and die] in the place of their choosing and for almost all Canadians, the first choice is their home;
- Affordable housing alone will not meet the needs of aging Canadians.

While there is demand for a wide range of housing options for older adults across Canada, our focus in this paper is on the need for a greater supply and range of housing options for low and middle income seniors who may need low to moderate levels of support to live independently for as long as possible. *“Those with low levels of need can remain in their own homes, and those with higher need for support can access government-subsidized long-term care homes. Seniors who have moderate needs and moderately high-income levels can access retirement homes, however low—and middle-income seniors with moderate needs have very few alternatives.”<sup>1</sup>*

## When designing for this population, you will want to consider three key elements:

### 1. AGE-FRIENDLY BUILT ENVIRONMENT

Homes will need to be physically designed to accommodate changing needs and, ideally, would be located in communities that can best support the needs of older adults.

### 2. SUPPORTIVE NON-BUILT ENVIRONMENT

Regular social interaction, opportunities for meaningful contribution and access to programming, support and care (both formal and informal) are critical for older adults to maintain good health as their needs change.

### 3. AFFORDABLE FINANCIAL ENVIRONMENT



And finally, all of this needs to be affordable for middle and lower income seniors.

Our “Periodic Table of Housing Models For Aging Canadians” is intended to help organizations navigate the range of housing options available. Note that the options highlighted are not mutually exclusive; projects may incorporate many of these elements in their designs. Nor are the options comprehensive. Our goal is to support organizations in their efforts to build new housing for older adults by providing a framework for shaping early discussions and by providing some ideas and inspiration upon which they can build.”

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<sup>1</sup> Supporting Affordable Housing for Canadian Seniors Living in Rural Communities, Max Bell for Public Policy at McGill University, July 2020

# Periodic Table of Housing Models for Aging Canadians

<b>Location &amp; Community Context</b> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #00a0c0; padding: 5px; width: 45%;"> <p style="font-size: 8px; text-align: center;">PAGE 14</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Be</p> <p style="font-size: 10px; text-align: center;">Pocket Neighbourhoods</p> </div> <div style="border: 1px solid #00a0c0; padding: 5px; width: 45%;"> <p style="font-size: 8px; text-align: center;">PAGE 14</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Be</p> <p style="font-size: 10px; text-align: center;">Intergen Communities</p> </div> </div>		<b>Building &amp; Unit Design</b> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #00a0c0; padding: 5px; width: 45%;"> <p style="font-size: 8px; text-align: center;">PAGE 16</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Be</p> <p style="font-size: 10px; text-align: center;">Accessible Homes</p> </div> <div style="border: 1px solid #00a0c0; padding: 5px; width: 45%;"> <p style="font-size: 8px; text-align: center;">PAGE 16</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Be</p> <p style="font-size: 10px; text-align: center;">Adaptable Homes</p> </div> </div>		<b>Social Connection</b> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid #e67e22; padding: 5px; width: 30%;"> <p style="font-size: 8px; text-align: center;">PAGE 18</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Nb</p> <p style="font-size: 8px; text-align: center;">Cultural/ Lifestyle Specific Communities</p> </div> <div style="border: 1px solid #e67e22; padding: 5px; width: 30%;"> <p style="font-size: 8px; text-align: center;">PAGE 18</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Nb</p> <p style="font-size: 10px; text-align: center;">Home Sharing</p> </div> <div style="border: 1px solid #e67e22; padding: 5px; width: 30%;"> <p style="font-size: 8px; text-align: center;">PAGE 19</p> <p style="font-size: 24px; text-align: center; font-weight: bold;">Nb</p> <p style="font-size: 8px; text-align: center;">Naturally Occuring Communities</p> </div> </div>		
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 <b>Built Environment (Be)</b>		 <b>Non-Built Environment (Nb)</b>		 <b>Financial Environment (Fe)</b>		



# Designing Housing for Older Adults

Once your organization has made the decision to pursue an affordable housing project to support older adults in your community, the question becomes *“what type of housing should we build?”*

As your organization begins to contemplate what type of housing to build to serve the needs of older adults, keep in mind that older adults are not a homogeneous population, older adults overwhelmingly want to age in their home, and affordable housing alone will not meet the needs of aging Canadians.

**Older adults seeking affordable housing are not a homogeneous population.** Although our reductionist society prefers that an arbitrary cut off age of 65 is the demarcation line for an entire segment of citizens, it is simply not possible. Rather there are significant differences within the older adult population based on individual characteristics such as health status, socioeconomic status, education level as well as lifestyle or cultural preference, work patterns and comfort with technology. These characteristics translate into a range of different housing preferences and needs; sometimes these align to broad age brackets but not consistently.

The Canadian Mortgage and Housing Corporation<sup>2</sup> divides Canadian seniors into four sub-categories based on age ranges (Table 1). But this is a crude way to further segment the >65 population.

**Table 1: Proportion of total Canadian population, by age projected to 2041 (in 000s)**

SUB-SEGMENT	AGE RANGE	2021	2031	2041
Pre-Seniors	55-64 yrs	5,277	4,746	5,238
% of total population		13.9%	11.5%	11.8%
Young Seniors	65-74 yrs	4,067	4,936	4,521
% of total population		10.7%	11.9%	10.2%
Older Seniors	75-84 yrs	2,147	3,346	4,183
% of total population		5.7%	8.1%	9.4%
Elderly Seniors	85+ yrs	883	1,257	2,034
% of total population		2.3%	3.0%	4.6%

An alternative segmentation that starts to get at needs, preferences and goals instead of just demographics comes from the Canadian architecture and design practice BDP Quadrangle,

<sup>2</sup> Housing for Older Canadians: The Definitive Guide to the Over-55 Market - Understanding the Market, Canadian Mortgage and Housing Corporation, August 2020

which differentiates between the “third” and “fourth” stages of life<sup>3</sup>.

*The Third Age:* “A life stage following retirement (or semi-retirement) where older adults are living generally healthy lives and are pursuing personal fulfillment.”

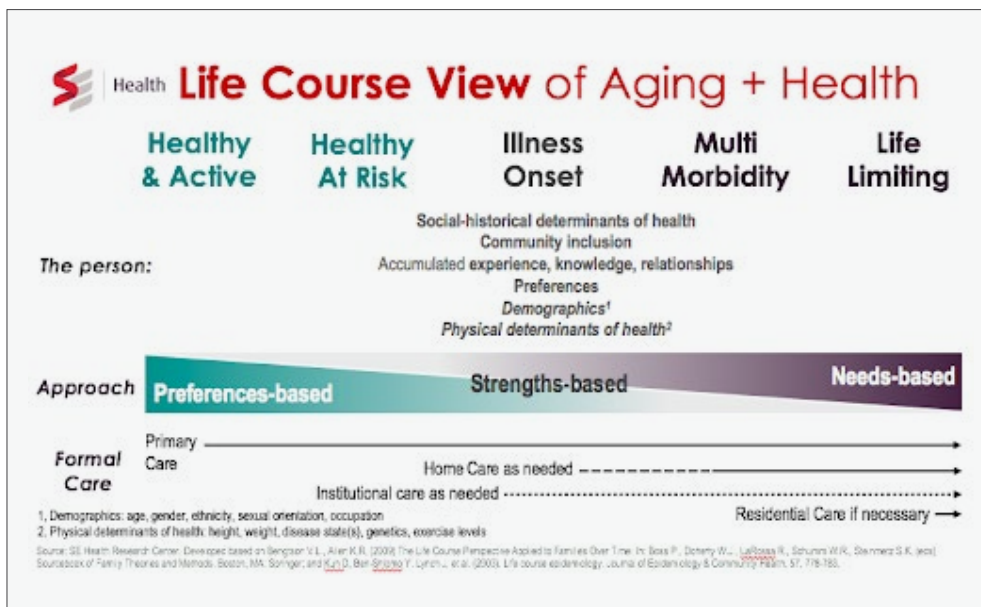
*The Fourth Age:* “A life stage where older adults experience reduced mobility and / or develop greater dependence on others for care and support.”

Further still, organizations like SE Health consider multiple drivers of segmentation across the Life Course (see Figure 1). This segmentation considers four key variables across five stages of one’s life course:

1. The individual’s medical & functional context
2. The sociological context
3. The degree to which the individual has access to—and wants—supports (informal or formal)
4. The individual’s preferences.

Depending on where an older adult falls on this continuum, a different combination of physical modifications to the home and supportive programs and services will be required to extend a persons’ ability to age successfully at home. By contrast, the Senior Living industry uses more crude variables to distinguish between different housing and care models (e.g. memory care, assisted living and independent living) with limited sub-segmentation within a residential care setting.

**Figure 1: SE Health’s Approach to Segmentation by Life Course**



<sup>3</sup> Reimagining Age-Friendly Living, BDP Quadrangle, 2020-21

**Older adults overwhelmingly want to age [and die] in the place of their choosing and for almost all Canadians, the first choice is their home.** One characteristic of older adults that is remarkably consistent across the country and across age brackets is a strong desire to “age-in-place” or to “age-in-community”<sup>4</sup>. The COVID-19 pandemic has only strengthened this desire as older adults and their families are increasingly hesitant to move to age-segregated congregate settings such as retirement residences or long-term care (LTC) homes. In a survey conducted by the National Institute on Aging in 2021, 96% of Canadians over 65 reported that as they get older, they will do everything they can to avoid moving into a LTC home<sup>5</sup>. There is clearly a strong preference for non-institutional, non-medicalized models of housing and supports, and a desire to remain in a home or community that is familiar, authentic and intergenerational for as long as possible.

*The CMCH defines **aging-in-place** as the ability to live in the same home or community safely, independently, and comfortably, as you age.<sup>6</sup>*

**Affordable housing alone will not meet the needs of aging Canadians.** Finally, providing appropriate, accessible and affordable housing will not, on its own, address the needs of many older Canadians as they age. To maintain the physical, mental and social well-being of older adults, the housing and care sectors need to work more closely together to proactively provide support and easy access to care as needed. There are a growing number of models in Canada and around the world that integrate age-friendly physical spaces alongside social programming, health services and, in some cases, innovative technologies to maximize older adults’ overall well-being and quality of life.

With these three foundational considerations in your grasp, you are well positioned to now consider what type of housing project to pursue. Just as “seniors” are not a homogeneous group of people (Consideration #1 above), the type of housing that caters to this demographic cannot be homogeneous. Indeed, there is a growing need across the country, not only for a greater supply of housing that meets the needs of older adults, but also a greater range of housing options.

*“Conventional models of senior living are typically homogenous settings focused on residents’ immediate health care needs, rather than heterogenous environments that cater to diverse needs and lifestyles, physical and mental health, and social connections across generations —all critical aspects to promoting holistic well-being.”<sup>7</sup>*

<sup>4</sup> Alternatives to Long-Term Care and Housing: An Environmental Scan, Benzie, Cacciola, Chu, Barcellos, Grant, Niehaus, Nsair, April 2020

<sup>5</sup> National Institute on Ageing, Pandemic Perspectives on Long-Term Care: Insights from Canadians in Light of COVID-19, March 2021

<sup>6</sup> CMHC website: Aging in Place, June 2021

<sup>7</sup> Rethinking Longevity in an Age-Inclusive World, Gensler, October 2020

# Gaps in the Housing Market for Older Adults

Part of the challenge with figuring out what type of housing to build is giving the model of housing an appropriate name. There are a range of housing models to consider—both with & without programming/services bundled into the housing offering—and at various price points. Different institutions use different—and sometimes conflicting—nomenclature to describe housing types based on what is offered, at what price, and who pays. *“These models are not mutually exclusive and there is also not an agreed upon definition, apart from regulated models like hospice or long-term care facilities.”*<sup>8</sup>

To begin, let’s start with the Canadian Mortgage and Housing Corporation’s (CMHC) typology of the seniors’ housing market.

**Figure 2: CMHC’s Seniors Housing Market Segmentation<sup>9</sup>**



- **Mainstream market housing:** Some 85% of adults >75 years old live in a private household<sup>10</sup>; these homes and the communities they are located in, may or may not be well suited to aging-in-place.
- **Seniors-specific communities:** Active lifestyle communities or retirement residences (offering independent living, assisted living and/or memory care options) are designed for seniors but, for many aging Canadians, these communities are either undesirable or unaffordable (or both). The after-tax median income for senior households, where the highest income earner is 65 years old or older, is just over \$60,000.<sup>11</sup> With average monthly rents of approximately \$3,000<sup>12</sup> for a standard space in a seniors-specific community, the cost of this type of housing is difficult to cover for many older adults with low to moderate incomes.
- **Long-term care:** Finally, older adults who are no longer able to live independently may move into a long-term care setting, if they can get a bed. Wait times for long-term care can be >200 days in some parts of Canada. If the current propensity to move older adults into LTC homes as the “default option” continues, the number of beds needed will double in Canada between now and 2041.<sup>13</sup>

<sup>8</sup> White Paper: Housing & Health, Catholic Health Association of Ontario, September 2020

<sup>9/10</sup> Housing for Older Canadians: The Definitive Guide to the Over-55 Market - Understanding the Market, Canadian Mortgage and Housing Corporation, August 2020

<sup>11</sup> Average Canadian retirement income, Wealthsimple website, viewed December 13, 2021.

<sup>12</sup> 2021 Seniors Housing Survey: Learn more from our insights, Canadian Mortgage and Housing Corporation, July 6, 2021.

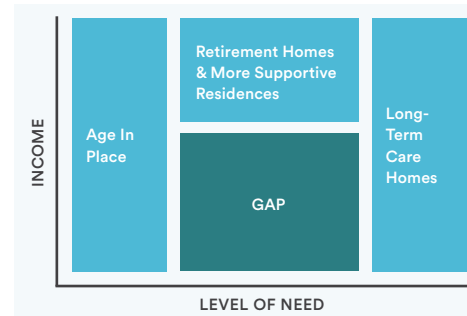
<sup>13</sup> Ageing Well, Queen’s University, School of Policy Studies, November 2020



This market overview leaves a significant market gap in housing for *low and middle income seniors who may need low to moderate levels of support to live independently*. A 2020 paper published by the Max Bell School of Public Policy at McGill University identified this gap in rural communities and, although the conditions are different, we have heard the same gap identified in smaller towns, suburban locations and in large urban areas. (See Figure 3).

### Figure 3: Gap in the Seniors Housing Spectrum

*“Those with low levels of need can remain in their own homes, and those with higher need for support can access government-subsidized long-term care homes. Seniors who have moderate needs and moderately high-income levels can access retirement homes, however low- and middle-income seniors with moderate needs have very few alternatives.”*



Almost a quarter of senior households are living below housing standards for adequacy, affordability and suitability because it is increasingly difficult to find housing that meets their changing needs. Almost 20% of Canadian seniors spend >30% of their before tax income on housing, this increases to almost 40% for seniors who live alone.<sup>15</sup>

The Housing for Health team at SE Health calls this gap in the seniors housing sector the Missing Middle. Very low income Canadian seniors are supported with social housing and subsidized services, and very high income Canadian seniors can pay their own way privately. However, the majority of Canadian seniors (estimated by SE Health to be ~65%) are in the Missing Middle with few or no housing options that meet their financial, medical, functional and personal preferences and needs.

There is consensus about the general characteristics of housing for older adults that might help to fill this gap:

- 1. Age-Friendly Built Environment:** Homes will need to be physically designed to accommodate changing needs and, ideally, would be located in communities that can best support older adults.
- 2. Supportive Non-Built Environment:** Regular social interaction, opportunities for meaningful contribution and access to programming, support and care (both formal and informal) are critical to maintaining good health and addressing changing needs.
- 3. Affordable Financial Environment:** And finally, all of this needs to be affordable for middle and lower income seniors.

We have used these three lenses to develop a conceptual framework for organizations considering the type of housing they may build in their communities to address this gap in the seniors housing market.

<sup>14</sup> Supporting Affordable Housing for Canadian Seniors Living in Rural Communities, Max Bell for Public Policy at McGill University, July 2020

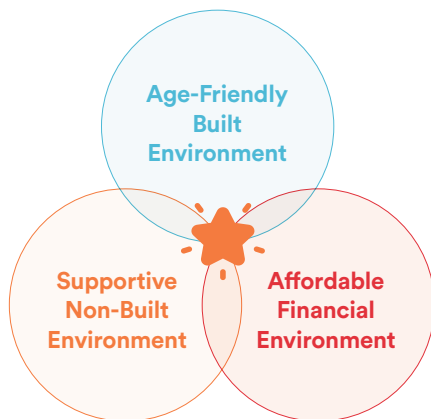
<sup>15</sup> Report on Housing Needs of Seniors prepared for the Federal, Provincial and Territorial (FPT) Forum of Ministers Responsible for Seniors, June 2019.

# A Framework for Understanding Seniors Housing

What makes a home good to live and age in? How can we extend the health span of older adults? How can we enable thriving-in-place for people seeking an affordable home in which to live and age?

First, the physical or built environment needs to be suitable for the changing needs of older adults. Second, the non-built environment (or the “experience of living in that place”) must also be appropriate. And finally, the home must be affordable for residents, while also being economically viable over the long term for the housing developer and operator.

**Figure 4: Core Components of a Good Home to Live and Age in**



By designing a home, or a community, so that people can thrive as they age, you may find that you end up designing projects that appeal to a wide range of ages and abilities.

*Inclusive or universal design is a design approach that ensures that an environment can be understood, accessed and used to the greatest extent possible by all people. Inclusive design considers the full range of human diversity with respect to age, ability, language, culture, gender and other forms of human difference.*

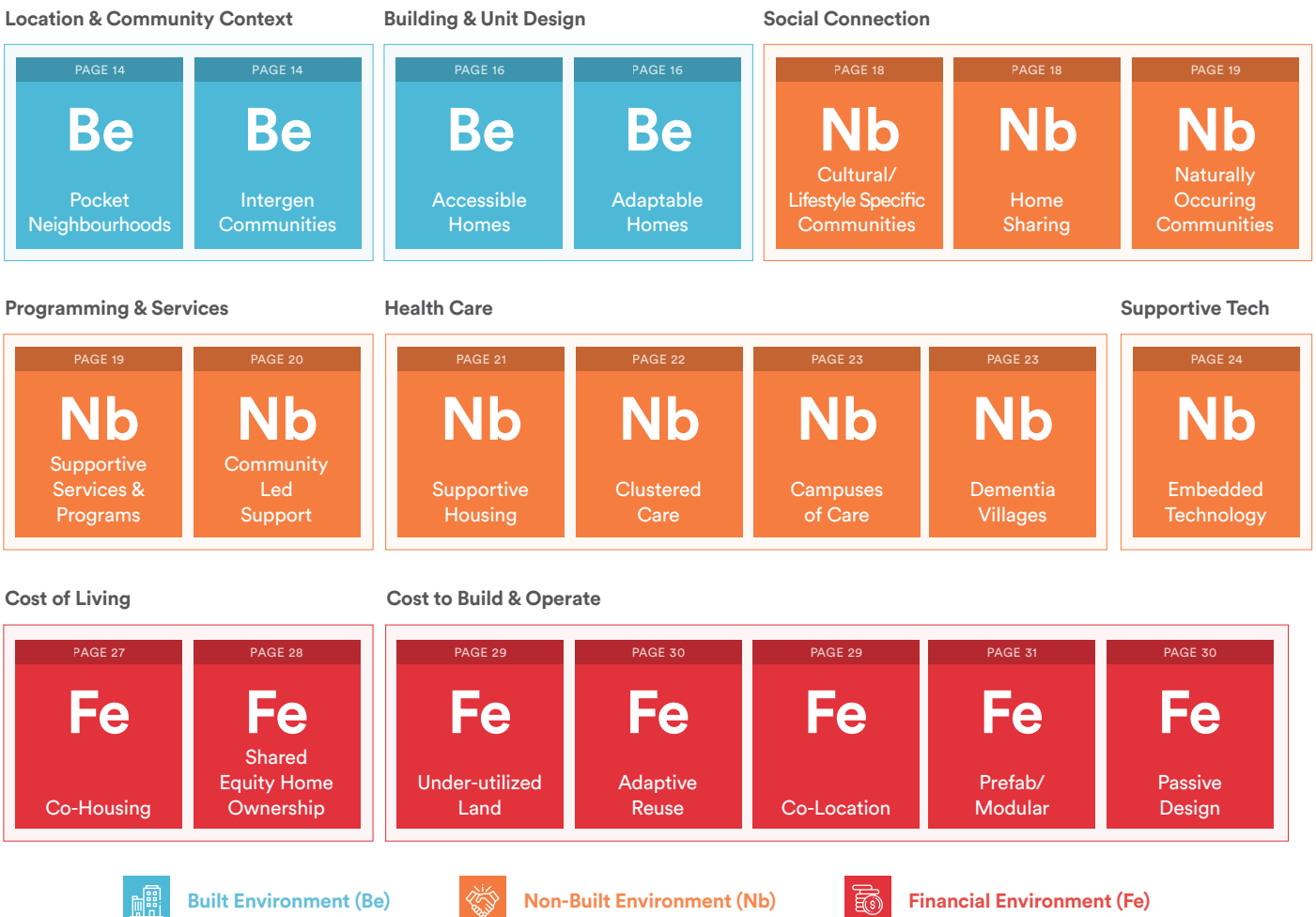
<sup>16</sup> Inclusive design research centre at OCAD university website, viewed August 5, 2021.

# Housing Models For Older Adults

We use the three components of our seniors housing framework (built, non-built and financial environment) to map out a range of housing models you could consider pursuing. This is not a comprehensive list but is intended to serve as a guide and inspiration to help you think through a number of options and determine what will make the housing you choose to build uniquely attractive to the population of older adults you are targeting. Also, as mentioned earlier, there are not well established and agreed upon definitions for many of the housing models highlighted, but perfecting the typology is not our priority.

For the different housing models explored below, we have provided a few examples of completed projects. Since these project characteristics are not mutually exclusive; many projects will demonstrate excellence in more than one area. To help navigate the options available, we have developed a “Periodic Table of Housing Models for Aging Canadians”.

**Figure 5: Periodic Table of Housing Models for Aging Canadians**





# The Built Environment

# 1. The Built Environment

## A. LOCATION AND COMMUNITY CONTEXT

Where a home is located matters so, it is critical to consider the community context. Some locations offer older adults greater safety and comfort or greater access to resources than others. Expectations of what a project can accomplish need to respond to the geographic context. For example, some of the optimal characteristics of a site may be more easily achieved in an urban setting than a rural setting (or vice versa). In cases where a site lacks a key element, it may be possible to incorporate that gap (e.g. a park or a pharmacy) into your project, thus enhancing the local context for everyone.

Ensuring both a strong connection with the broader community as well as a strong sense of community within your housing project should be a priority. Many housing models prioritize social interaction amongst neighbours in their design and management which can help to reduce isolation and loneliness and strengthen informal networks of support for older adults.

Below are highlighted a range of local and community context considerations to review when evaluating a potential site and determining its appropriateness for housing for older adults.

*The American Association of Retired People (AARP) works to promote communities that meet the needs of young and old alike for some 30M advanced age members in the United States. AARP has created a simple overview of what makes a livable community for people of all ages.*

**Table 2: Location and community context considerations**

<b>Neighbourhood characteristics</b>	Is the neighbourhood safe? Is the neighbourhood noisy?
<b>Proximity to transportation / Ease of mobility</b>	Is public transit close by? Is the neighborhood walkable (e.g. sidewalks, safe crossings, <a href="#">walk score</a> )?
<b>Proximity to amenities</b>	Are daily amenities located nearby (e.g. groceries, pharmacy, primary care, coffee shop)?
<b>Access to nature</b>	Is there accessible green or blue space nearby (e.g. parks, gardens, trails, lake/ocean views)?
<b>Access to social and intergenerational activities nearby</b>	Are there nearby places to go to be amongst other people, to contribute to the community or to participate in recreational activities (e.g. community centre, social club, library, cafe, playground, employment or volunteer opportunities)?
<b>Access to communal spaces within the housing development</b>	Are there shared spaces and amenities available for use by all residents of the development (e.g. courtyards, gardens, multi-purpose rooms, community kitchens, etc.)? Are outside community members/organizations invited into these spaces?



## Examples of housing approaches that emphasize location and community context

**Pocket-Neighbourhoods:** Pocket neighbourhoods are a type of planned community that consist of groups of smaller residences clustered around a shared open space. Communities are designed to foster social interaction between neighbours. Some are cooperatively owned. Pocket neighbourhoods share many of the same principles as co-housing (see below), can be well integrated into the wider community and can facilitate multi-generational living. “Pocket neighbourhoods are often described as being a neighbourhood within a neighbourhood.”<sup>17</sup>

### *Aurora Pocket Neighborhood (Ithaca, NY)* [↗](#)

- Private living spaces built around a common courtyard
- Located in an existing neighbourhood, walking distance to services, amenities and transit

**Intergenerational Communities:** A growing number of housing projects are intentionally designed to facilitate interaction across generations. Rather than seniors-segregated communities, these projects offer housing options for all ages and stages. Some housing models go even further and are designed to accommodate multigenerational living within the same home. Several examples are highlighted in the CMHC’s 2020 publication [Housing for Older Canadians: The Definitive Guide to the Over-55 Market](#) including:

### *Harbour Landing Village (Regina, Saskatchewan)* [↗](#)

- Designed to intentionally facilitate relationships across generations and to foster a village-like environment.
- Includes an early learning centre for young children, university student living quarters, a licensed personal care home, assisted living suites and general public facilities (e.g. art studio, yoga room, multipurpose room with cooking facilities, meeting rooms, etc.)
- Seniors can live in independent, assisted living or supportive care suites
- There are also affordable options for university students who can pay a reduced rent in exchange for doing 30 hours of work a month in the building

### *Intergenerational Social Housing (Netherlands)* [↗](#)

- This 17 unit housing project is a partnership between a young adult welfare organization and a housing corporation specializing in affordable housing for seniors
- 13 units are allocated for young mothers or young women who cannot live with their families and 4 units are allocated for older women who act as coaches for the younger women
- Located in the city centre to provide easy access to services and amenities
- Includes a rooftop terrace and meeting spaces to encourage intermingling

### *Sällbo (Helsingborg, Sweden)* [↗](#)

- Project’s goal is to “combat loneliness and promote social cohesion by giving residents incentives, and the spaces, for productive interaction.”
- 51 apartments over four floors of a refurbished retirement home; each floor has a gym, yoga room, library and communal kitchen with free wi-fi in communal areas; main floor has a multifunctional space
- 72 residents (older adults 70+ and young adults 18-25); selected after extensive interview process
- Residents sign contract promising to spend at least 2 hrs / week socialising with neighbours
- Full time “host” acts as a facilitator/mediator
- Run by a not-for-profit housing organization and funded by city council

<sup>17</sup> Alternatives to Long-Term Care and Housing: An Environmental Scan, Benzie, Cacciola, Chu, Barcellos, Grant, Niehaus, Nsair, April 2020.

**B. BUILDING / UNIT DESIGN**

The physical design of homes for older adults should prioritize the resident’s overall health and well-being while also accounting for the range of potential changes to vision, hearing, balance, mobility and memory that frequently accompany aging. In addition, considering how unit design can best support care delivery in the home, including the type of technology infrastructure that may be required to deliver care, will help to future-proof designs where both the delivery of care in the home and the use of supportive technologies are likely to increase.

As we increasingly recognize climate change as a critical determinant of health, building homes that are as environmentally responsible as possible should also be a priority. The Sustainable Housing Initiative’s “Step-by-Step Guide to Developing Affordable Housing” dives into this topic in detail. Given the close relationship between planetary health, population-level health and individual health, there is increasingly an overlap across health and sustainability guidelines and certifications that your design team should be aware of.

Table 3 points to helpful resources, best practices, guidelines and certifications to be aware of as you develop your project plans.

**Table 3: Helpful Resources for Designing Healthy & Sustainable Homes**

<p><b>HEALTHY HOMES</b></p> <p>Helpful Resources:</p> <ul style="list-style-type: none"> <li>• <i>Dialog Design Community Wellbeing Framework</i></li> <li>• <i>WELL Building Standard</i></li> <li>• <i>Fitwel Certification</i></li> <li>• <i>Happy Homes Toolkit</i></li> </ul>	<p>There are a wide range of best practices related to building homes that promote good health. These guidelines and certifications provide helpful guidance for consideration.</p> <p>For example, good air quality might be achieved through high quality HVAC and air filtration systems and through the inclusion of operable windows. While supporting stronger connections to nature might be achieved through ample natural light, views of nature, access to balconies or gardens and the use of natural materials. Design choices can also nurture strong social connections within a community.</p> <p>In response to the COVID-19 pandemic, new design guidelines are also being developed to enhance infection control practices and support residents well-being and resilience in future pandemics.</p>
<p><b>(AGE) INCLUSIVE / UNIVERSAL HOMES</b> <b>ACCESSIBLE HOMES</b> <b>ADAPTABLE HOMES</b></p> <p>Helpful Resources:</p> <ul style="list-style-type: none"> <li>• <i>CMCH: Accessible and adaptable housing</i></li> <li>• <i>Home for Life</i></li> <li>• <i>SAFERhome Standards</i></li> <li>• <i>Lifelong Housing Program</i></li> <li>• <i>AARP Home Fit Guide</i></li> </ul>	<p>Definitions across these various design terms can get a little blurry but the big idea is to ensure homes are designed, from the outset, to accommodate the needs of a wide range of potential residents of all ages and abilities. These design approaches allow homes to be adapted more easily and inexpensively as necessary and better enable older adults to stay in their home for longer.</p> <p>Accessible features like wider doors and corridors, entrances without steps, lever hardware and wall reinforcement to allow for the installation of grab bars or rails should be part of unit design specifications.</p> <p>Adaptable housing is designed to be upgraded, expanded, divided or used for a variety of different purposes throughout its life without costly renovations or structural changes; a benefit to residents whose needs change over time.</p>

<p><b>HOMES CONDUCTIVE TO CARE DELIVERY</b></p> <p>Helpful Resources:</p> <ul style="list-style-type: none"> <li>• <i>The Centre for Health Design: Aging in Place and Healthcare at Home</i></li> </ul>	<p>As health systems across the country and internationally increasingly shift care into the home, this begs the question of whether home design might better accommodate care delivery.</p> <p>In addition to the design features that are frequently included in inclusive and accessible design, it may also be beneficial to consider the needs of caregivers in the home (e.g. space for an accompanying caregiver in the bathroom, incorporation of a caregiver workstation, secure space for equipment / medication storage).</p> <p>Similarly, if care in the future will be increasingly reliant on technology, homes must be able to accommodate any necessary digital infrastructure including having a high speed and stable internet connection.</p>
<p><b>SUSTAINABLE HOMES</b></p> <p>Helpful Resources:</p> <ul style="list-style-type: none"> <li>• <i>Leadership in Energy Efficiency and Environmental Design (LEED)</i></li> <li>• <i>Passive House</i></li> <li>• <i>Net Zero Homes</i></li> <li>• <i>R-2000 Homes</i></li> <li>• <i>Built Green</i></li> <li>• <i>Green Globes</i></li> <li>• <i>Energy Star</i></li> </ul>	<p>Water performance, energy use, material choice, waste reduction and climate resilience are all important sustainability considerations with related impacts on our overall health and wellbeing.</p> <p>In addition to being a responsible environmental and community health steward, there are other reasons for incorporating sustainable building practices as you develop your project.</p> <p>Depending on where you are building, certain practices may be required by the zoning or building and energy codes in your region. In order to be eligible for certain funding sources you may also be required to meet certain sustainable design criteria.</p> <p>In cases where certain practices are optional, they could help to reduce your operating costs (e.g. if your building is highly energy efficient). A careful evaluation of the upfront costs versus the impact on the ongoing operations and maintenance of the building will be required.</p>

## Examples of housing approaches that emphasize building / unit design

### Accessible Homes

#### *Daniels Corporation, Accessibility Designed Program (Ontario)* [↗](#)

- Residential suites offered through this program exceed the accessibility standards set by the Ontario Building Code and follow the principles of universal design
- Accessible features are provided at no extra cost if the purchaser opts for an ADP suite
- Standard layouts include accessible features such as roll-in showers with grab bars, wider doors, under-sink knee clearance and roll-out balconies with swing doors

### Adaptable Homes

#### *Clarion Housing (UK)* [↗](#)

- This non-profit developer prioritizes making spaces flexible and adaptable to lifestyle changes
- In their Revensbury Project, larger two-story units can be subdivided into smaller spaces and flex as residents' needs change (e.g. stairwells are designed to accommodate stair-lifts and dining rooms can become ground floor bedrooms)



# The Non-Built Environment

## 2. The Non-Built Environment

### A. SOCIAL CONNECTION

Social connectedness is important for everyone, especially older adults who may find themselves increasingly lonely or isolated. Housing projects for older adults can work to create a strong sense of community by bringing people together who have similar interests or lived experiences, by pairing older adults with companions or housemates and by creating opportunities for neighbours to better get to know one another. Strong social connections are an important determinant of health for older adults and contribute to strong community resilience, especially in times of crisis.

#### Examples of housing approaches that emphasize building strong connections

**Cultural / Lifestyle Specific Homes:** There is growing demand from older adults to live in communities that align with their cultural or lifestyle preferences. In Ontario, for example, the wait time for a long-term care bed in a culturally or religiously specific home is double the average.<sup>18</sup>

##### *Performing Arts Lodge (Vancouver, B.C.)* [↗](#)

- Mission: To provide long-time members of Vancouver's performing arts professions with affordable housing within a vibrant and creative community setting
- 99 units of social housing (rent-geared to income suites + near-market rental suites) and 12 life-lease suites
- Includes a performing arts rehearsal space, outdoor gardens and amenity spaces

##### *Town Hall Apartments (Chicago, IL)* [↗](#)

- Offers affordable housing for LGBTQ residents 55+ in a 6 story, mixed-use development with street-level retail
- Amenities and services include a landscaped terrace, fitness room, computer lab, family dining room, secure bike parking, laundry on each floor, onsite property management and social service staff

##### *Priya Living (California)* [↗](#)

- Seniors living operator catering to older Indian residents (e.g serve Indian cuisine, feature cultural programming, targeted marketing approach)

**Home Sharing:** There are a variety of home-sharing models including co-housing (see more below) and intergenerational home-sharing. In some models, younger adults may live with an older adult and help around the house in exchange for lower rent while in others groups of friends may choose to live together and share expenses and communal spaces.

##### *Canada HomeShare* [↗](#)

- Connects students with seniors in exchange for affordable rent in the seniors home (typically between \$400 - \$600/month)

<sup>18</sup> Shortage of nursing homes geared to ethnic groups a 'disaster' for aging immigrant population, Toronto Star, Feb. 15, 2021



- Students agree to provide up to seven hours of assistance and companionship
- Program is led by social workers to ensure safety, mitigate potential conflicts and conduct routine safety checks

### **Sparrow (Canada)** [↗](#)

- Although not specifically for older adults, Canadian start-up Sparrow matches people with extra space in their home to potential housemates and makes the homeshare process easier for both parties

**Naturally Occurring Retirement Communities (NORCs):** What's most interesting about these communities is that they are unintentional in their development. NORCs are defined as housing developments that are not planned or designed for older people, but which over time come to house a large proportion of seniors. The University Health Network's Open Lab has mapped 489 NORCs in Toronto which are home to 70K seniors.<sup>19</sup> These apartments tend to attract seniors who are seeking to live in an informal community of peers.

*The University Health Network's [Open Lab](#), based in Toronto, Ontario, re-imagines what might be possible in NORCs. For example, their work on "[Social Spaces](#)" identifies specific design strategies for improving spaces such as entry ways and lobbies, elevator landings and corridors to better facilitate social interaction.*

*[Hey Neighbour Collective](#), based in Vancouver, B.C, brings together housing providers, non-profits, researchers, local and regional governments, housing associations and health authorities to experiment with and learn about ways of building community, social connectedness and resilience in multi-unit housing communities. The collective is increasingly focusing on opportunities and strategies for better meeting the needs of older residents.*

## **B. PROGRAMMING & SERVICES**

To support older adults to age independently for longer, many seniors housing models offer a range of on site services and programming focused on tenants' social, mental and physical well-being. This may be through the provision of educational classes, peer support programs or recreational and social gatherings like fitness groups or communal meals. Support may also be provided to make it easier for older adults to access outside services to extend their independence, from meal deliveries to transportation to help around the house.

### **Examples of housing approaches that incorporate seniors-focused programming & services**

**NORCs / Seniors Apartments with Supportive Services & Programs:** In some NORCs and seniors apartments, community health and social service partners, or other non-profit organizations, bring programs and services into the building with the goal of extending older adults' independence and improving their health and overall well-being. These services tend to be proactive / preventative in nature and address a range of social determinants of health.

### **Cherryhill NORC and Healthy Ageing Program (London, ON)** [↗](#)

- 13 compact rental apartment buildings close to downtown
- Apartments are managed by a private property owner while health and social services are provided

<sup>19</sup> Vaccinating Seniors in NORCs, UHN Open Lab Website, viewed July 23, 2021

by the Cherryhill Aging Program, a collaboration of residents and researchers from Western University and local businesses and community organizations

#### *Oasis (Kingston, Ontario)* [↗](#)

- Oasis is a not for profit organization that partners with private landlords who provide space within the building for program delivery free of charge
- Oasis helps to develop a senior-driven participatory program designed to strengthen and sustain healthy communities of older adults by addressing determinants of health including isolation, nutrition, physical fitness, and sense of purpose

#### *Ellice Place, Social Housing Assisted Living (SHAL) (Winnipeg, Manitoba)* [↗](#)

- A Manitoba Housing initiative that provides affordable, modified housing units and assisted living services for seniors 65+
- Rent is geared to income plus each tenant pays a \$700 service package fee (this cost was calculated based on what a person on old age security could afford, and still have money left for daily expenses)
- The service package includes: light housekeeping, bulk laundry, move-in assistance, 2 meals a day in a communal area, enhanced security, recreational programming and a front desk and a property manager onsite
- Health services are not included in the package; rather they are provided through the health care system by the regional health authority<sup>20</sup>

**Community-Led Support:** Harnessing the knowledge, skills and capacity of community members, a growing number of grassroots organizations and new ventures provide support to older adult neighbours. These models build some structure around the idea of “neighbours caring for neighbours”.

#### *Virtual Village Network (US)* [↗](#)

- A member driven, non-profit organizations for residents 50+ designed to help older adults age-in-place
- Originating with the Beacon Hill Village in Boston, there are 267 active Villages in the US; a Village 101 Toolkit is available to help others replicate the model<sup>21</sup>
- In Boston, members pay an annual fee of US\$675 per year (or US\$975 for a couple) to have access to seven staff members who help them get the services they need (e.g. finding handymen, getting groceries, scheduling rides, finding health care providers, finding social, educational, cultural activities, etc.)
- Low-income households and individuals may qualify for a reduced annual fee
- Membership fees combined with philanthropic contributions are required to cover the costs of the program

#### *Umbrella (US)* [↗](#)

- A for-profit venture that aims to build local communities of “helpers”; helpers are matched with adults 60+ who need work done in and around the house at an affordable rate
- Helpers come from the local community and are pre-vetted
- The cost of small and midsize jobs is fixed at US\$20/hr (for larger jobs, professionals can also be booked through the site but their cost varies)

<sup>20</sup> Environmental Scan of Seniors Social Housing Models, Canadian Urban Institute, January 2020

<sup>21</sup> Alternatives to Long-Term Care and Housing: An Environmental Scan, Benzie, Cacciola, Chu, Barcellos, Grant, Niehaus, Nsair, April 2020

## C. HEALTH CARE

Traditional seniors living models have historically been rooted in medicine and the delivery of health care services. This is certainly true of institutional-style nursing and long-term care homes, as well as retirement residences, that house large numbers of older adults, offer various levels of care depending on residents' needs, and almost always have on-site nursing staff. But for older adults that need higher levels of care, there are a range of alternative models that offer access to support with activities of daily living as well as health care services but which aim to offer a more home-like setting that is less institutional and medicalized.

### Examples of housing approaches that incorporate health care services

**Supportive Social Housing:** Supportive housing is a widely used term that can take on different meanings depending on the context. For our purposes, we define supportive social housing as housing that is both affordable for those with lower incomes (e.g. rent geared to income, rent supplements, housing allowances) and offers a range of supports to higher-need / higher-risk tenants (e.g. lifeskills training, mental health support, intensive case management). Supportive housing developments typically target a specific population such as formerly homeless seniors, older adults with physical or cognitive disabilities or those with addictions.

#### *LOFT (e.g. Bradford House, Ontario)* [↗](#)

- LOFT delivers supportive housing and services for at-risk seniors with complex challenges such as mental and physical health challenges, addictions, dementia and responsive behaviours
- Core services include assisted living services and specialized personal support services, behavioural support, Alternative Level of Care transitional housing, psychogeriatric case management and outreach services
- Bradford House is home to 54 residents age 55+ living with mental health, addictions and cognitive decline
- Bradford House offers residents access to personal support workers and case management services and have partnered with the palliative care team at the local hospital to better support older adults at the end of their life

*Work is underway in the City of Toronto to design an integrated service model for Toronto Community Housing Corporation's 83 seniors' designated buildings. To inform this work, the Canadian Urban Institute conducted an [environmental scan](#) of service delivery models that connect low- and moderate-income seniors living in social housing with health-related and supportive services. The report reviews 34 programs across Canada, the US and Europe. Its key findings include:*

- *Ongoing tenant involvement is key*
- *Successful models are created by understanding the population profile and then developing flexible place-based programs*
- *Health care, housing, and social service providers typically operate in different worlds*
- *Collaboration and partnerships are essential but take time*
- *On site staff can play different roles but are key to improving health and building the trust and community among senior tenants*
- *Health services require a higher level of cultural sensitivity, and resources need to be devoted to providing culturally appropriate care*
- *Funding services for low-income seniors is a challenge, but there is a business case to be made*

- *Supporting residents with simple daily tasks and undertaking building modifications are key to helping seniors age in place*
- *Social programs and wellness initiatives, combined with affordable housing, can support health outcomes*
- *Sharing health data creates complex privacy issues, but there are ways to ensure tenants are informed and their information is kept confidential when necessary*

**Clustered Care:** Clustered care models often serve a similar demographic to traditional nursing homes (e.g. older, higher need seniors) but instead of living in an institutional setting, older adults live in small house-like buildings. Typically, groups of 8-12 residents share a home and are supported by a small dedicated care team. Residents have access to all the amenities of the home including the living room and kitchen (where they can prepare their own food whenever they like) and eat family-style at a dining table. Cooking, cleaning and laundry is often done on-site in the home by the same team of caregivers who provide daily resident support. Staff develop richer relationships with residents as the care team is small and consistent. Staff are also given more autonomy than in traditional nursing home settings. The staffing model is, however, typically more expensive, although this may be offset by lower administrative costs and lower staff turnover.

#### **Green House Project (USA)** [↗](#)

- There are ~350 Green House homes in the US serving ~3,250 older adults
- Homes include private rooms and bathrooms for all residents plus a shared living room, kitchen and outdoor spaces
- “Designed to ensure that elders have the autonomy and respect they deserve, Green House homes destigmatize aging and humanize care for those who live and work there.”
- This model has been particularly effective at preventing and mitigating the impact of [COVID-19](#)

#### **Butterfly Model of Care (e.g. Henley House, ON)** [↗](#)

- Focused on serving adults with dementia; residents are grouped with others living with similar stages of dementia
- Homes are domestic, colourful settings with open access kitchens, family style dining and personalized bedrooms with individualized “front doors”
- Staff are viewed as family members / part of the household (~1:5 staffing ratio)

#### **Spruce Corners (Apsley, ON)** [↗](#)

- Supportive services are provided to 8 frail seniors who pay \$475/month in rent plus \$275/month for food (there are no additional charges for other support services provided)
- A single-story “long bungalow” with two wings, each containing 4 private bed/sitting rooms with bar fridge and microwave
- Shared dining area, kitchen, lounge and washroom suited to tenants recently discharged from hospital
- Partnership between Peterborough Housing Corporation (owner and property manager) and Canadian Red Cross (support service provider)
- Support services are provided for the equivalent cost of 2 hr/person per day and are funded by the Ministry of Health and Long Term Care + Central East Local Health Integration Network
- Plans are underway, in partnership with a local hospital, for an 80 unit building using the same model which will include 20 units for ALC discharges

**Campuses of Care:** Also known as seniors villages, campuses of care aim to integrate a broad spectrum of seniors housing and care options within a contained geography. “At an individual level, campuses increase local access to a coordinated range of health and social care services, supports and housing options. At an organizational level, campuses offer enhanced collaboration opportunities across providers and partners to improve consistency and coordination of care, and improved access to shared resources, expertise and infrastructure. At a system level, campuses can address a diversity of health, social, financial, and housing needs to help seniors avoid premature or inappropriate use of higher intensity care settings.”<sup>22</sup>

Campuses of care tend to be run either by a single organization or through a formal collaboration of independent seniors housing, health and social service providers. They may be run as private market rate communities or as mixed-income communities. Campuses often evolve over time and are built with existing housing or care facilities serving as an anchor upon which additional services and accommodation types are added incrementally.<sup>23</sup>

### ***Bruyère Village (Ottawa, ON)***

- Built by Bruyère, a multi-site academic health care organization, Bruyère Village incorporates a range of housing options for Ottawa’s aging population all on one large site
- Independent Living: 78 units in three, three-story apartments (64 market rate units and 14 units offered at average market rent and targeting moderate income households)
- Affordable housing apartments (Social Housing Registry of Ottawa determines eligibility): 25 below market rent apartments in which rent is fixed at ~80% of average market rent and 6 rent geared to income apartments (through a monthly subsidy from the City of Ottawa)
- An additional 4-story building of independent and assisted living units with 70 spaces for high risk seniors who need support with activities of daily living (funded by the local health unit)
- Includes several clustered living apartments for seniors who require additional support (including 3 meals a day)
- Offer healthy aging and community programs as well as complimentary shuttle bus service for shopping
- Near to walking trails, parks and amenities

**Dementia Villages:** Hogewey dementia village, “the Dutch Village Where Everyone Has Dementia”, opened in 2009 and set a new standard for how to care for and house older adults with dementia. It is a model that aims to shift away from institutionalization and instead seeks to create a homelike and authentic living experience for residents. “Hogewey works because of its total commitment to the vision of normalcy for older adults with dementia.”<sup>24</sup> Architecture and design firm Perkins Eastman has studied the model carefully and shares its findings of what makes Hogewey dementia village so successful in its report “Missing Main Street”. Dementia villages inspired by Hogewey have opened across the globe.

For all that is lauded about the dementia village, it is still a model that segregates older adults with dementia from the rest of society. “When asked what they’d do differently if they built Hogewey again, its operators don’t hesitate to respond that they would have a stronger connection with the surrounding community ... no one has yet succeeded in providing a place where people with dementia are ‘just people’ by knitting together the dementia village and the surrounding community.”<sup>25</sup>

<sup>22/23</sup> Seniors’ campus of continuums: local solutions for broad spectrum seniors care, F. Morton-Chang, S. Majumder, W. Berta, BMC Geriatrics, 2021

<sup>24</sup> Missing Main Street, Perkins Eastman, 2019

<sup>25</sup> Missing Main Street, Perkins Eastman, 2019



***The Village (Langley, B.C)*** [↗](#)

- 5 acre site situated on the site of a former elementary school
- Features six, fully-staffed, single-story cottages which can accommodate 12 people each, for a total of 72 residents
- Each cottage contains shared spaces (living room, library, and dining room) as well as private bedrooms and en suite bathrooms for each resident.
- Centred on a Village Plaza and Oakwood Community Centre
- Includes a general store (where items are provided free of charge to give residents the familiar experience of shopping for themselves), salon, workshop, post office, medical clinic, art space, barn with animals, vegetable and sensory gardens and walking paths
- Privately funded community so residents can self-refer and don't need to go through the local health authority to get a placement<sup>26</sup>

**D. SUPPORTIVE TECHNOLOGIES**

Digitally enabled homes and service models have the potential to assist with activities of daily living and enhance resident independence and well-being. Many older adults are already accustomed to using technology in their daily lives and will increasingly be digital natives in the years to come. An AGE-WELL poll conducted by Environics Research in July 2020 showed that 72% of Canadians aged 65+ feel confident using current technology.<sup>27</sup>

To enable the use of supporting technologies, first and foremost homes must be able accommodate high speed and reliable internet - access to the internet is increasingly viewed as a key social determinant of health and so should be considered a priority regardless of the income level of residents. Homes may also incorporate smart home or assistive technologies such as smart security or lighting systems or fall detection technology to enhance resident safety. When it comes to care, digital solutions can make it easier for residents to connect with caregivers through remote monitoring, diagnostic testing, virtual check-ins and virtual clinical visits. Finally, solutions focused on enhancing digital connection for older adults offer the opportunity to engage in virtual calls, participate in community chats, and access a range of entertainment and informational resources. The landscape of point solutions that address a targeted need (e.g. fall detection or supporting connection to informal caregivers) is changing rapidly. The challenge now is to deliver an integrated and seamless suite of solutions to older adults to enable easier at home adoption.

While the integration of supportive technologies in the home is still in its infancy, there are emerging examples of what might be possible. For health care organizations building housing for older adults, this presents a unique opportunity to integrate a forward looking digital health strategy with your housing strategy.

**Examples of housing approaches that embed supportive technology*****Connected Care Hub, UHN Open Lab (Toronto, ON)*** [↗](#)

- The Connected Care Hub is a prototype that imagines a model of service delivery within NORCs that utilizes both physical and digital supports to help seniors age-in-place

<sup>26</sup> A look inside: Canada's first 'Dementia Village', Daily Hive, July 2019

<sup>27</sup> COVID-19 has significantly increased the use of many technologies among older Canadians: poll, AGE-WELL Network of Centres of Excellence, Sept 2020

- It imagines onsite help using virtual care technologies to monitor chronic conditions, conduct virtual visits, enable virtual “walk-in” appointments and support medication management
- It also imagines supporting residents with digital literacy training and enhancing accessibility through the integration of technologies such as voice activation or digitally enabled real time translation services

*Wellness Suites (Niagara Falls, ON)* [↗](#)

- This 97-suite luxury, wellness-themed condominium development is aimed at “sophisticated baby boomers age 65+” and offers Assisted Living and Wellness Enhancement Programs available for purchase
- Have partnered with [Could DX](#) will deploy up to 40 Connected Health Kits to support remote monitoring “allowing residents to self-monitor their vital signs with data continuously flowing back to the clinical care team<sup>28</sup>

*Inspir Carnegie Hill (New York City, NY)* [↗](#)

- “This luxury assisted living residence offers a wide range of digitally enabled programs and services which it calls the [Alli Technology Suite](#), a “comprehensive technology suite designed to enhance safety, health and happiness, and to promote resident connectedness.<sup>29</sup>
- The home uses digital signage, in-unit voice assistant technologies and resident safety features such as nurse call, fall detection, location detection, access controls, etc.
- For resident entertainment, virtual reality experiences, interactive programming and live stream learning programs are available

<sup>28</sup> Luxury seniors home to deploy ‘wellness monitoring’, Canadian Healthcare Technology, July 14, 2021

<sup>29</sup> Inspir Senior Living website, viewed July 22, 2021



# The Financial Environment

## 3. The Financial Environment

### A. COST OF LIVING

Many older adults, especially those living on low or moderate fixed incomes and those living in large urban centres, find it challenging to find accommodation that is affordable. Housing is generally considered affordable if it costs less than 30% of a household's before-tax income. On top of paying for housing, older adults may find that they incur out-of-pocket health care costs which increase as they age or as their health deteriorates. Publicly-funded care will often not fully meet the needs of an older adult and so many will pay for private care and services. In some cases, the cost of these types of additional services are bundled into the cost of accommodation either through a monthly fee or included in monthly rent.

*As of 2016, almost 20% of Canadian adults over 65, and almost 40% of seniors living alone, spend more than 30% of their income on housing. Affordability is of particular concern for renters, residents of large cities, women and seniors 85 years old or older.<sup>30</sup>*

In addition to traditional rental or ownership options, there are a range of alternative housing tenures that may be considered to deliver more affordable housing and provide greater financial security to residents. [Housing for Older Adults: The Definitive Guide to the Over-55 Market, Design the Project](#) by CMCH provides an excellent overview of the leasehold and life lease tenures, co-housing and public-private partnerships.

#### Examples of housing approaches that address the cost of living

**Co-Housing:** Co-housing or co-living models lend themselves well to older adults seeking to reduce their cost of living while maintaining strong social connections and informal networks of support. Projects typically include privately owned units designed around communal amenities or a shared ownership model with private bedrooms/bathrooms and shared common amenities (much like cluster living). In many cases, co-housing projects begin with a group of future residents who come together to develop a project that meets their needs, but increasingly professional co-housing consultants and developers are bringing new projects to market. The [Canadian Cohousing Network](#) is a useful resource for those interested in learning more about this type of development.

#### *Abbeyfield Houses (20 houses located across Canada)* [↗](#)

- Non-profit co-housing model for low-income seniors with supportive services
- Monthly rent covers cost of housing + meals
- 12-15 seniors per household, each with a private bedroom and bathroom + common areas (dining room, kitchen, laundry and living spaces)
- A live-in house coordinator does regular cleaning, maintenance, prepares meals and provides support
- Houses are accessible

<sup>30</sup> Housing for Older Canadians: The Definitive Guide to the Over-55 Market - Understanding the Market, Canadian Mortgage and Housing Corporation, Aug 2020

**Harbourside Cohousing (Sooke, BC)** [↗](#)

- A common house surrounded by 31 units of housing in 3 duplexes, 3 fourplexes and a 3-storey building (with 13 units)
- Common house includes central meeting room, two kitchens, guest bedrooms, library, games room, co-care suite, laundry and office
- A fitness centre, workshop and arts and crafts room are also available on site

**Shared-equity home ownership models:** Community land trusts and housing co-ops are examples of alternative forms of affordable home ownership; these models provide both more affordable housing options and the ability for lower or moderate income residents to build equity. They tend to foster a strong sense of community amongst residents and rely on competent and committed volunteers for effective self-management. The appeal of these models is their ability to preserve affordability indefinitely unlike other affordable housing models that are time-limited in nature.

“Community land trusts (CLTs) are community-run, nonprofit landholding organizations that sell or rent the units atop the land they own, usually with the intent of keeping that housing affordable in perpetuity.”<sup>31</sup> CLTs operate as long-term stewards of affordability. They own the land upon which housing units are built and homeowners typically take out a long-term lease. Typically, for-sale homes are kept affordable through agreements that limit the amount of appreciation that can go to the homeowner with the balance of appreciation going back to the trust to continue to keep units affordable or develop new housing. There are ~250 Community Land trusts in the US and a growing number of CLTs across Canada. [The Canadian Network of Community Land Trusts](#) is a helpful resource for more information.

Housing co-ops are cooperatively owned by their members who elect a board of directors to govern and oversee management. In Canada, most housing co-ops are rentals targeting people with low to moderate incomes (although new models are emerging including equity co-ops). Over 2,200 co-ops across Canada are home to over 250,000 people and about one third of households pay monthly rent geared to income. The [Co-operative Housing Federation of Canada](#) and the [Canadian Mortgage and Housing Corporation](#) both provide helpful resources for more information.

**Harrington Village (Shelburne, Vermont)** [↗](#)

- Developed by Champlain Housing Trust (the largest community land trust in the US)
- Village includes 42 affordable apartments spread over 5 buildings, 36 apartments for seniors with free in-home care-coordination services (Wright House) and four shared-equity homes in two duplexes
- Wright House consists of adaptable one-bedroom units which incorporate design elements to help residents age in-place and includes a community room, gym, library, community kitchen, beauty salon, storage, underground parking, computer room, outdoor walking loop and garden
- In-home care services are delivered by the Support And Services At Home (SASH) Program and are funded by Medicare at no-cost to residents

**Western Manitoba Seniors Non-Profit Housing Co-operative (Brandon, Manitoba)** [↗](#)

- **Phase I:** an equity co-op for seniors with 34 housing units (14 one bedroom and 20 two bedroom)
- Rent supplements are available for 6 units and the City of Brandon purchased the equity shares for 3 units so they can house seniors with very low incomes
- **Phase II:** a four story, 63 unit project with 15 market rate units and 48 below market units

<sup>31</sup> CityLab University: Shared-Equity Homeownership, Bloomberg CityLab website, April 29, 2019



- City of Brandon transferred the land to the co-op at no cost and provided a long term reduction in municipal taxes
- Governments of Canada and Manitoba provided a \$3.1M capital contribution in the form of a 15 year forgivable loan
- No in-house services are available; community members and family watch out for aging members who need more support

A range of other models that aim to provide partial ownership opportunities are emerging in the fintech and proptech sectors with early stage companies like [Rhove](#) offering residents a chance to own shares in the building in which they live.

## B. COST TO BUILD AND OPERATE

Identifying more cost effective ways of designing and building age-friendly housing is critical in order to deliver more affordable housing options. Architecture firm BDP Quadrangle identifies three opportunities to optimize costs through design in its [Reimagining Age-Friendly Living](#) report.<sup>32</sup> The effectiveness and appropriateness of any of these strategies will be highly project specific and some may require an increase in upfront investment to achieve long term savings; a careful analysis of feasibility / cost implications must be complete to determine the best path forward.

### I. Reduce land costs

- Take advantage of under-utilised properties and sites (e.g. land adjacent to a health facility or place of worship)
- Identify adaptive re-use opportunities (e.g. convert closed long-term care homes into housing)
- Consider co-location opportunities (e.g. housing + community centre or health centre)

### II. Reduce building construction costs

- Utilize pre-fabrication and modular construction solutions
- Consider circular material cycles to optimise quantities
- Repeat designs / modules across sites

### III. Reduce building operational costs

- Incorporate passive design strategies
- Adopt durable building strategies
- Consider resilient design strategies

*CMHC's National Housing Strategy [Federal Lands Initiative](#) supports the transfer of surplus federal lands and buildings (often through a competitive process) to eligible proponents. These properties are available at discounted to no cost for the development of affordable housing units. Similarly, the [Ontario Nonprofit Lands Registry](#) provides an advanced circulation list that enables eligible not-for-profit organizations the opportunity to access surplus provincial properties for purchase before they go on the open market.*

<sup>32</sup> Reimagining Age-Friendly Living, BDP Quadrangle, 2020-21

## Examples of housing approaches that address the cost to build and operate

**Adaptive Reuse:** Serious consideration of opportunities for adaptive reuse of existing buildings to develop new seniors housing is required. For example, in Ontario, nearly half of existing long-term care homes need to be retrofitted to meet updated standards. For some long-term care homes, it will not be possible or desirable to upgrade their facility, creating an opportunity to adapt these buildings into alternative housing options. Similarly, there are approximately 27,000 religious buildings in Canada and it is estimated that by 2025 roughly 9,000 places of worship will close.<sup>33</sup> There is an opportunity to convert these buildings and/or underutilized sites into more affordable housing options for seniors. All kinds of sites are being adapted to include affordable housing and / or housing for seniors including churches, schools, post offices, hotels and malls.

### *Love Song Housing (Prince Edward County, ON)* [↗](#)

- Surplus school (46,000 sf situated on 20 acre parcel) will be converted into 50 units of affordable seniors housing and a community hub for use by tenants and the wider community; 5 units will be reserved for short stay respite care and the site will include a wellness centre so residents can access care services
- Units will be ~400 sf and include bed/sitting area, servery with fridge, microwave, counter, sink and private bathroom with walk in shower
- Facility will provide a shared lounge, kitchen, dining and laundry facilities and a three-season courtyard
- Expected service provision will include meal prep, housekeeping, laundry, etc.
- Project led by Emmanuel Senior's Affordable Co-Housing Committee

### *St. Luke's United Church (Toronto, ON)* [↗](#)

- The United Property Resource Corporation is planning to repurpose St. Luke's United Church and develop a new mid-rise addition that would feature mixed income and affordable rental housing as well as community and cultural spaces
- The development will preserve and revitalizes the 1887 heritage sanctuary

**Prefabricated and Modular Construction:** This type of housing is manufactured off-site in factory-controlled conditions and then brought to a site for installation and finishing. This process can offer a number of cost-saving advantages including fewer delays or cost overruns associated with extreme weather, more efficient use of materials and faster construction times, although this is highly dependent on the location of the site and desired design of the project. Many developers and builders across the country are experienced in sourcing and delivering modular buildings and increasingly the market is developing modular designs that are also age-friendly.

### *FABhome (Bassano, Alberta)* [↗](#)

- Modular age-friendly homes suited to developing small-scale seniors housing projects (particularly in rural settings) or augmenting the capacity of existing care facilities
- "FABhome provides a concept-to-completion service to deliver turn-key modular housing projects."
- Homes are compact, modular electric houses built to passive house characteristics and are equipped with adaptive physical and cognitive supports (e.g. sit stand counters in kitchens and bathrooms, floor system that reduces fall injuries)
- Homes also include FABassist, an age-friendly digital system that ingrates smart home controls with entertainment, activity and wellness monitoring - the system is controlled through the television using

<sup>33</sup> The Revitalization of Church Buildings: How New Life & Purpose can be Brought to these Historical Resources, Ontario Professional Planners Institute, Nov, 2018

a custom-designed tablet controller

- First homes are being built in [Bassano](#), Alberta to support their plan to deploy an age-friendly village pilot project (FAB Village Square) adjacent to the community hall which will house a common room for future village residents

#### **Minka (California, USA)** [↗](#)

- Minka homes are universally designed and easily adaptable to meet the needs of residents; their modular building system has no internal load bearing walls so room sizes can be more easily adjusted
- Their flagship model is a 640 sf one bedroom home with ADA accessible bathroom and complete kitchen
- “Home design, fabrication and assembly is faster, simpler and less wasteful than conventional construction methods.”
- Founded by Dr. Bill Thomas, geriatrician and founder of The Green House Project
- Working with [Signature Healthcare](#) (a long-term care provider in the US) to explore the feasibility of a small new seniors community in rural Tennessee

#### **R-Hauz (Toronto, ON)** [↗](#)

- Deliver prefabricated 1-2 story laneway suites and 6 story mass timber infill townhomes that work within the City of Toronto planning guidelines
- Exterior facades are customizable and floor plans are flexible to accommodate a range of configurations, including those well suited to older adults (e.g. direct elevator access to each unit, balconies in each unit, etc.)
- Buildings exceed municipal/provincial energy efficiency requirements

**Passive Design Strategies:** Passive design refers to technologies and construction methods that increase a building’s energy efficiency and reduce its operating costs without using complex systems (e.g. improved insulation, energy efficient heating/cooling systems).<sup>34</sup> In addition to being environmentally sustainable, these strategies can also help to reduce monthly utility bills and overall building operating costs. For more information, visit [Passive House Canada](#).

#### **Hillcrest Senior Residence (Pittsburgh, PA)** [↗](#)

- One of the largest Passive House certified projects in the United States
- Consumes ~86% less energy for heating and ~46% less energy for cooling when compared to typical developments
- 66 mixed income housing units for seniors - 6 units for senior households earning 20% of the area median income (AMI), 34 units for those earning 50% AMI, 16 units for those earning 60% AMI, and 10 units at unrestricted rents; Also includes 8 units that are fully accessible
- Project has a community room with a library, community garden, business centre, fitness room, outdoor terrace, laundry rooms, and a private room for health services
- Developer partnered with the University of Pittsburgh’s School of Nursing to provide residents with quarterly health screenings, monthly healthy eating tips and exercise and fall prevention workshops<sup>35</sup>

<sup>34/35</sup> Housing for Older Canadians: The Definitive Guide to the Over-55 Market - Designing the Project, Canadian Mortgage and Housing Corporation, September 2020

# Conclusion

We are encouraged by the range of emerging housing models for older adults, both in Canada and internationally. They remind us that there are a range of alternatives to the predominant options currently available in Canada. As more organizations commit to expanding the range of housing options for older adults in their communities, especially for lower and middle income older adults, our collective knowledge and expertise will only strengthen. Addressing gaps in the seniors housing market will be critical in the years ahead if we are to ensure that older Canadians have affordable, appropriate and supportive homes in which to age.

Our hope is that the Building with Mission project will help to increase the interest of health organizations to join this effort. By utilizing their real estate assets, their resources and their expertise, mission-driven health organizations can help to bring a greater supply and range of housing options communities across the country more quickly. For more information visit [BuildingWithMission.ca](http://BuildingWithMission.ca).

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