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ENABLING THE MISSING MIDDLE:

DEFINITIONS, EVIDENCE, BARRIERS, AND PROMISING PRACTICES

November 2024

Authors:

Dr. Carolyn Whitzman, Nima Ashtari, and Priya Perwani

Contributors:

Ahmad Al-Musa, Alikhan Orynassar, Cherise Burda,
Karen Chapple, Lauren Shiga, and Paul Akaabre

GENERAL INQUIRIES

Contact us at schoolofcities@utoronto.ca or 1-416-946-7534

Learn more about us at schoolofcities.utoronto.ca

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DESIGN

Tony Chang and Priya Perwani

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EXECUTIVE SUMMARY

The purpose of this report is to identify current Canadian and international proven and promising practices in enabling the higher density and more affordable infill development known as “Missing Middle” (MM). We begin with definitions and benefits of MM, before describing the recent growth of MM enabling legislation in the U.S. and New Zealand as well as Canada, and evaluation of their success. We outline current barriers and potential enablers to enhance reforms that are still relatively new and untested.

“Missing Middle” is defined in this report as multi-unit residential and mixed-use developments that have similar lot sizes and heights to single-family homes. Home types are generally in three categories: accessory dwelling units (ADUs – small detached or attached homes), multiplexes (subdivisions of existing houses into two or more units, or purpose-built multi-unit flats), and small apartment buildings of up to four storeys, often on a single lot.¹ MM is a density type in between mid-rise (5–11 storeys) and high-rise apartment buildings (12 storeys or more) at one extreme, and single-family homes at the other. However, many planners and developers we interviewed included mid-rise apartments in their working definitions. The term is also associated with a price point: market MM for moderate- and median-income households earning between 51–120% of area median household income (AMHI), although ADUs, multi-tenant buildings such as rooming houses, and nonmarket MM may be aimed at very low and low-income households earning less than 50% AMHI.² MM housing was common in North America during the late 19th and early 20th century, before exclusionary zoning and building codes, along with gentrification of well-serviced central cities, led to the loss of existing stock and difficulty in building new multi-family affordable homes.

Benefits of MM include:

- Greater affordability due to smaller home sizes than single-family homes;
- Greater diversity of home sizes than a duopoly of small one- to two-bedroom units in high-rise apartments and large four-plus bedroom single-family new homes, from studio ADUs and “cottage clusters” to larger multiplexes and two- to four-bedroom apartments;
- Better locations, often in areas with good access to public transit, amenities, and employment; and
- Energy efficiency, due to smaller homes and shorter distances between homes, services, and employment.

Although the benefits of infill housing, along with related concepts like urban intensification, transit-oriented-development, and “15-minute cities”, have been recognized since the 1990s, legislative, administrative, and financial barriers have prevented wide uptake until the past decade. Evidence from international cities and states/provinces that have undertaken jurisdictional reform shows:

- Increasing MM housing supply can reduce housing costs in relation to incomes, including for low-income tenants (Auckland);

- Increasing MM housing requires addressing building codes, design restrictions, financing, development taxes, and NIMBY (Not In My Back Yard) pushback, as well as upzoning (California); and
- Focusing on enabling very low- to moderate-income MM may require density bonusing, financial incentives, and cross-party, intergovernmental collaboration (Portland and Oregon).

Evidence from Canadian promising practices (Edmonton, Kelowna, Kitchener) suggests:

- MM reforms must be integrated into long-term “roadmaps,” preferably with affordability, nonmarket, and locational sub-targets (who needs what housing where and at what cost);
- While municipalities can and do undertake reform individually, supportive federal and provincial reforms (targets, zoning and building code reform, and ways to fund infrastructure improvements that go beyond “growth paying for growth”) are essential to increase MM housing supply; and
- MM development is highly reliant on an emergent set of SME (small and medium-sized enterprise) developers, including homeowner-developers, who need better access to financing, quick and simple approvals, and an end to development taxes.

Missing Middle reforms must be integrated into long-term “roadmaps,” preferably with affordability, nonmarket, and locational sub-targets (who needs what housing where and at what cost).

We identify eight types of enablers and good practices that help overcome barriers:

1. **Targets.** Not only is there need for municipal housing supply targets set by senior governments (federal, provincial/territorial), but specific targets related to cost, size, location, and type of housing in cities, and neighbourhoods within those cities, that need to be linked to infrastructure funding from senior governments.
2. **Ending exclusionary zoning.** A simplified set of federally or provincially mandated residential and mixed-use zones, permissive as to number of units (especially in relation to congregate housing such as rooming houses, group homes, and long-term care), with additional flexibility as to mixed-uses (housing on top of retail, incorporating childcare and other services); it is impossible to scale up MM housing development without consistency and simplified zoning both across and between municipalities.

3. **Real local democracy.** Automatic staff approvals of developments conforming to simplified and much more permissive zones will help avoid NIMBY and other anti-democratic delays; moving local decision-making “upstream” to official and neighbourhood plans, plus use of mechanisms to ensure that marginalized groups (e.g. low-income and racialized tenants) get an equal say; and enabling feedback loops between SME developers and planners, including encouraging homeowner-developers.
4. **Building codes.** Should be revised, preferably at the federal level, to enable single egress and wood framing for buildings up to six storeys, to allow smaller and more energy efficient apartment buildings with larger units and more windows; and enable smaller elevators (to improve accessibility in small apartment buildings).
5. **Eliminating site design barriers.** Reducing multiple design barriers to MM development affordability and feasibility, including parking minimums, arbitrary front, back, and side site setbacks that limit tree retention and green and permeable ground cover; eliminating height and unit size minimums and building setbacks; considering unit size maximums to limit single-family “monster home” redevelopment.
6. **Rapid approvals.** Should be enabled through pre-approved designs with simplified online MM applications and reduction or elimination of multiple studies with associated fees; existing nonconforming uses like rooming houses should be legalized in all zones.
7. **Development taxes.** Should be reduced or eliminated for MM infill housing.
8. **Financing.** Should be supported by municipalities, including free leased land for nonmarket developers and easier access to credit for small developers, such as homeowners, including non-traditional forms of ownership such as cohousing and community land trusts.

1. INTRODUCTION

This report was funded by the Canada Mortgage and Housing Corporation (CMHC) as part of its Housing Supply Challenge (HSC) Level 5: Scaling Up program. The School of Cities was commissioned to provide support to the 18 nonmarket and market affordable housing innovators, including research support. This research is part of the housing ecosystem support that can help the HSC innovators form better understanding of the Missing Middle landscape, encouraging faster mobilization, uptake, and scaling of housing solutions.

The purpose of this report is to identify current Canadian and international proven and promising practices in enabling the higher density and more affordable infill development known as “Missing Middle” (MM). We identified current barriers and potential enablers through a review of both peer-reviewed research and recent reports related to key terms like Missing Middle, “infill”, and “urban intensification.” We supplemented the literature review with initial interviews with three affordable housing developers: one West Coast, one Prairies and one in Ontario. Our initial research over the summer of 2024 revealed certain cities that were identified as good Canadian practices, including Edmonton, Alberta; Kelowna, British Columbia; and Kitchener, Ontario. We interviewed one or more municipal planners, one political leader, and one affordable housing developer in each of those three cities in August and September 2024.

We begin this report with definitions and benefits of MM, before describing the recent growth of MM enabling legislation in the U.S. and New Zealand as well as Canada, and evaluation of their success. We outline current barriers and potential enablers to enhance reforms that are still relatively new and untested.

*The purpose of this report is to **identify current Canadian and international proven and promising practices in enabling the higher density and more affordable infill development known as “Missing Middle.”***

2. WHAT IS THE MISSING MIDDLE?

Missing Middle (MM) housing describes a range of multi-unit or clustered housing that can fit in lots currently occupied by single-family homes. In British Columbia (B.C.), the term “small-scale multi-unit housing” (SSMUH) describes these two basic characteristics (B.C. Government 2024). MM housing typically sits in the middle of the height and density range defined by single-family homes at one extreme, and mid- or high-rise apartments at the other (see Figure 1). These buildings include accessory dwelling units (ADUs – both individual small buildings and clusters), multiplexes (duplexes, triplexes, fourplexes, and more), and small apartment buildings under four storeys. Four storeys is an arbitrary limit set by many proponents of MM as equivalent in height to single-family homes. However, many Canadian MM actors we interviewed included buildings of six to eight storeys (including the City of Kitchener, 2023). MM homes have “gone missing” in many North American and Australasian cities because of increasingly exclusionary zoning and building regulations, most acutely felt over the past 50 years (Garcia et al. 2022; Evenson et al. 2018; Opticos Design 2018; Whittemore 2021).

Figure 1: Missing Middle housing options.



Source: Opticos Design Inc (2018).

Along with height, form, and lot size, MM also refers to an income point: the lack of well-located affordable housing for low- to median-income households to rent or own (CMHC 2021; Garcia et al. 2022). Daniel Parolek, the architect and founder of Opticos Design who coined the term “Missing Middle” in 2010, identifies several characteristics that unify MM development. These include their relative affordability, proximity to neighbourhood services including shops and transit, lower perceived density (due to having the scale and form of a single-family home), a small building footprint (especially in terms of width and depth of the building), and liveability despite their smaller size (Parolek 2020).

MM is predominantly an urban/suburban concept rather than a small town or rural one, and many of the mechanisms discussed in this report are most relevant to communities with frequent public transit systems. Although the B.C. Guidelines for small-scale multi-unit housing (SSMUH) (B.C. Government 2024) cover all settlements with more than 5,000 people, some of the ideas (including eliminating minimum parking requirements) are less relevant to regional or rural areas with poor public transit or walkability.

MM housing is further broken down into three typologies: ADUs, multiplexes, and small apartment buildings.

2.1 ACCESSORY DWELLING UNITS

Accessory dwelling units (ADUs), sometimes known as the “Missing Little,” are additional units on a lot already occupied by a main building (Lessard et al. 2018). They include garage suits, backyard suites, and basement suites. They are self-contained, with a kitchen and bathroom, and generally have a separate entrance (Ashtari et al. 2022). As shown in Figure 2 and Figure 3, ADUs can be added to the main property or built separately. They can be a basement suite, a structure in the backyard or on a laneway, a garage retrofitted to have an apartment above, or an annex to the main building.

Figure 2: An attached ADU (yellow).

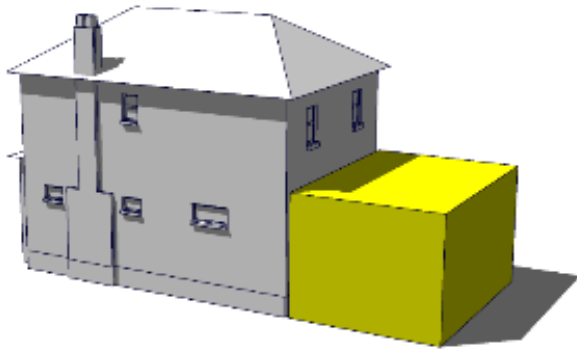
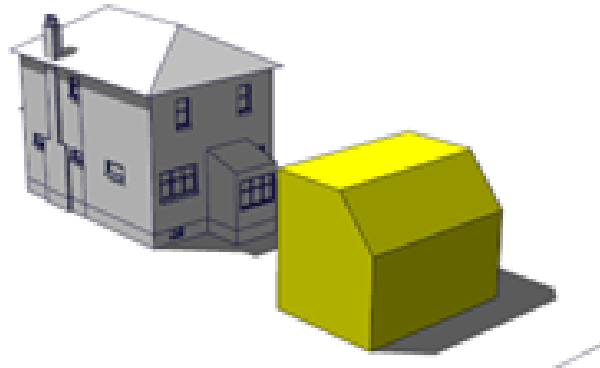


Figure 3: A detached ADU (yellow), often a laneway house or garden suite.



Source: Finding The Missing Little in Toronto (2022).

2.2 MULTIPLEXES: DUPLEXES, TRIPLEXES, FOURPLEXES, AND MORE

A multiplex is “a two- or three-storey building with one or two apartments per floor” (Open Council 2024). Like ADUs, each apartment is self-contained, with kitchen and bathroom (see Figure 4). The units share one or more walls with their neighbours, generally extend from the front to back of the building and have a direct entrance from the street, rather than a common lobby (Asad 2024;

DeWolf 2005). They can be converted from single-family homes in some cases, and conversely, can be converted into single-family homes (Muhkija 2022). Multiplex buildings are commonly found in older American cities like Boston, Chicago, New York, and some smaller Midwest cities (DeWolf 2005), as well as being a dominant form of housing in Quebec cities (LaFerrière 2021). Generally, multiplex units have two to four bedrooms and are larger than ADUs.

Figure 4: A fourplex offers four separate living areas, two on each storey, united by a shared entryway.



Source: Bradford Today (2024, April 5).

2.3 SMALL APARTMENT BUILDINGS (FOUR STOREYS OR LESS)

The City of Toronto (2018) and B.C. Housing (2019) define small (or low-rise) apartment buildings as having four storeys or less while sharing interior corridors, vertical circulation, and entrances. They feature vertically stacked units that may be organized on one or both sides of a shared corridor (single-loaded or double-loaded), or less frequently in North America, clustered around a single entrance or stairwell. In most cases, small apartment buildings do not have elevators unless they were designed or renovated to accommodate people with a mobility disability, families with young children, or older people who may have difficulty with stairs.

Some apartment buildings do not have self-contained private units. Instead, they contain rooming houses, single room occupancy units, and other forms of congregate housing, such as group homes for people with disability or student dormitories. “Dwelling units” are defined as units that may have a kitchen or bathroom, but not both, and usually share an entrance. They may share a kitchen, bathroom, or common room. They are intended for long-term accommodation (Goldstein 2020).

Small apartment buildings generally do not have the shared amenities or facilities (communal pools, recreation rooms) of larger apartment buildings (Unique Properties 2021). Low-rise apartments have a range of unit sizes, from studios to four-bedroom units, often within the same building.

Figure 5: A four-storey apartment in contains dozens of units and fits nearly seamlessly into most low-rise neighbourhoods (Auckland, New Zealand).



Source: Shutterstock.

Figure 6: Heartwood apartment complex contains 52 units and is located in a residential community (Hamilton, Ontario).



Source: Indwell.

All forms of MM housing were common in the late 19th and early 20th centuries in Canada's largest cities, including Montréal, Toronto, Winnipeg, Vancouver, and Halifax.

All forms of Missing Middle housing were common in the late 19th and early 20th centuries in Canada's largest cities, including Montréal, Toronto, Winnipeg, Vancouver, and Halifax.

3. WHAT ARE THE BENEFITS OF MISSING MIDDLE?

3.1 AFFORDABILITY

Zoning and other forms of local regulation determine who can afford to live in a community (Whittemore, 2021). In this report, we use income-based definitions of affordability similar to those used by the CMHC from the 1940s to the 1980s and those used by the U.S. Department of Housing and Urban Development today (HART, 2024). This definition is income-based, not based on a proportion of ‘market prices’, and uses the standard international definition of affordability, which is 30% of pre-tax household income:

- Very low income: up to 20% of area (regional or metropolitan) median household income (AMHI)
- Low income: 21–50% AMHI
- Moderate income: 51–80% AMHI
- Median income: 81–120% AMHI
- Higher income: more than 121% AMHI.

Traditionally, Missing Middle (MM) housing was intended to meet the needs of very low- to median-income renters, including but not limited to students, minimum wage workers, seniors and others reliant on pensions, and young single adults and couples. Renting out multiplex units and ADUs was a mechanism to help cover mortgages for moderate- and middle-income owners. Starting in the early 20th century in some neighbourhoods, and escalating in the 1970s, three regulatory mechanisms and market dynamics affected the availability of low-cost MM options: (1) increasingly exclusionary zoning and crackdowns on “illegal” rentals; (2) deconversion of multiplex rental units to owned single-family homes, as well as conversion of some multiplexes to condominium status; and (3) more generally, “gentrification” of central cities and suburbs, or movement of higher-income households into communities, leading to displacement of lower-income households and increased housing costs in remaining units (Harris and Kinsella 2017).

With the MM choked out of cities for half a century, housing options for low- to median-income renters and homebuyers have become increasingly limited, forcing many into overcrowding in small central city high-rise condominium units, or lengthy and costly “drive until you qualify” commutes to suburbs and regional cities (Carlucci 2023). Over the past decade, a new generation of activism on MM, and associated urban infill concepts of transit-oriented development, 15-minute cities, and complete communities, have argued for the importance of affordable and well-located “starter homes” for younger households, as well as options for older “empty nesters” to “age in place” and community (Burda and Chapple 2024a; Employment and Social Development Canada 2016; Garcia et al. 2022) argue that ADUs alone could satisfy between 10 and 20% of Canada’s housing supply shortages (similar to California), and in a form that is well-located and affordable to those who need housing most desperately: low- and moderate-income singles and couples.

Some researchers have questioned the effectiveness of the MM to address housing affordability and equity issues. Skeptics argue that abolishing exclusionary zoning is unlikely to yield a substantial increase in new housing units, and the newly built low-rise multi-family homes could remain unaffordable for low-income households. Building more housing in single-family neighbourhoods could benefit moderate- and low-income households through housing “filtering,” but the filtering process could take decades. In addition, upzoning in desirable and high-demand locations could contribute to gentrification (Dong 2024).

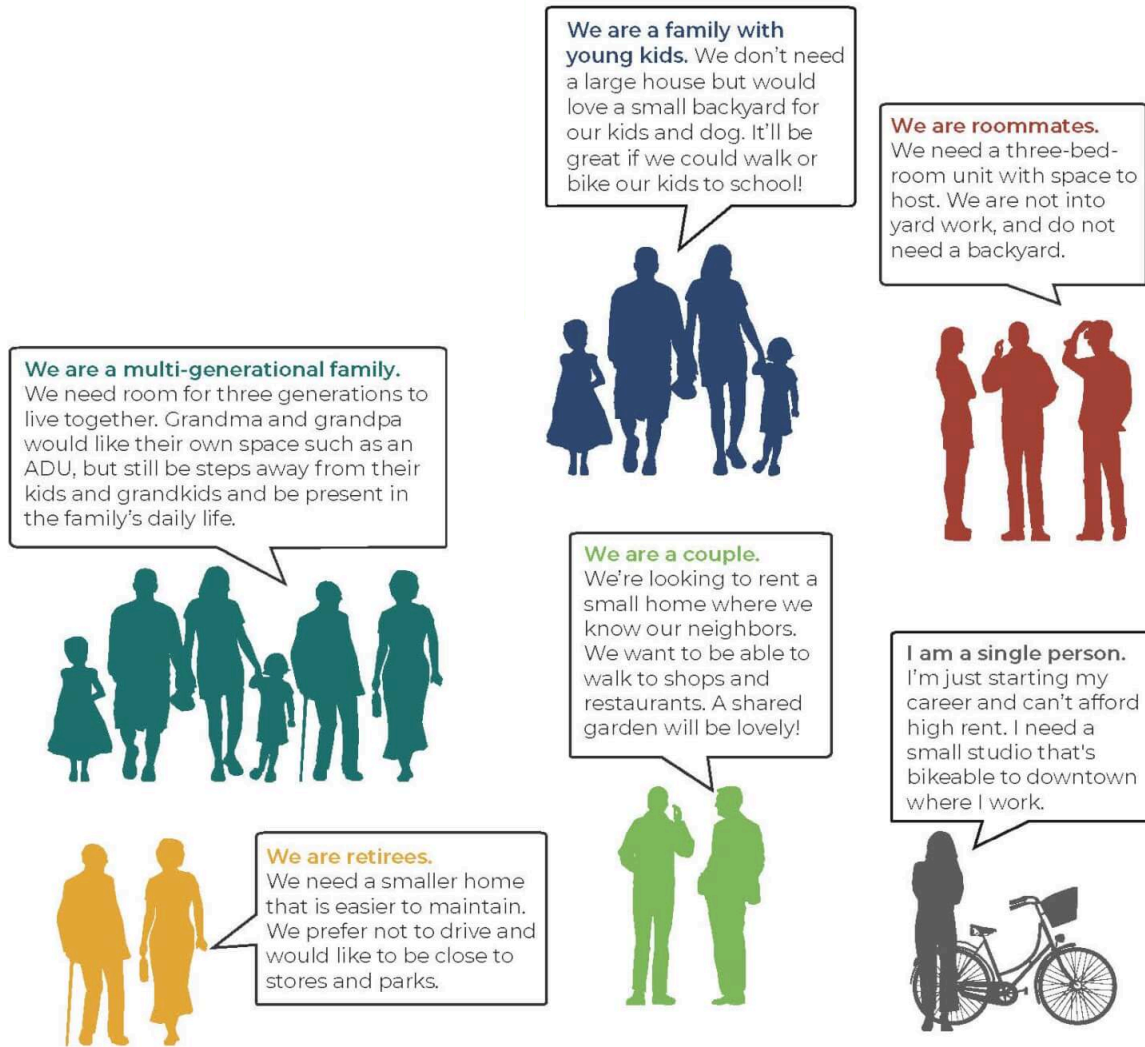
However, gentrification is already occurring in well-located neighbourhoods with predominantly single-family housing, and demolition of older houses for larger and even more expensive single-family homes is endemic. Single-family homes are nearly three times more expensive in overall price than multiplex units that could be built by upzoning (Garcia et al. 2022). Adding a unit to an existing property has the potential to cover mortgage payments if the costs of construction, including costs of financing and development taxes, are less than what that property owner could charge in rent (Alam et al. 2021; Cipkar 2023; Mendez 2018). Property owner landlords are more likely to charge below-market rent (Cipkar 2023), particularly if the tenant is a family member or friend, as was the case in many of Edmonton’s first ADUs (Salvador 2017). For seniors who are homeowners, even if they have paid off their mortgage, renting a unit may assist in paying for home maintenance and supplementing pension income, as well as providing companionship and possible assistance, a significant enabler for aging in place (Arcis 2022). There are also numerous schemes to provide additional affordability, from density bonuses for affordable units in Portland (Andersen 2020) to waived fees and development charges for nonmarket redevelopment (Lee 2022). There is also evidence that increasing supply lowers housing cost increases in well-located neighbourhoods most subject to gentrification (Dong 2024).

3.2 HOUSING DIVERSITY

Aside from form and affordability, MM units also provide “middle sized” units. Central city neighbourhoods increasingly consist of extremely expensive larger single-family homes (four to five bedrooms), especially in the case of “knockdown rebuild” projects where smaller two- to three-bedroom homes are torn down and replaced by larger dwellings. The arterial roads where higher density housing has been allowed in recent years have attracted the development of small studios and one-bedroom units more suitable for investment than long-term living. Neither size is affordable or adequate for most couples or families with young children, who are increasingly leaving expensive Canadian cities such as Toronto and Vancouver (Moffatt 2021). Inadequate housing options are exacerbated by double-loaded corridor apartments required by most North American building codes, which make larger apartments with three or more bedrooms nearly impossible to construct (Smith 2023).

Carlucci (2023) argues that smaller scale apartment buildings, multiplexes, cottage clusters, and ADUs encourage social interaction, thereby creating a sense of belonging, community, and support among residents. They can offer opportunities to integrate and serve multiple generations or households (cohousing): i.e. these units enable people of all ages to live together and share space in different ways (Figure 7). Accessible ADUs allow seniors to age in place, to grow older without moving to bigger scale or institutional settings (Arcis 2022).

Figure 7: Benefits of Missing Middle housing.



Source: ARP and Opticos Design.

Smaller scale apartment buildings, multiplexes, cottage clusters, and ADUs encourage social interaction, thereby creating a sense of belonging, community, and support among residents.

3.3 ENVIRONMENT, LOCAL ECONOMIES, AND HEALTH

Internationally and within Canada, urban sprawl is a major contributor to climate change, through higher emissions from land use change, embedded emissions in infrastructure, and transport energy consumption. “Smart growth”, or intensification of existing communities, has been advocated by all levels of government since the 1990s (Monroy et al. 2020; Tomalty and Alexander 2005). Rankin et al. (2024) found that, on average, MM buildings have significantly lower embodied greenhouse gas (GHG) emissions per bedroom when compared to single-family and mid- or high-rise buildings. Residents in higher density neighbourhoods use about 40% less electricity and 50% less water than those in low-density areas (U.S. Environmental Protection Agency 2011). MM housing also has the lowest carbon footprint in construction. In comparison to high-rises, MM projects use less energy to build, can be made of environmentally conscious materials, and have simpler mechanical systems (Vivre en Ville, 2023).

The environmental benefits are enhanced if parking requirements are relaxed. Heavy concrete substructures for high-rise buildings, especially those with underground parking, can be minimized (Rankin et al. 2024). Brownstone and Golob (2009) have found that density is inversely correlated with vehicle use.

The related goals of urban intensification, transit-oriented development, and 15-minute cities encourage walking, cycling, and use of public transit, all of which are more beneficial to public health than car dependence (Parolek 2015). The closer families are to schools and playgrounds, and the closer seniors are to green spaces and health services, the more that transportation costs and time can be saved (ARP and Opticos Design [n.d], City of Vancouver 2016). Walkability can also improve mental and physical health through improved “sense of place” and local economic vitality (Parolek 2015).

Frederick (2022) has found that diversity in housing stock is associated with lower unemployment and decreased income inequality for workers aged 25 and under, suggesting that one of the explicit aims of MM should be to preserve income and social diversity as areas are upzoned. MM housing also offers family-friendly and ground-oriented alternatives to building more single-family housing in “greenfields”, which is why MM ownership options are required (Burda and Chapple 2024a).

4. DOES MISSING MIDDLE WORK?

Legislation to end single-family zoning and enable a variety of Missing Middle (MM) typologies in English-speaking countries is recent. In 2016, Auckland became the first city to broadly upzone from single-family to three units on a lot, although secondary units were allowed in California, Vancouver, and a few other jurisdictions at the turn of the 21st century. Minneapolis became the first North American city to allow multiplexes throughout residential zones in 2019. Edmonton became the first Canadian city to undertake comprehensive equity-based regulatory reform, starting in 2018. Given that development timelines between application and move-in are generally two to five years, evidence on the ability of MM legislation to enable increased well-located and affordable supply is limited.

In addition, the period from 2019 to 2024 has been complicated by COVID-related labour and construction disruptions, and many of these jurisdictions have faced legal challenges as they try to reform outdated systems. This section reviews the current limited evidence on which MM enablers work best.

4.1 AUCKLAND, NEW ZEALAND

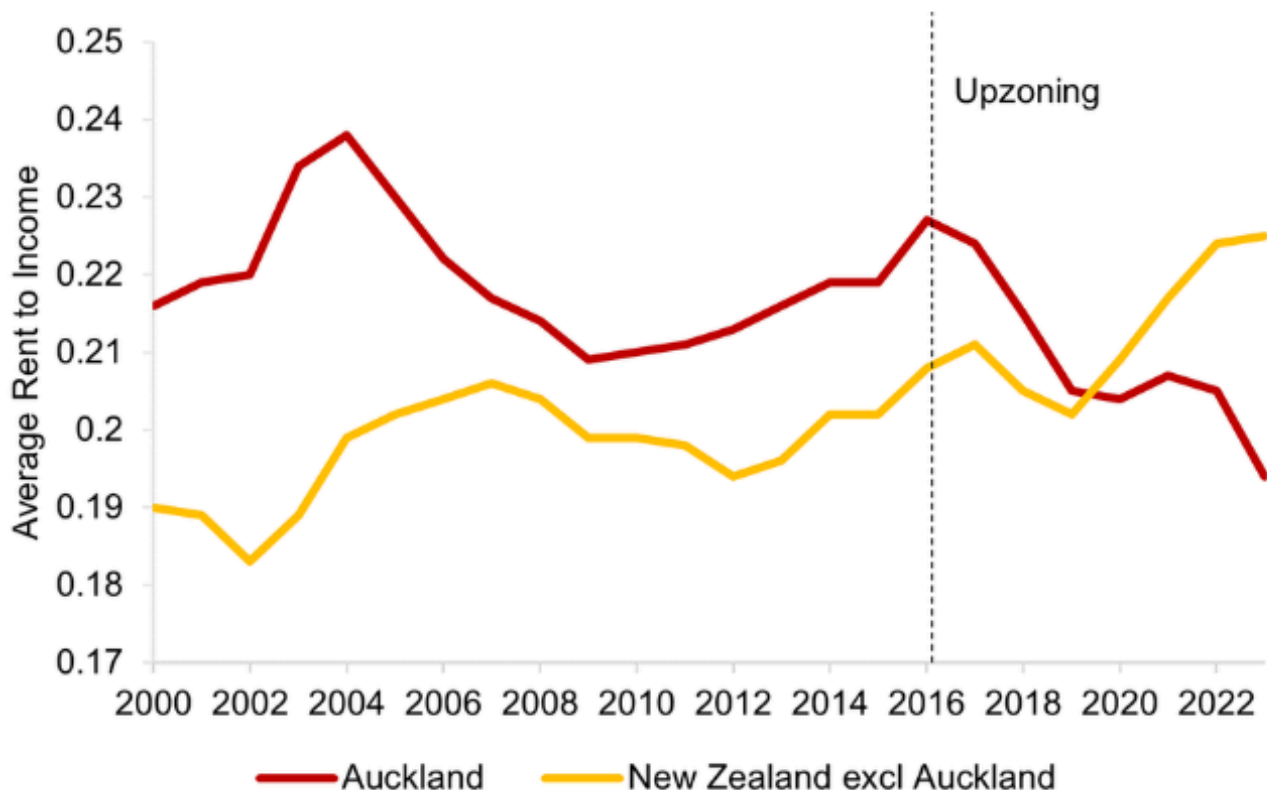
Auckland, the largest city in New Zealand, was one of the first cities in the world to end exclusionary zoning, in 2016, six years after its suburban municipalities amalgamated with the central city government. Between 2001 and 2018, the city's population increased almost 50% from 1.16 million to 1.57 million, while housing prices doubled between 2009 and 2016 (Greenaway-McGrevy and Jones 2023; Mielezsko 2023). The need for strategic policies and direction to manage urban growth had initially led Auckland Council to release a strategic plan in 2012, detailing new housing targets and aiming to have 60 to 70% of its new dwellings built within the existing built-up area.

The 2016 official plan (called a “unitary plan” in New Zealand) simplified residential zoning in the amalgamated city to four zones, all of which were more permissive than the zones they replaced. The terrace housing (townhouses) and apartments zone, for instance, had a maximum height limit of five storeys and a maximum site coverage of 50%. Reliance on regulating maximum unit numbers, minimum lot sizes, and front, back, and side setbacks were minimized to accelerate new construction.

The number of permissions nearly doubled in the five years after the upzoning compared to the five years before the new rules; 68,000 new building permits were issued from 2017–2021, compared to 35,000 issued from 2012–2016. Permissions were primarily in the form of townhouses and multiplexes, located closer to the central business district, transit lines, and employment locations than previous development (Greenaway-McGrevy and Phillips 2022).

In 2010, Auckland was the most expensive major city in New Zealand for renters. Since the upzoning reforms, rents in Auckland have grown more slowly than the national average. Between 2016 and 2022, median rent to median incomes dropped substantially, from 22.7% in 2016 to 19.4% in 2023 (Maltman 2023). In contrast, New Zealand as a whole saw this ratio rise from 20.8% to 22.5% (Figure 8). It is now cheaper, on average, to rent in Auckland than in Wellington, the next largest city. Upzoning in Auckland has been calculated to have decreased the rents for a two-bedroom home by 14–35% over a Business As Usual scenario (Greenaway-McGrevy 2023).

Figure 8: Auckland versus the rest of New Zealand rent to income ratio.



Source: Maltman, 2023.

Upzoning has led to benefits for low-income renters. Rents in the lowest quartile have risen more slowly in Auckland than the median rents. From 2010 to the end of 2016, lowest-quartile rents grew by approximately 38%; from 2016 until 2022, the growth in these rents had tapered to 14% (Maltman 2023). The causal nature of these findings – that upzoning led to more supply and that more supply led to greater affordability – are disputed by other housing economists who point out the role of other contextual factors (Murray and Helm 2023). However, the correlation between increased supply and lower prices in Auckland as compared to other jurisdictions in New Zealand is hard to contest.

To conclude, there is strong evidence that comprehensive upzoning in Auckland swiftly increased well-located supply and decreased the pace of rent increases, including benefits for low-income renters.

4.2 CALIFORNIA, UNITED STATES

California, with a population similar to Canada's (39 million), has been at the forefront of state-led policies to address severe housing shortages in many of its municipalities and regions. Since 1989, the state government has required municipalities to include a "housing element" in their "general plans" (in Canada, "official plans"), which includes a strategy to meet housing supply needs (Chapple et al. 2020). But progress on supply and affordability has been hampered by a "whack-a-mole" approach to specific MM barriers thrown up by local governments.

Much of California's enabling legislation has focused on ADUs. A 2016 McKinsey report estimated that California could add up to 790,000 housing units if homeowners are willing to adapt their properties to accommodate ADUs (Brown Calder and Gygi 2023). In 1982, the State banned municipalities from explicitly outlawing ADU development. However, some municipalities reacted by enacting tougher approval processes (Brown Calder and Gygi 2023). A 2002 state bill required as-of-right approvals for ADUs, but municipalities still managed to limit the number of permits for ADUs by increasing costs of infrastructure hookups and other development taxes (or "impact fees" in California), as well as adding new barriers such as on-site parking minimums, floor area ratio (FAR) restrictions, and minimum setbacks (Chapple et al. 2020).

California addressed many of these issues in 2019 when the legislature passed additional bills to override municipal barriers. Cities and counties were mandated to permit ADUs as-of-right with minimal restrictions; ADUs could be built concurrently with a new primary residence and ADU projects were to be approved within 60 days. Over time, minimum lot sizes, parking requirements, and owner-occupancy rules were banned, as were development taxes for units smaller than 750 ft².

The impact of these legislative changes has caused the number of ADU permits issued in California to increase dramatically; by 88% between 2019 and 2022. Constructed ADUs follow the same general trend, almost tripling from 5,852 in 2019 to 17,460 by 2022 (Brown Calder and Gygi 2023). By 2024, 100,000 ADUs had been permitted, fully 20% of total housing permits (Casita Coalition 2024).

In 2021, California followed Oregon's lead (see 4.3) by eliminating single-family zoning and allowing up to four new homes on most lots. However, high development taxes and design considerations such as restrictive floor area ratios, height limits, and setbacks have continued to be barriers to supply, as is uncertainty related to lawsuits against the legislation by NIMBY municipalities. (Minneapolis had many of these problems as well, meaning that only 65 duplexes and 20 triplexes were approved in that city from January 2020 through June 2022 [Garcia et al. 2022].)

Further, the financial viability of MM housing beyond ADUs is still an open question. Builders interviewed across California said that the ideal building typology would be between eight and twelve units, where more projects start to become financially viable. This “magic number” would allow developers to leverage economies of scale while using less expensive wood frame construction, without elevators, depending on building code requirements. Developers in San Diego have taken advantage of the City’s unlimited ADU provisions – which go beyond the State-mandated requirements to allow up to two ADUs – to build cottage clusters of ten or more additional homes on larger parcels, which greatly improves financial feasibility and also produces affordable units (Garcia et al. 2022; Wegmann et al. 2024).

A 2024 report by the same Turner Center team modelled proformas for four kinds of MM developments – a duplex and fourplex development intended for sale, and a fourplex and ten-unit apartment building intended for rent – in four California markets. The break-even rents for the fourplex were not affordable to median-income households, even in the lowest land cost market. Reductions in development taxes and use of replicable as-of-right designs that attract conventional finance may nudge projects closer to affordability and feasibility (Garcia et al. 2024).

Because of their small size, ADU ownership tends to be slightly more affordable than conventional housing units. About 27% are affordable to low- to median-income households making less than 120% of Area Median Household Income (AMHI), in comparison to 20% for all newly permitted housing (Minott 2023). A recent survey of rents found a wide range of affordability; the share of units affordable to a two-person household with an income less than 80% of AMHI ranges from 12% in Los Angeles to 67% in Marin County (Chapple et al. 2021).

There is strong evidence that to increase the supply of ADUs, California state targets and a consistent stream of evidence-based enabling legislation were essential. However, in a high land cost scenario, as in California and many Canadian cities, additional measures, such as eliminating development taxes, scaling up modular production, and addressing all “second generation” design barriers (i.e. remaining regulations like parking, setbacks, unit limits, and floor area ratio that complicate production) may be necessary to provide MM viability and affordability.

4.3 PORTLAND, OREGON

The City of Portland’s MM approach includes bonuses for affordable and nonmarket housing, making it a particularly interesting source of evidence, as does the bipartisan nature of support for equity-focused MM in the state of Oregon.

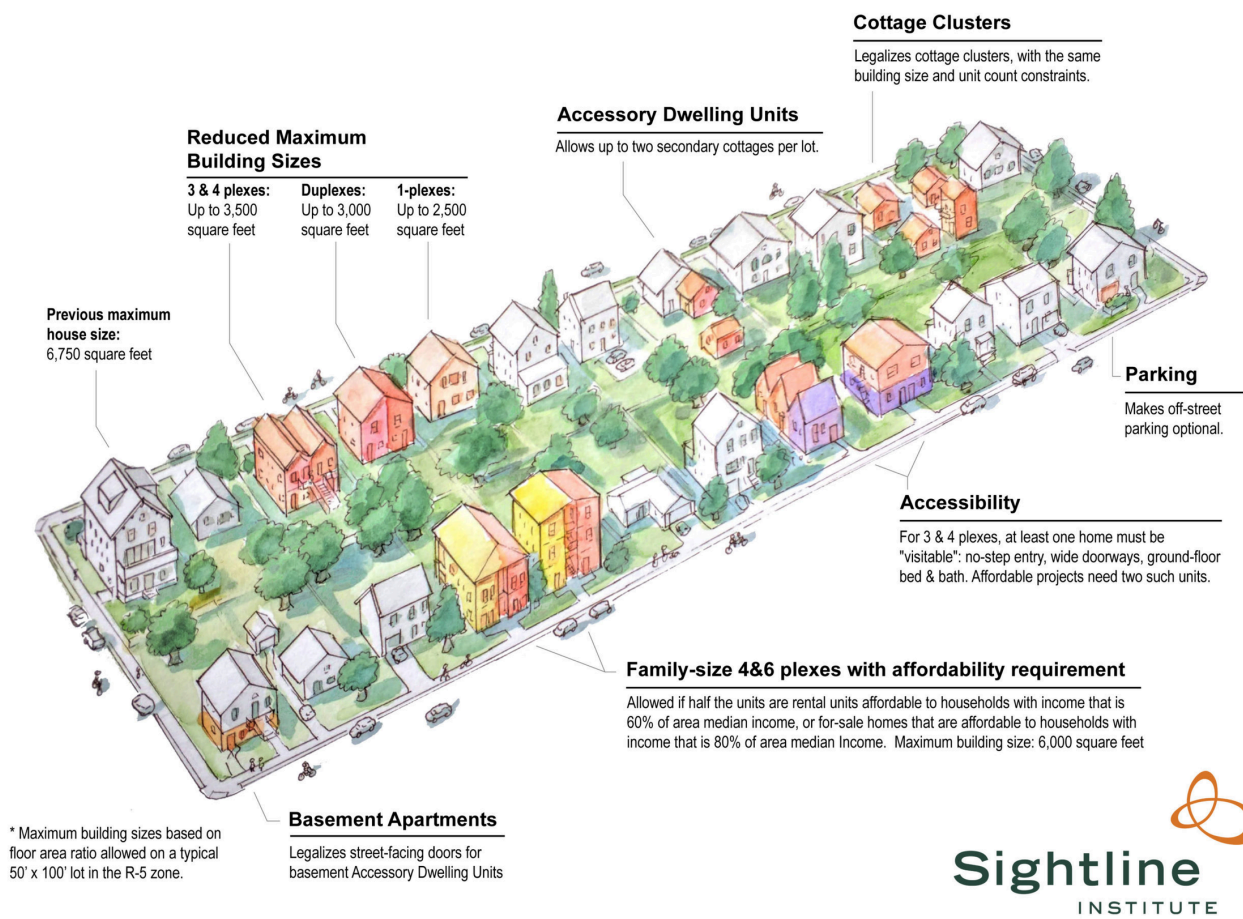
From 2010 to 2020, Oregon’s population grew by approximately 400,000 people, from 3.8 to 4.2 million, while the number of homes increased by only 150,000, and average housing prices doubled. Ironically, many migrants were from California, seeking lower-priced housing (Potter 2023); as is the case in Canadian provinces like Alberta and Quebec, where housing “refugees” go on to drive up prices in the places they move to for housing cost relief. As of 2016, one-third of Oregon’s

households, including half of all renters and a quarter of homeowners, were in unaffordable housing, spending more than 30% of their pre-tax household income. In 2015, Oregon’s rental vacancy rate was the lowest in the country, below 3.6%, and homelessness kept rising (Minott 2023; Potter 2023).

Figure 9: Rendering of the Residential Infill Project in Portland, Oregon.

Portland’s Residential Infill Project

Re-legalizing “middle housing” citywide

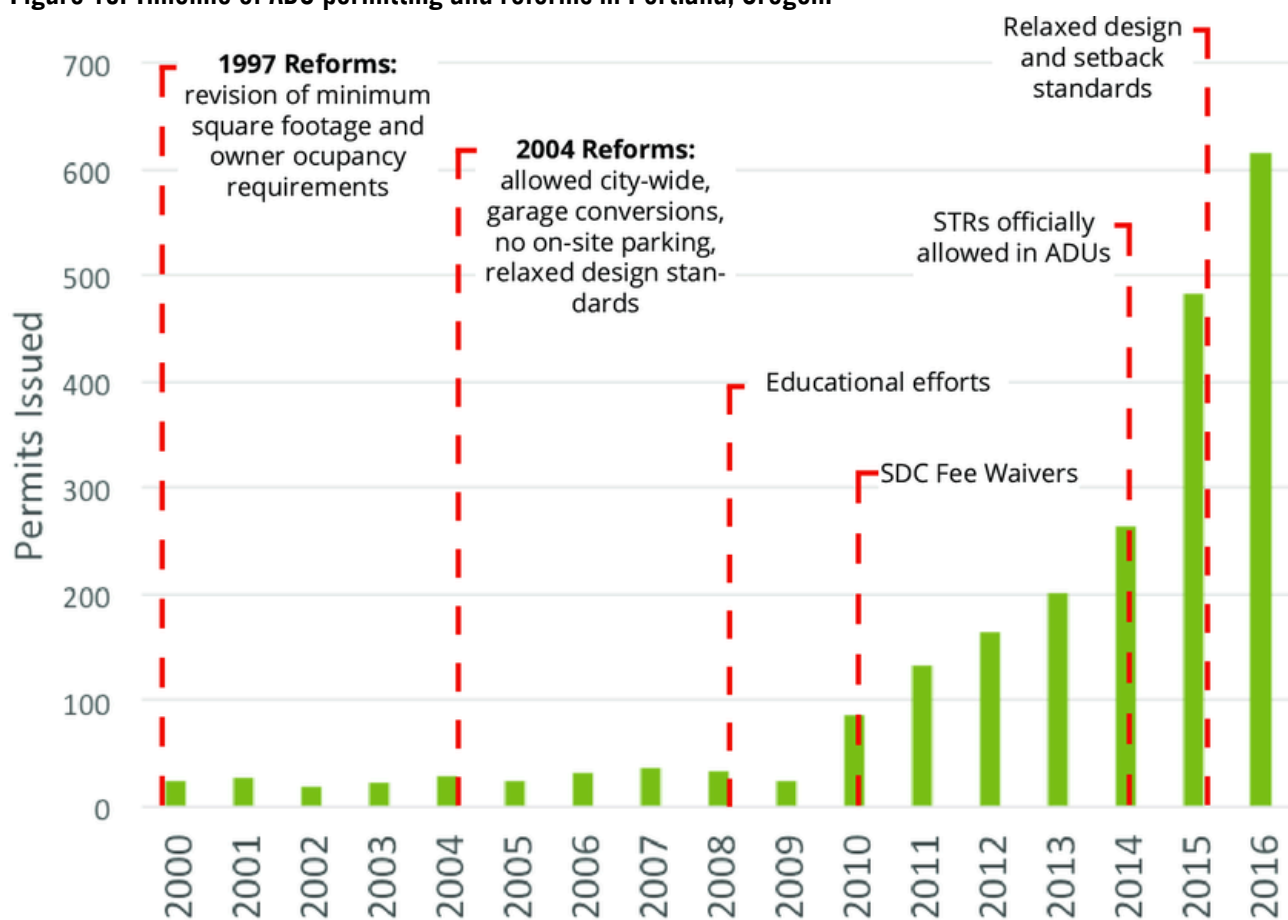


Source: Sightline Institute, 2020.

Portland was facing particularly strong challenges and obstacles. At the time, 77% of the land in Portland was zoned exclusively for single-family detached houses. In 2015, rents in central Portland neighbourhoods increased 14%, and officials estimated that the city needed an additional 24,000 affordable housing units to meet the growing demand (Potter 2023). ADUs as secondary units were already allowed in Portland, as were duplexes on corner lots and in a limited number of zones, but take-up rates were low. This was because low maximum unit counts meant that developers could only make large ownership duplexes “pencil in” (Dong 2024).

In 2019, Oregon passed state-wide policy reforms, legalizing fourplexes in almost every residential zone. It was the first state in the U.S. to essentially ban single-family zoning state-wide. The measure was brought forth by bipartisan majorities in both the State Senate and House of Representatives. The law required any city in Oregon with a population of 10,000 people or more to allow the construction of duplexes in areas that formerly allowed single-family detached houses only. In cities with populations of 25,000 or more, as well as in 24 municipalities in the Portland metro area, the reforms go further: areas that were formerly zoned for single-family detached houses must now allow fourplexes (Brown Calder and Gygi 2023).

Figure 10: Timeline of ADU permitting and reforms in Portland, Oregon.



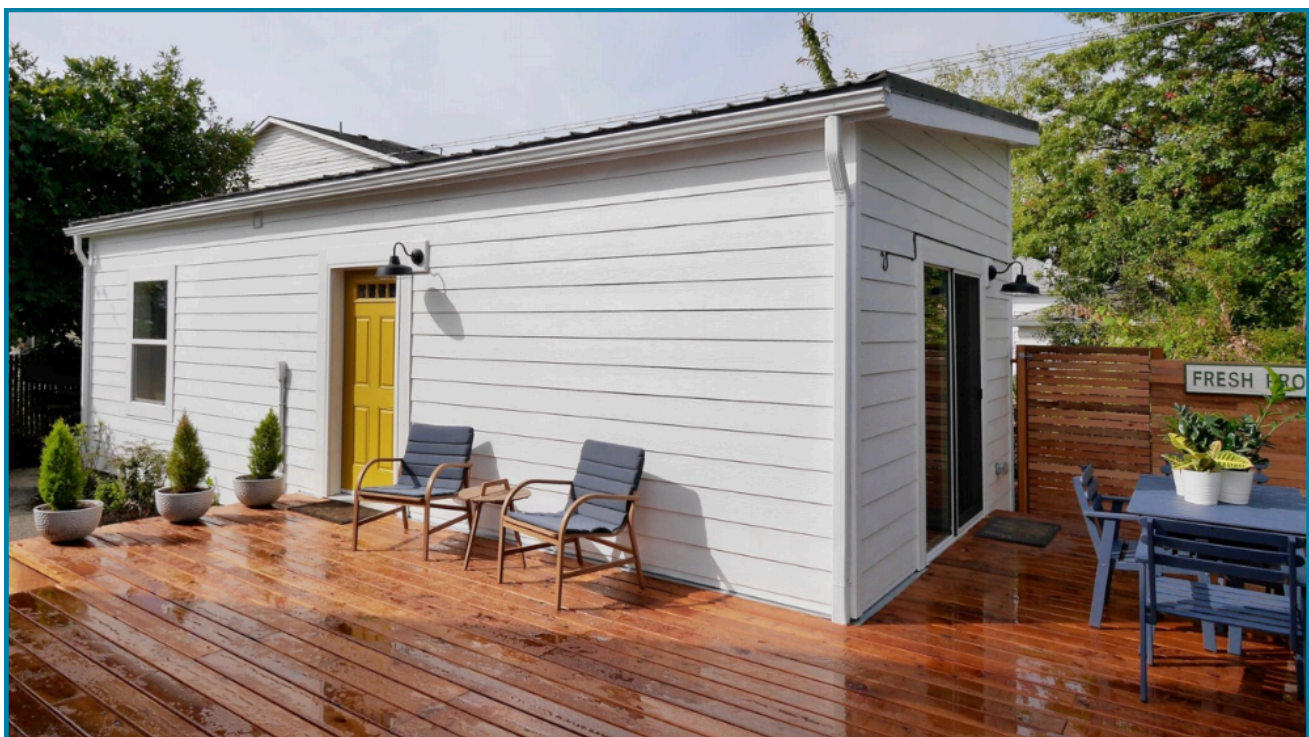
Source: Chapple et al., 2017.

The law also struck down local provisions that cause “unreasonable cost and delay” in the construction of MM housing. This included minimum parking requirements, which can pose logistical challenges and increase costs. The legislation was another first, as “the largest state-level parking reform law in U.S. history,” according to Sightline Institute, a think tank focused on sustainability in the U.S. Northwest (Potter 2023).

Portland had already allowed ADUs on most lots as of 2002, and suspended development taxes on these units in 2010, saving homeowners up to \$12,000 in fees. They also removed minimum parking mandates from three-quarters of the city's residential land and made home driveways optional, reducing the cost and complexity of adding ADUs. Flexible design standards were also implemented to diversify ADU types. These changes worked: the number of ADU permits issued grew from just one in 2010 to 112 by 2014, and further to 334 by 2018. But after 2018, permits and construction dropped again (Brown Calder and Gygi 2023).

In 2020, Portland expanded on state initiatives to create “the best low-density planning reform in U.S. history” (Andersen 2020). The Residential Infill Project (RIP) allows the maximum number of units to be increased from four to six homes on most lots if at least half are available to low-income Portlanders (those earning less than 50% of AMHI at regulated, affordable prices). It also regulated the maximum size of new single-family homes, a novel approach to shaping affordable housing outcomes (Figure 9).

Figure 11: Example of a detached backyard prefab ADU in Portland, Oregon.



Source: Dweller.

The RIP has caused ADU permits to surge (Figure 10). As of July 2021, about 3,350 permits were issued for ADUs in Portland, ten times more than in 2018. Private companies like Dweller (2021) develop modular ADUs and handle most aspects of the planning process, including permitting, utilities, installation, and landscaping in return for a share of the below-market rents (Figure 11).

Other forms of MM have also benefited from RIP. An independent report analyzed the impacts of the RIP's first year: fourplexes accounted for more than 75% of permits, and all new units had two or more bedrooms, enabling growing or multigenerational households. Most units had no on-site parking. More than 86% of the units were within a quarter mile (0.4 km) of a transit corridor or station, and 80% were constructed in central city neighbourhoods.

The maximum new building size limit prevents competition from detached single-family homes. Nearly half of the new detached single-family homes built and sold from 2018 to 2022 are not permissible under RIP, altering the nature of housing production in Portland away from higher-income homes (Cascadia Partners 2023). MM housing increased as a proportion of total permits from 13.4% in the four years before RIP implementation to 44.7% after 2020. With about 20% of permits being for ADUs, that means that single-family homes were no longer the majority housing type in new construction.

The implementation of the RIP has also led to an expanded spatial distribution of middle housing units in single-family neighbourhoods. Before the introduction of RIP, middle housing developments were primarily concentrated on corner lots and in the single-family zones with the highest permissible density, because of regulatory constraints. Following the implementation of the RIP, developers have started to build more MM housing units in single-family zones with medium permissible density and on parcels further away from the city centre.

The turn from a unit-based to a floor area ratio approach meant that developers could decrease average home sizes from 2,170ft² in the four years before 2020 to 1,109 ft² in the 2021 to 2023 period. Everything else being equal, reducing the average size of middle housing units by nearly half in single-family zones could potentially result in a one-third decrease in their average cost, although a full comparison would need to occur after a critical mass of homes are rented or sold (Dong 2024).

Oregon and Portland show the strength of a state and a municipality working together to support equity in supply. Working backward from affordability for low- to moderate-income households to the policies that might enable these outcomes, including tax relief for ADUs and maximum new house sizes, has led to increased supply of well-located, affordable MM.

5. HOW CAN MISSING MIDDLE BE ENABLED?

The case studies of California and Oregon point to the sheer complexity of enabling the Missing Middle (MM). It is not just a matter of upzoning: parking minimums, height restrictions, maximum unit counts, minimum home and lot sizes, approval times, development taxes, and the kind of novel financing that Dweller demonstrates, all have an influence on outcomes. Furthermore, strong targets – not only for aggregate supply, but for affordability at various cost points, sizes, and locations – can inform better MM policy.

5.1 THE IMPORTANCE OF TARGETS

In the context of widespread housing supply deficits, federal, provincial, and municipal governments across Canada have imposed targets for approvals and construction. Canada has set a goal of 3.87 million new homes by 2031 in its 2024 Housing Plan, twice as many homes as its Business As Usual scenario (Government of Canada 2024). To do so, it has made infrastructure funding conditional on zoning reform in both its Housing Accelerator Fund (HAF), announced in 2023, and a new Provincial Infrastructure Fund, to be launched in 2025. It promises to address building code and finance barriers, and encourage pre-approved designs and modular construction. However, most provinces, including Alberta and Nova Scotia, have set targets that are well below Canada's, and the only province that is meeting national targets is B.C. (CBRE 2024).

Ontario set a goal of building at least 1.5 million new homes by 2031 and is committed to meeting this goal in part by “promoting building up near transit and reforming zoning to create more ‘gentle density’” (Ontario 2019). The Province has, in turn, set housing targets for its 50 largest municipalities, only 19 of which reached or exceeded their goals for 2023. Municipalities are incentivized through Ontario's Building Faster Fund, a \$1.2 billion infrastructure fund that provides up to \$400 million per year to reward municipalities that have achieved at least 80% of their annual target, with a bonus for those exceeding their annual goals (CBRE 2024).

*Canada has set a goal of **3.87 million new homes by 2031 in its 2024 Housing Plan, twice as many homes as its Business As Usual scenario.***

Ontario has been widely criticized for ignoring the recommendations of its own Housing Affordability Task Force. More than two years on from its 2022 report, most of the MM recommendations – allowing four units as-of-right on all urban residential lots; introducing building code amendments to allow single-egress buildings up to four storeys; allowing congregate housing as-of-right and legalizing existing rooming houses; establishing province-wide zoning standards that prohibit minimum lot sizes; heights; and design restrictions such as angular planes and shadow rules – have not been included in the Province’s numerous planning-related bills (Spoke and August 2024).

In contrast, B.C.’s housing target of 60,000 new homes in ten specific municipalities between 2022 and 2027 has been backed up by new legislation: a minimum of three to six units on former single-family lots (depending on size of lot) in all municipalities; a minimum of six units within 400 metres of frequent public transit; and higher minimums near rapid transit (B.C. Government 2024). A further 20 municipalities falling behind targets were identified in 2024, with the Province promising to emphasize small-scale multi-unit housing (SSMUH) as-of-right to address these shortages. B.C. specifies sub-targets for units by size (one-, two-, and three-bedroom), rental versus owned units, and below-market rental units and units with on-site support (B.C. Government 2024). B.C. also offers help in mapping infrastructure capacity for intensification (B.C. Government 2024).

For example, Vancouver updated its ten-year housing targets in 2024 to include 4,000 laneway houses (5% of the total housing production target of 83,000 homes) and 7,000 multiplex ownership homes (8%); a total of 13% of its housing targets to be accomplished through “gentle density” (Figure 12). However, the City has accomplished only 30% of its permit approval targets in 2024. It argues that the provincial 20% target for three-plus bedrooms is unviable under current market conditions. It also argues that provincial five-year targets, based on completions, rely on proposals that have already gone through the application process (Chai 2024). The B.C. Government (2024), in turn, claims that rental-only restrictions combined with high land prices has meant that many Missing Middle proposals are unviable.

Figure 12: Housing Vancouver Ten-Year Target (2024-2033).



Source: Chai, 2024.

Most of these targets are aggregate, having no income or size requirements. Bergmann and Lauster (2024) argue, based on the example of Auckland, that market mechanisms will adequately “filter” new housing over time to meet low-income and family needs through vacancy chains. That is, if there is enough new housing supply (even housing only affordable to higher-income households), higher-income households will move from older homes that will then become available to low-income households. However, in Canada, low-cost housing supply is being lost much faster than it is being built, and high-cost housing supply is taking much too long to filter to low- and moderate-income households (Burda and Chapple 2024b; Zuk and Chapple 2016).

One aspect of MM targets is identifying which well-located areas are best for intensification, and how to prevent displacement of lower-income households through demolitions. Given the importance of scaling up new supply near transit, schools, and employment, municipalities in Oregon are using infrastructure mapping to address exclusionary zoning and displacement through the concept of a “complete community,” similar to 15-minute cities used in other places. This concept applies city-wide and to neighbourhood targets. Grant (2023) describes the complete community as an area with “the full suite of services and amenities in a relatively compact settlement,” including infrastructure like public transit, shops, civic centres, parks, and schools. In 2012, Portland set a target of having 80% of its households live within complete communities, which necessitated (1) mapping city infrastructure and assessing the proportion of households living in “healthy, connected neighbourhoods;” (2) expanding access to transportation, recreation, and commercial services accordingly; and (3) enabling new housing near these amenities. MM housing is thus seen as a part of a broader equity initiative (Portland Bureau of Planning and Sustainability 2016).

5.2 ENDING EXCLUSIONARY ZONING

Perhaps the most troubling implication of the prevailing zoning regimes in most large North American cities is that they limit living in most well-located, infrastructure-rich areas to high-income households who can afford to buy single-family houses. Students, service workers, and single parents are priced out of desirable areas due to zoning restrictions, although some may find illegal market rental accommodation, including in basement apartments and rooming houses. Seniors may find it hard to downsize or age in place, unless they move to small apartments on the traffic-heavy arterials that are often still the only places where higher density housing can be built. Height, usage, and unit count restrictions, along with distance requirements, often exclude rooming houses, seniors’ residences, assisted living facilities, group homes, supportive housing, and other congregate living situations from being built to accommodate a growing population with a diverse set of housing needs. This exclusion has been termed by the Advocacy Centre for Tenants Ontario as “people zoning.”

For example, Kitchener’s bylaws in 2007 required a distance of at least 400 metres between group homes, while Ottawa similarly restricted the production of group homes and residential care facilities by allowing their construction in only a single designated residential zone (GHK 2007). More recently, the B.C. Government (2024) also used the term “people zoning” to describe limitations on multi-unit housing.

Federal and provincial supply targets are motivating municipalities across Canada to upzone single-family residential neighbourhoods to allow for MM. For example, Vancouver is proposing to allow up to six units to be built on most residential lots, while Victoria is allowing as many as 12 units per lot in some neighbourhoods (CMI Financial Group 2023). With these zoning reforms, the challenge now lies in tackling second generation barriers like outdated building codes and design regulations (School of Cities 2024).

One way to prevent the displacement of low-income families from amenity-rich neighbourhoods is “density bonusing,” as has already been discussed in the Portland case study (see 4.3). Austin’s Affordability Unlocked bonusing program offers another approach.

In the late 20th century, Austin was one of the most affordable cities in the U.S. However, in recent years, affordability has become a significant issue for many residents, especially as population grew with a tech sector boom. By 2016, 49% of Austin’s renters were in unaffordable housing (Austin Community Foundation, 2022) (Figure 13).

Austin’s 2017 housing strategy has a target of 60,000 homes affordable to moderate-income households at 80% of median family income (MFI), along with 20,000 homes affordable to low-income households at 30% MFI. The City’s bonusing program, in effect since May 2019, offers extensive waivers and modifications of development regulations in exchange for meeting stringent affordability requirements.

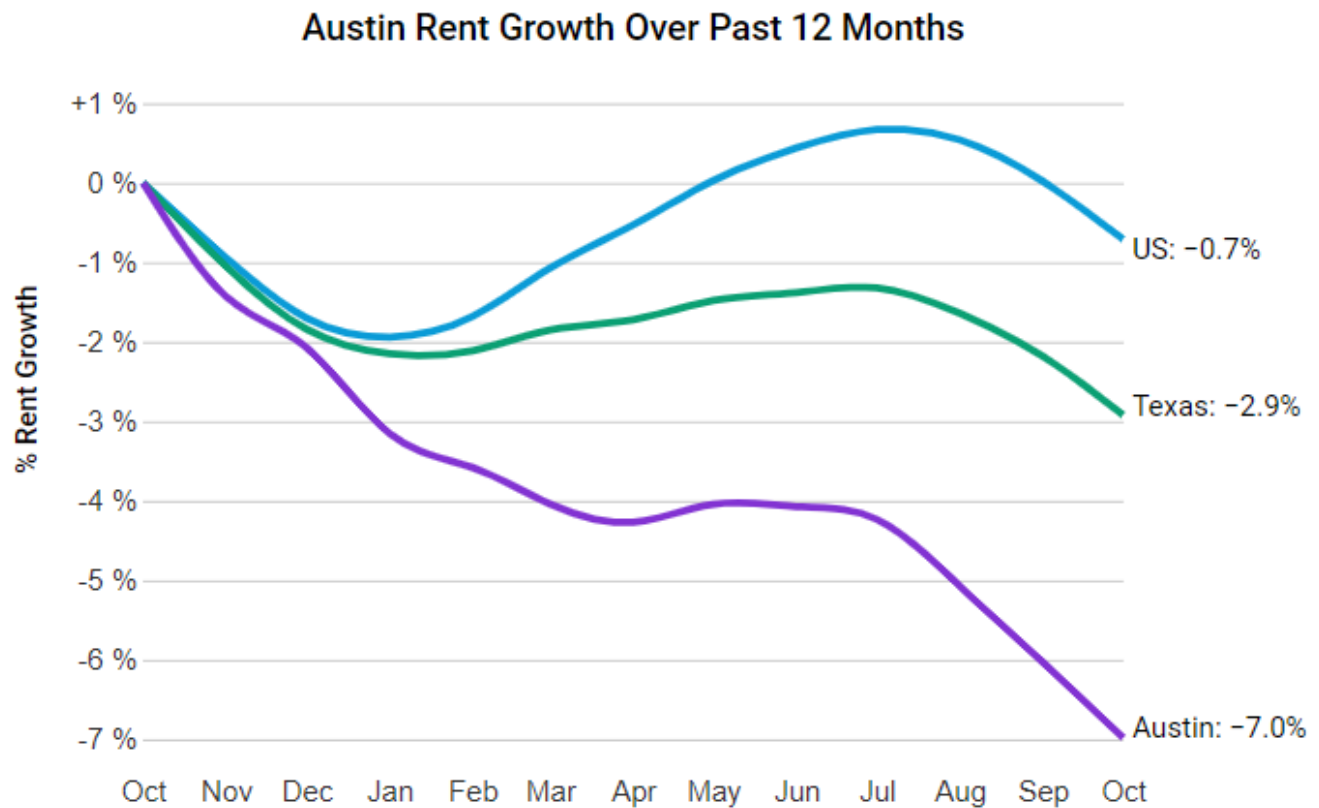
In single-family zones, Affordability Unlocked offers two options. The first allows up to six dwelling units, plus waivers of height restrictions, floor area ratio, design requirements, occupancy limits, parking requirements, a 25% increase in allowable height, and a reduction in minimum lot sizes and yard setbacks. In exchange, rent levels for 80% of the affordable units must remain affordable to moderate-income households whose incomes are at 60% or below MFI, and 20% of the affordable units must remain affordable to low-income households at or below 50% of MFI. Affordable ownership units must be sold to households with incomes averaging up to 80% MFI and remain affordable for 99 years. In addition, 25% of affordable units must include two or more bedrooms, or be used to provide supportive housing or housing for seniors.

One way to prevent the displacement of low-income families from amenity-rich neighbourhoods is “density bonusing.”

The program’s second option allows up to eight dwelling units in single-family zones, along with a 50% increase in allowable height, plus the waivers and incentives offered in the first option in exchange for meeting all of the other incentives plus one of the following: 75% of the units are affordable to low- and moderate-income households; 10% of the affordable units serve very low-income households at 30% of MFI; 50% of the affordable units have two or more bedrooms; or the property is located within a quarter mile (0.4 km) of a transit corridor. For developments with affordable ownership units, Austin will have a right of first refusal to purchase any affordable ownership unit upon sale. The bonusing program is intended to be used in combination with the City’s other funding programs, all of which offer loans for affordable housing (Goldstein 2023).

There have been legal challenges to this ordinance, but according to the City’s 2022 scorecard, 10,444 units affordable to low- and moderate-income households earning 80% MFI or below have been built between 2017–2022 (Austin Community Foundation, 2022). Enabling this moderate-income housing has led to greater rent decreases in Austin than in the rest of Texas from November 2023 to October 2024 (Apartment List 2024).

Figure 13: Austin Median Rent Price timeline.



Source: Apartment List, November 2024.

The B.C. government (2024) allows density bonusing for affordable or special needs housing. Vancouver’s 2021 Affordable Housing Choices Interim Rezoning Policy offers height and density incentives for projects that can meet one of the following affordability criteria: 100% of residential floor space is rental housing; units sold for at least 20% below-market value and include a secure mechanism for maintaining that level of affordability over time (e.g. resale covenant, second mortgage); innovative housing models and forms of tenure (e.g. cohousing) that can demonstrate enhanced affordability; or a community land trust model is employed to secure increasing affordability over time (Goldstein 2022).

Another aspect of ending exclusionary zoning is to enable mixed-use zoning: small cafes, grocery stores, childcare centres, and businesses in areas previously designated as solely residential. A big theme of Vancouver’s Urbanarium (2023) competitions has been the need for retail with housing on top in the MM, especially since low-income households are less likely to own cars, and thus more likely to require services in close proximity. The City of Edmonton (2019) is moving toward mixed-use zoning in most residential neighbourhoods.

5.3 REAL LOCAL DEMOCRACY

Increasingly stringent exclusionary zoning and a lack of housing targets has encouraged the growth of opposition to MM housing proposals by third-party individuals and groups known as NIMBY (Not In My Backyard) (Balintec 2023). Development proposals are subject to lengthy and heated debates during public hearings, both in neighbourhoods and municipal council chambers. These public hearings have been dominated by resident associations which overrepresent older, wealthy, white homeowners who are better able to navigate bureaucratic processes (Holleran 2020; Moore and McGregor 2021). While NIMBY opposition often focuses on planning matters like heritage, traffic, parking, and shadowing, opposition is usually greater when proposed housing is provisioned for lower-income people, especially those with disabilities or who have experienced incarceration (Goss-Gilroy 2019; Whittemore 2018). Participants of public hearings who share concerns about accessibility and affordability are shouted down and dismissed, or even threatened by community members if they are labelled as “homeless” or people who somehow do not “deserve” human rights (Renovate the Public Hearing Initiative 2023).

NIMBYs not only organize to oppose individual proposals, but they also oppose ending exclusionary zoning, as upzoning and as-of-right approvals would get rid of the requirement for costly and time-consuming individual rezonings for every multi-unit application. For example, the City of Toronto is currently mid-way through a year-long process on rezoning-related public consultations. Of the 650 public consultations in 2023, half were related to individual development applications. Staff reported spending a cumulative 190 hours on logistics (e.g. scheduling, venue booking, coordinating presentations, preparing materials) for each meeting, about eight days of staff time for every two- to three-hour meeting. A conservative estimate of over 60,000 hours of staff time at rates of \$40 to 200 per hour means thousands of dollars per meeting, all of which is reflected in application and permit fees, as well as general property taxes, not to mention delays in approvals. There is also the option of resident association or developer appeals to the Ontario Land Tribunal, even after consultation and

council decisions, a dysfunctional feature of the current zoning system. Yet 62% of those who participate are not satisfied with opportunities to provide feedback and 73% are not confident that their feedback is being considered (Elliot 2024). This is the system that is defended on the grounds of “local democracy.”

An emphasis on upstream consultation – developing a sense of values and rights in formulating official plans and neighbourhood strategies – is being pursued by Canadian projects like Renovate the Public Hearing (2023), which also stress the importance of working with processes such as citizen juries who are selected by representative sampling of local populations.

Design competitions are also used to provide the public with a sense of how communities can be improved by increasing diversity in housing choices. For example, in 2019, the City of Edmonton, working with the Alberta Association of Architects, created a competition to design a multi-unit MM development that addressed neighbourhood context and was economically feasible and scalable. The competition drew 30 proposals from teams of architects and builders or developers from across Canada and as far away as London, U.K. A national jury panel reviewed the proposals and awarded first, second, and third place honours to the top finalists. There was also a People’s Choice vote that garnered interest. The winning team acquired the right to purchase five parcels of City-owned land and create the housing (Canadian Architect 2019), although the development has stalled, unfortunately (Edmonton planner interview).

In Vancouver, a registered charity called Urbanarium creates and sponsors competitions, debates, studios, talks, maps, and tours, including a recent Decoding Density competition that challenged aspiring Canadian builders to submit building designs emphasizing communal living, affordability, and density. By providing a platform for the discussion of city and planning issues divorced from political ideology, Urbanarium and organizations like it are playing an important role in addressing the systemic issues underlying NIMBY.

Design competitions are also used to provide the public with a sense of how communities can be improved by increasing diversity in housing choices.

5.4 MODERNIZING THE BUILDING CODE

As single-family homes became legislated as the norm, modernizing building and fire codes to enable multi-unit housing fell by the wayside. In the U.S., it now costs US\$153/ft² to build a home in most inland cities and \$500/ft² in most coastal cities. Most of these costs, which are two to ten times more expensive per square foot than European counterparts, is due to out-of-date regulatory codes (Smith 2024). The next frontier after targets, zoning, and reducing third-party objections is to address long-overdue changes to building and fire codes that reduce multi-unit housing accessibility, affordability, and choice.

B.C. (Heikkila 2024) and the federal government (Government of Canada 2024) are implementing major improvements to current building code regulations, many of which date back to the 1940s. Because of fire safety concerns related to single means of exit (egress), any multi-unit building over two storeys in most of North America is typically laid out along a double-loaded corridor, with multiple apartments arrayed on either side of a single long hallway, like in a typical hotel. This results in each apartment having windows facing only one direction, with the opposite wall up against the hallway, and the other two sides up against other units in the same building. As the site grows, the central corridor is simply stretched out and more apartments are added onto even longer hallways (Smith 2023). Bedrooms, which require windows, become long and narrow, and common spaces such as kitchens and living rooms are sometimes without natural light and ventilation. Single, double, and corner lot sites may become unviable for small apartment buildings.

Yet fire safety has completely changed in the past 80 years, with sprinklers, fire alarms, and fire-resistant materials. Canada does not allow the kind of combustible cladding that was the cause of the disastrous Grenfell Tower high-rise fire in London (U.K.). Less than 10% of building fires originate in an egress or stairwell (kitchens are the most common places where fires start), and fires spreading beyond their room of origin are rare in buildings with working fire alarms. North America remains an outlier in not reforming building codes to allow single egress in apartments of up to 6 to 12 storeys (Eliason 2022; Heikkila 2024).

*North America remains an outlier in not reforming building codes to **allow single egress in apartments of up to 6 to 12 storeys.***

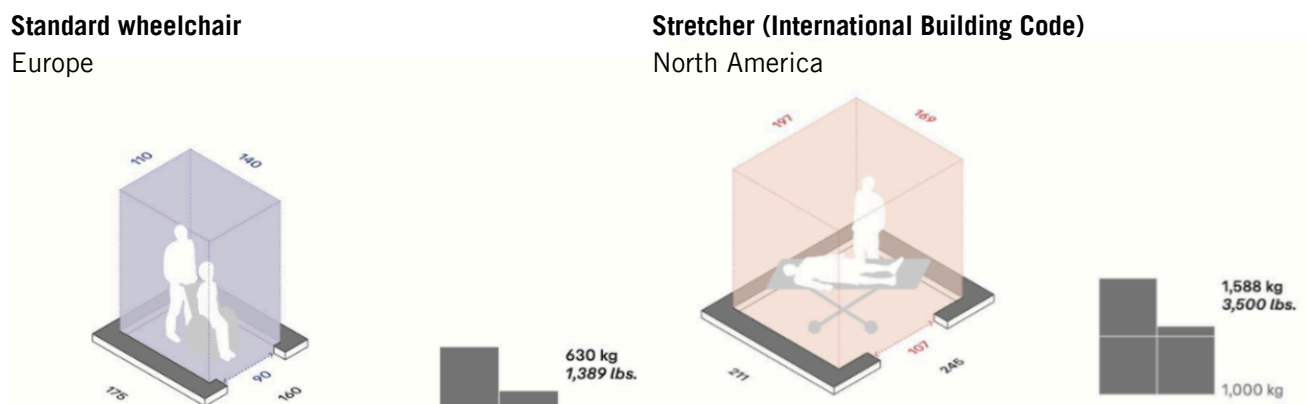
Allowing single egress (one entrance, with a common stairwell and/or elevator) for apartment buildings of up to six floors, as in B.C., would enable greater viability for low-rise apartment buildings, as well as larger units within those buildings (Heikkila 2024). Research for the City of Vancouver

(Eliason 2022) found that apartments in single-egress buildings can improve cross-ventilation (and associated energy savings), as well as allow more bedrooms with windows, within smaller floor plates. Assuming an average construction cost of CA\$2,500/m², a reduction of 15 m² of floor area results in a cost savings of \$37,500 per floor. In a four-storey apartment, this results in a reduction of \$150,000 in construction costs. In the U.S., Seattle, New York City, and Austin have adopted building codes to permit single egress for up to six storeys (Pagano 2024), and Toronto is also exploring this option. Enacting changes at the federal level would be most efficient.

A related building code issue is the requirement of some building codes to have minimum front and side setbacks to reduce the threat of fire spreading. Again, this is a relic of an era before firewalls and sprinkler systems. Required minimum front and side setbacks can doom the viability of MM development. Flexibility on setbacks would allow larger outdoor spaces and tree retention (B.C. Government 2024).

Another area of building code reform with huge implications is regulation of elevators. In Europe, it is common to have elevators for three- or even two-storey apartment buildings. Older residents, those with a disability, and households with young children (strollers or shopping carts), benefit from this accessibility standard. The U.S. and Spain have the same number of passenger elevators, but Spain has one-seventh the population, 6% of the U.S. gross domestic product, and fewer than half as many apartments. The critical difference is that most other countries in the world allow small elevators that can accommodate a person in a wheelchair and one other passenger, while North America requires elevators that can accommodate an ambulance stretcher (Figure 14). Furthermore, regulations forbid modular housing companies from manufacturing elevators in the U.S., and the North American regulatory island prevents much less expensive elevators from being imported. A basic four-stop elevator costs about \$158,000 in New York City, compared with about \$36,000 in Switzerland (Smith 2024).

Figure 14: Comparison of cabin size, European versus North American elevator.



Source: Smith, 2024.

More generally, the classification of multi-unit housing as commercial rather than residential needs to be revisited (B.C. Government 2024; Garcia et al. 2024). Code requirements are more onerous for commercial construction, and property taxes are sometimes set at a higher rate. In 2022, Memphis extended the residential building code to projects with up to six homes rather than three. In 2023, B.C. did the same for projects up to six homes (B.C. Government 2024).

5.5 ELIMINATING SITE DESIGN BARRIERS

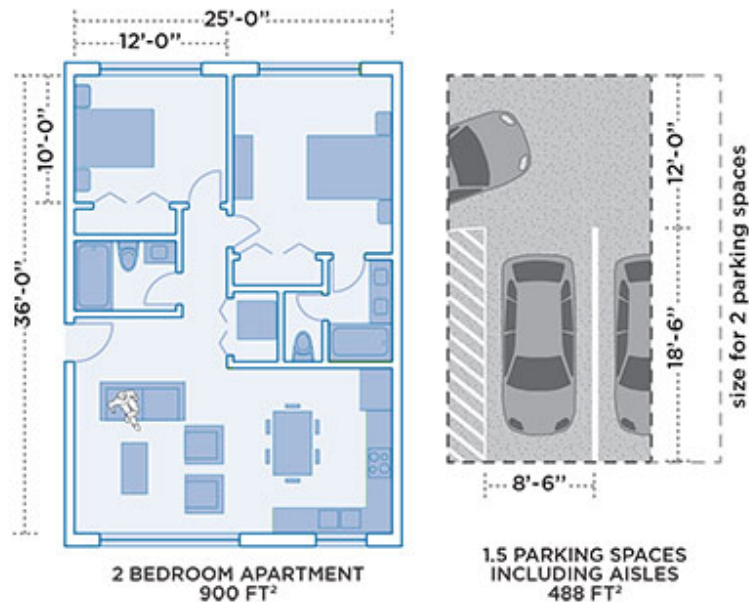
Site design requirements for multi-unit construction, such as maximum floor area ratio, minimum and maximum unit sizes, minimum front, side, and rear setbacks, and height restrictions suited to single-family housing often remain unchanged during upzoning, making it difficult for developers to get affordable and high-quality designs approved. To unlock MM homes, rezoning must therefore be accompanied by eliminating design standards set to serve single-family houses (B.C. Government 2024; Chapple et al. 2020; Garcia et al. 2022).

One of the first priorities involves parking requirements. Urban housing has had onerous parking requirements of at least one off-street space per unit, including in areas with good public transit service, and jobs and amenities in easy walking and cycling distance. The B.C. government (2024) sees on-site vehicular parking requirements as the greatest barrier to MM intensification, and recommends eliminating parking minimums and instituting parking maximums for developments.

In B.C.'s Lower Mainland and Greater Victoria, surface parking spaces commonly cost \$20,000 to \$30,000 to build, while underground parking costs range from \$50,000 to \$75,000 per space. Requiring on-site car parking increases construction time and complexity, especially in the case of underground parking spaces, which require excavation and blasting, and greatly increase embedded carbon in concrete and steel.

*To unlock Missing Middle homes, rezoning must be accompanied by **eliminating design standards set to serve single-family houses.***

Figure 15: Size requirement for parking spaces versus size of an average two-bedroom apartment in North America.



Source: Spivak, 2018.

Further, driving out of on-site parking past a sidewalk can risk pedestrian safety, especially for children (B.C. Government 2024). In addition, the parking space required can be equal to the size of an apartment (Spivak 2018) (Figure 15). Yet older people, students, and low-income people, some of the main beneficiaries of MM, are much less likely to drive.

Eliminating parking requirements can also increase water-permeable green space on a lot and contribute to GHG reduction goals by supporting a modal shift, especially when there is public transit, carshare, or parking garage options nearby. In some cases where there is limited public transit, increasing on-street parking can help, especially if there is a permitting system that prioritizes residents. Improving bike infrastructure through separated paths, pedestrian infrastructure including sidewalks, shade trees and benches, implementing traffic calming measures such as pedestrian-priority signals and reallocating road space to bike lanes and sidewalks, and more generally working toward complete communities can complement eliminating minimum parking requirements (B.C. Government 2024).

Edmonton has been at the vanguard of parking reform in Canada. In the late 2010s, the City discovered it had 50% more parking than it needed. In 2020, it eliminated parking minimums city-wide, allowing builders to decide how much their project needs, as the first steps of its equity-based zoning reform. Toronto city council followed in late 2021. The federal government has included parking reform, especially in areas with good public transit, as part of the HAF, and the B.C. government has also established leadership on this issue. Vancouver eliminated parking minimums city-wide in June 2024, and both Ottawa and Montréal propose ending parking requirements as part of their official plans.

Figure 16: Vancouver gentle density detached home rendering.



Source: Oleksiuk and Davidson, 2023.

Early results of reform elsewhere are positive. In Minneapolis, the amount of new parking is down roughly by a third compared with a decade ago. A study of parking reform in Buffalo and Seattle found that about two-thirds of new housing benefited from the changed rules. In San Diego, the end of parking minimums near transit led to an increase in the construction of affordable housing (The Globe and Mail 2024).

Another design barrier is the requirement for minimum front, rear, and side setbacks, or distances from the lot line of a property, especially when combined with a maximum floor area ratio or lot coverage (B.C. Government 2024, Garcia et al. 2024; Taskforce on Housing and Climate 2024). The floor area ratio (sometimes called floor space ratio or index) limits the total amount of usable space of a building in relation to its lot. In Vancouver, there is a requirement for a 20% front setback from the sidewalk and a maximum floor space ratio of 1.0. A better approach would be to provide a minimum water-permeable surface ratio (grass, garden, permeable footpath) on a lot and flexibility as to the form of lot coverage. With a minimum 30% permeable surface lot coverage for smaller two-unit redevelopments and up to 60% lot coverage for sixplexes, strain on sewers could be minimized, and green space and existing or new trees maximized, while providing flexibility for big yards, especially in multi-lot infill. A four-storey multiplex with 50% permeable surfaces could allow an accessible, energy efficient community of eight approximately 1,000 ft² homes (Oleksiuk and Davidson 2023).

While maximum unit size limits are discouraged in B.C.'s MM guidelines, they make an exception for a single-family home "knockdown rebuild." As is the case in Portland, Vancouver has created a maximum single-family home size (2,400 ft², compared to Portland's 2,500 ft²) to improve the relative economic viability of MM redevelopments (B.C. Government 2024).

A related barrier is limitations on the positioning of entrances on non-principal residences. This can limit the development of courtyard clusters with a shared green space. While street addresses can be visible for emergency response vehicles, the existence of a laneway, side, or courtyard entrance is less significant (B.C. Government 2024).

5.6 RAPID APPROVALS

As other enablers for MM increase, small developers, including homeowners interested in ADUs and turning their homes into multiplexes, face a bewildering set of approval processes, many involving high fees and long timelines that act as barriers.

According to a recent benchmarking of Canadian municipal approval processes (Altus Group 2022), many municipalities still do not make essential materials such as application requirements, technical study terms of reference, or key planning documents available online to applicants, which can hinder the quality of submissions received, and indirectly impact municipal review timelines. Online submission portals and guidelines for technical studies are still uncommon. Even single-lot development applications can require 10 to 20 studies, which increases the amount of time to gather a complete application, adds complexity to the municipal review, and requires high expenditures on private sector technical experts. Average approval times range from five months in Charlottetown to 32 months in Toronto. And lest this average be seen as a high-density development problem, the marginal amount of staff days per unit approved is five- to ten- times higher for smaller applications (3–50 units) than for larger applications (400–500 units). That means it is harder for a small- or medium-enterprise or homeowner-developer to undertake a MM project than it is for a large developer to undertake a high-rise project.

Some municipalities are putting procedures in place to facilitate the approval of new development, especially MM housing. For example, Ezvan and Al-Musa (2023) describe San Jose's ADU pre-design application portal, which allows homeowners to apply and receive a building permit in a single day. And in Kelowna, B.C., more than 1,300 lots in the core are eligible for the first round of the City's new "fast track" program, which allows property owners to apply for a building permit using one of four pre-approved multi-family designs, and receive approval within ten days. Each design, provided by local architects, has multiple variations to choose from and range from two- to six-unit buildings (Berk 2024).

Ideally, municipalities would set up small-developer "one-stop shops" (Ezvan and Al-Musa 2023; Goldstein 2023). This would place all information on a single webpage with up-to-date links, including a list of pre-approved designs and details, and provide access to a local labour pool trained to build

those designs, staff to facilitate permitting, and grants and financial mechanisms to make the process affordable. The Town of Caledon is working with community builders to allow pre-approved plans where applicable (i.e. detached ADUs such as backyard suites) and pre-designed section details for multiplex conversions and additions. Ontario’s draft Bill 23 initially proposed reducing the scope of approvals by exempting residential buildings containing ten units or fewer from site plan control, though only some exterior design exemption of site plan control was in the final legislation. Cities such as Windsor and Kitchener are trying to remove barriers, such as by expediting the approval process for ADUs. The City of Edmonton has a “how to” guide for both secondary suites and garden suites, as well as a video (Ezvan and Al-Musa 2023).

A related enabler involves retroactively approving (i.e. legalizing) previously prohibited homes, as Toronto did when it passed a new regulatory framework for multi-tenant (rooming) houses in March 2024. While rooming houses are now permitted city-wide, landlords and operators need to obtain a licence. The legalization of rooming houses, along with a regulatory framework mandating safety and inspection, allows an affordable and safe housing option for low-income households (Goldstein 2020).

*Ideally, municipalities would set up **small-developer “one-stop shops.”** This would place all information on a single webpage with up-to-date links.*

5.7 DEVELOPMENT TAXES

Aside from application fees and delays, the viability of MM is frequently doomed by development taxes. One Toronto homeowner (“Ben”) relayed this story in 2016: Ben co-purchased a house with his son with the intent of living in it, with his wife on the ground floor and his son’s family on the second. His son was carrying a large mortgage on his half of the house and wanted to build two basement apartments to help. They hired an architect at considerable expense to prepare plans to add a rear addition so that the house would have four dwelling units with two side walkouts, a rear deck, and a new detached garage. After spending a great deal of money on architectural drawings, and another \$5,000 to the City to apply for building permits, Ben was told that his application triggered four additional fees:

- A development charge of \$80,000;
- An education development charge of \$4,500;
- A parkland fee of \$72,000 based on property value; and
- A road damage deposit of \$2,400.

Ben calculated the total fees payable to the City, including the \$5,000 permit fee, as \$161,684 just to add two units, all of which was payable before a shovel goes into the ground or any interior work begins (Aaron 2016). And development charges have increased in Toronto by approximately 100% since 2016 (Altus Group 2022).

Development taxes (often called “impact fees” in the U.S. and include taxes such as “community amenity charges” in B.C., development charges and parkland charges.) date from post-war subdivision agreements and were originally intended to provide buy-in from cash-strapped suburban governments and their NIMBY residents. There is a difference between a 500-unit suburban subdivision on an unserviced lot and adding two to four units to a serviced neighbourhood where water and sewer use may have already decreased in recent decades due to population decline and greater water conservation measures (B.C. Government 2024). The idea that “growth should pay for growth” has allowed property taxes in cities like Toronto to remain artificially low, as compared to cities like Montréal, where municipalities pay for the cost of new infrastructure related to development. Yet improved schools and libraries, new parks and recreational facilities, and replaced obsolescent water and sewer lines benefit existing residents as “free riders” (Sancton 2022). Meanwhile, development taxes add \$80,218 for a two-bedroom apartment in Toronto as of 2023, including payment for services such as policing, firefighting, childcare, and libraries that are hardly greatly augmented by one new household (Polèse 2023).

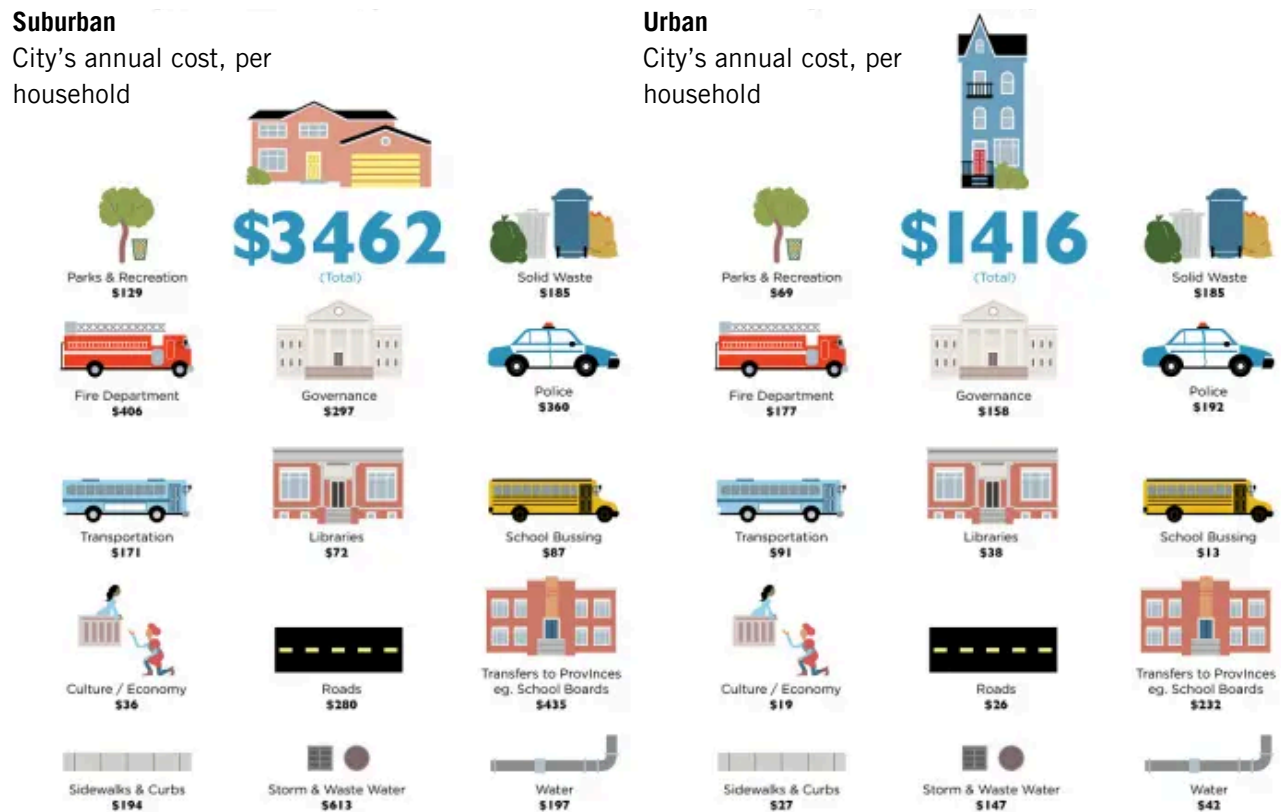
High development taxes affect MM in at least three ways. First, the direct cost is passed onto buyers or renters, adding to the unaffordability of new housing. Second, upfront charges, often entailing drawn-out negotiations with municipalities, favour developers with sufficient monetary and legal resources. This crowds out smaller developers, including owner-developers, and produces an oligopolistic housing market. Third, since charges are levied per unit, irrespective of income generated, development taxes create an incentive to build more expensive (often high-rise) units, rather than MM (Polèse 2023).

Development taxes should be eliminated, either replaced by higher property taxes or greater senior government responsibility for growth-associated infrastructure. This is the direction being pursued by the federal government in the HAF. Governments should start by exempting infill developments, as infrastructure costs are lower than suburban sprawl (Sustainable Prosperity Institute, 2012).

California, for example, exempts ADUs under 750 ft² from most development charges (Garcia et al. 2024). Developers can also pay development charges once residents have moved in, rather than at the time of issuing the building permit. Such a change would bend the cost curve (i.e. reduce upfront carrying costs) and allow developers to more easily finance MM projects. For example, an MM prototype proforma in East Bay and Los Angeles areas shows that lowering development taxes, specifically from US\$40,000 to \$10,000 per unit for multiplexes and ten-unit small apartments would improve their Internal Rates of Return (IRR) by 1-2%, pushing feasibility to the 15% feasibility threshold or the minimum IRR for financing (Garcia et al. 2024).

The City of Mississauga is also getting around high development charges and property taxes by deferring them for new rental units to stimulate uptake (City of Mississauga 2017). Bill 23 in Ontario exempts some residential developments from development taxes, including ADUs, affordable units, and nonprofit housing developments under specified criterion.

Figure 17: A comparison of infrastructure costs in the Regional Municipality of Halifax for infill (right) versus suburban sprawl (left).



Source: Sustainable Prosperity Institute, 2012.

5.8 FINANCIAL ENABLERS

Where MM has thrived, new forms of ownership and new firms of architect-builders have been engendered. Homeowner-developers often want to downsize to an ADU on their property and convert their main home to a multigenerational family multiplex, or simply want rental income to supplement retirement savings, rather than “selling up” and having to move. Cohousing is becoming increasingly popular, wherein multiple households act as their own developer and often include shared spaces such as gardens, laundry facilities, and common rooms. Small developers, such as nonmarket providers of cottage clusters, might want to buy and aggregate several scattered single-family dwellings in a way that provides economies of scale in renovating and adding units, including using a community land trust model to ensure that any home sales remain affordable over time. Conversely, owners of large lots might want to subdivide their lot more easily to enable new ADUs (Ezvan and Al-Musa 2023).

Traditional sources of finance – banks and mortgage companies – see these kinds of developers as high risk, particularly since nonmarket and homeowner-developers often do not have much equity or development experience, nor it is easy for them to provide accurate cost estimates for conversions, particularly during the short timeline when buying a home. Insurance, including mortgage insurance, can be hard to get. Currently the most common means of financing a renovation project is to take out a loan or line of credit, all of which have high interest rates. Homeowners may not want to take on such an expensive loan or take on the risk of such a project with high interest rates. In the case of cohousing, it is not possible to fractionalize a mortgage; multiple owners can be on a mortgage, but each person is essentially responsible for the entire mortgage. It is possible to “condo-ize” (stratify) a multiplex, but the process is legally similar to large condominium developments, so it is not necessarily feasible or easy for small projects (Al-Musa and Chapple 2024). Requirements that MM developers be owner-occupiers means that nonmarket developers, or multiple lot redevelopment, cannot be built (B.C. Housing 2024).

At the federal level, homeowners may be able to get mortgage loan insurance for ADU-related projects. For example, the federal government offers a new multigenerational home renovation tax credit of up to \$7,500, which could be used to build an ADU, but the terms and conditions are narrow: the renovation must be for a senior family member or an adult relative with a disability (Ezvan and Al-Musa 2023). Cohousing Options Canada brings people together to become their own developers and share costs and responsibilities. Vancity (Vancouver Credit Union) has templates for shared living or co-ownership, providing financial structures for families to live and own together (Ezvan and Al-Musa 2023).

Municipalities and provinces/territories can also assist MM finance. The B.C. government (2024) recommends incentive-based programs to encourage rental tenure and affordability, ranging from property tax exemptions or reductions to development cost charge waivers or reductions, and including forgivable loans and government land in return for commitment to rental-only tenure or affordable housing covenants.

Traditional sources of finance – banks and mortgage companies – see these kinds of developers as high risk, particularly since nonmarket and homeowner-developers often do not have much equity or development experience.

B.C. has grant funding for housing that supports “the implementation of established best practices and to test innovative approaches to improve development approvals processes” through the Union of B.C. Municipalities Local Government Development Approvals Program (City of Kelowna, 2022b). Through the administration of this grant, the City of Kelowna was able to implement a program called Infill Options, expanding permissions and streamlining approvals for infill housing (City of Kelowna, 2022b).

In the U.S., San Diego has an ADU Finance Program that helps homeowners with moderate income build ADUs on their property. The program provides financial assistance in the form of construction-to-permanent loans (up to \$250,000) and technical assistance (at no cost) that helps homeowners understand and complete the process of building an ADU. As part of the program, rents for the ADUs built are required to remain affordable for seven years (San Diego Housing Commission [n.d]).

A number of cities in San Diego County use their Community Development Block Grant (CDBG) to subsidize low- to moderate-income housing developments. Further, seven cities, including San Diego, authorize the use of CDBG funds for the direct financing of affordable housing projects. Also, a small number of jurisdictions have established housing trust funds to provide financial support for low-income housing development and providers (San Diego Housing Commission 2010).

Municipalities could act as co-borrowers to help “house rich-cash poor” retirees use the equity in their homes to finance renovations and new construction (Elgin et al. 2020). A variant on the one-stop shop is Calgary’s streamlined application process for nonmarket and affordable housing, which allows housing developers to apply to both CMHC and City housing funding programs simultaneously, with the hope that the Province of Alberta will participate in the future (CHRA 2022).

In addition, a few jurisdictions in San Diego provide desirable building sites to affordable housing developers. For example, Carlsbad and Chula Vista have “land banks” through which they set aside sites suitable for the construction of denser low-income (affordable) housing. By transferring or leasing this land to local developers, cities can help lower the land costs of building new MM housing (San Diego Housing Commission 2010).

6. PROMISING PRACTICES IN EDMONTON, KELOWNA, AND KITCHENER

The choice of three English Canadian “promising practices” was developed through a literature review and preliminary interviews with three Missing Middle (MM) affordable housing developers at the start of this project in May 2024 (from Alberta, B.C., and Ontario, respectively).

There is excellent francophone literature on MM infill in Quebec (e.g. *Vivre en Ville* 2022). Unfortunately, due to both time and linguistic constraints, we were unable to fully integrate a discussion of Quebec enablers and promising practices into this report. This is a significant limitation and one we hope to address in future work.

However, it is worth noting that over the past century, Quebec has had a much more liberal zoning regime than the rest of Canada. In Montréal in 2016, more than three-quarters of the city’s homes were apartments in duplexes, rowhouses, semi-detached houses, and other buildings with fewer than five storeys, more than double the 35% figure for Canada as a whole. In comparison, in Vancouver, 81% of residential land was zoned for single-family use in 2019 (albeit with secondary suites allowed in some zones), and the figures for Edmonton, Calgary, and Toronto were 69%, 67%, and 62%, respectively. However, in Montréal, “only” 46% of residential land was taken up by single-family uses (Yang 2019). Partly due to this long-standing multiplex culture, Quebec has the highest proportion of renters and the lowest proportion of households in housing need of any Canadian province, although affordability is getting worse. Quebec’s reliance on small and medium-sized developers has also arisen from its multiplex history and avoidance of municipal development taxes until 2017 (Polèse 2023).

A municipal benchmarking exercise of anglophone Canadian cities, judging speed and transparency of the application process with low development taxes, concluded that Edmonton was the most “development friendly” large city (CHBA 2022). Furthermore, Edmonton’s leadership in MM reforms, from eliminating minimum parking requirements to enabling a culture in which small- and medium-sized developers can thrive, has been recognized nationally (Ezvan and Ahmad 2023; *Globe and Mail* 2024). Kelowna is recognized as a national leader in identifying and responding to housing needs (University of Manitoba 2018) and is also gaining notice for rapid approvals of pre-approved MM designs (Berk 2024). Kitchener’s 2020 Housing for All strategy is leading to rapid MM development, especially along its new rapid transit line (Doucet et al. 2023).

In each city, we spoke to one or more lead planners tasked with MM reforms, a municipal politician considered an MM “champion,” and a local developer specializing in MM. The purpose of the interviews was to go beyond reports and other published material to uncover lessons for other cities on partnerships, processes, and “game changers” in enabling MM development.

6.1 EDMONTON, ALBERTA

Edmonton is the capital city of Alberta, with a population of just over 1 million as of the 2021 census, within a metropolitan area of 1.4 million, making it the fifth largest city in Canada (and sixth most populous metropolitan area). Edmonton is growing rapidly, attracting more interprovincial migrants drawn by relatively low housing costs and a strong economy. By 2041, the city is expected to have 483,000 more households, requiring 100,000 new homes, as outlined in the City's 2023 Housing Needs Assessment (City of Edmonton, 2023). Using the affordability analysis tool developed by HART (2024), 56,000 low-income households are identified as currently living in unaffordable housing. The challenge is how to meet current and future needs affordably and rapidly.

Targets

Edmonton has had a long-term strategy for meeting equity-based housing targets and sub-targets since its 2010 City Plan (Edmonton planner and politician interviews). The urgent need for nonmarket and other affordable rental options is recognized in the more recent 2020 City Plan. Overall targets include 50% of all new homes, with a total of 630,000 more residents, being developed within the existing urban footprint. There are minimum density targets of 45 homes per hectare in new suburban growth areas as well as established neighbourhoods, meaning that MM multiplexes are becoming the norm throughout all parts of Edmonton (Edmonton planner interview). Related objectives include eradicating homelessness and core housing need, combined housing and transport costing no more than 35% of households' incomes, and a 15-minute city where most journeys can be undertaken by walking, cycling, or public transit (City of Edmonton 2020a). Specific sub-targets include the aim of 16% of housing in all neighbourhoods being nonmarket, a proportion derived from its Housing Need Assessment (Doucet et al. 2022).

Ending exclusionary zoning

Edmonton took a gradualist approach, phased in over 15 years and in a highly sequenced fashion. Coming out of the 2010 City Plan, which had a target of 25% of all development in built-up areas, Edmonton started on moves to legalize more infill options, allowing garden and garage suites as-of-right in 2015, and also allowing lot splitting of 50-foot frontage lots into two 25-foot frontage lots (Edmonton planner and developer interviews).

In 2018, Edmonton published a five-year Infill Roadmap, which outlined both immediate changes and more substantive "bold moves" to rapidly increase MM (City of Edmonton 2018). One immediate bold move was to concentrate infill in key transit nodes and corridors. Another immediate bold move was the removal of zoning "overlays" to simplify the rules around MM multiplex options. A comprehensive parking review created the evidence base to eliminate minimum parking requirements in 2020, the same year Edmonton allowed an additional ADU to be built on most lots and eliminated restrictions against lodging houses and supportive housing.

The emphasis of Edmonton's Zoning Bylaw Renewal project was on greatly simplifying the number of zones, along with their design requirements. Edmonton's new zoning bylaw, which passed city council by a resounding 11-2 vote in October 2023, allows more housing typologies in more settings, including three-storeys by-right on all lots, more mixed-use development, and reducing the number of standard zones from 46 to 24 (CBC News, 2023). The move toward simplifying the number of zones is seen as one of the most important game changers, as it allows for greater certainty in the application process. The hope is this change will keep the "public hearing schedule from being cluttered up with a lot of small-scale, useless rezoning applications" which tend to get more NIMBY complaints than high-rise applications (Edmonton developer interview). In the initial reforms of the last decade, a secondary suite "didn't count" as a unit; technically, a property owner could have four townhouses on a lot, each with a basement apartment. However, this was not feasible due to setbacks and floor area ratio requirements. There has been a move towards greater flexibility in setbacks, which may lead to higher unit counts, as well as better green space and wastewater drainage outcomes (Edmonton developer interview).

The emphasis on equity within Edmonton's bylaw renewal was reflected in attention paid to ADUs, including new laneway street names, streetlights, and garbage pickup, and ending restrictions on collective housing options, such as group homes and rooming houses. These zoning changes create options for nonmarket and market housing providers of deeply affordable housing, as does encouraging small apartment buildings on suitable larger lots and land assembly of multiple lots. Edmonton planners argue that their equity approach was also reflected in making changes across the city rather than in certain growth areas, with very few "protected enclaves" (Edmonton planner interview).

One tendency was apparent in all three cities, Edmonton, Kelowna, and Kitchener. The pace of change on housing reform is leaving older definitions of MM behind. While the Edmonton planners used the definition of MM that included buildings of up to four storeys, generally on a single lot, the Edmonton developer included mid-rise apartment buildings of up to eight storeys. Mid-rise apartments of six to eight storeys were also included in MM discussions in Kelowna and Kitchener.

Real local democracy

By liberalizing zoning and design requirements, Edmonton has been moving minor development decisions away from a council and public hearing process that added time, money, and uncertainty to smaller scale development that already had potentially lower returns than the duopoly of "sprawl and tall." Councillors are elected by residents who sometimes fear neighbourhood change and the people who show up at public hearings are not representative of a rapidly changing city (Edmonton developer interview).

The zoning and regulatory change process was therefore accompanied by resources and public education opportunities like videos, infographics, and exhibits. The equity emphasis meant valuing new perspectives from tenants, new migrants, and Indigenous organizations throughout the process. There was a gradualist approach, rather than introducing everything all at once. After secondary suites and lot splitting were legalized in 2015, "there was a lot of resistance initially, but after a while,

the world didn't collapse, just more people were living in these places" (Edmonton planner interview). In fact, now that four- and six-storey apartment applications are becoming more common, residents say they want the "good old days" of "skinny houses," as the ten-year-old (townhouse) results of lot splitting are called (Edmonton developer interview). As the saying goes, "nostalgia is not what it used to be."

Edmonton's Infill Roadmap itself is framed within Treaty 6 obligations of shared prosperity, as signed by settlers and the Cree and Assiniboine Nations in 1876 (City of Edmonton 2018). The main question asked in public consultations, "How can we welcome new people and more homes into our older neighbourhoods?" was explored in over 30 meetings with community organizations, builders, and developers. A draft version of the roadmap was discussed at in-depth workshops and pop-up displays in parks and shopping areas. The philosophy of the new zoning bylaw was described (City of Edmonton 2020b) as addressing "unintended social impacts of our regulations," which had last seen a significant overhaul in 1961. It was explained that some regulations excluded people based on how they live; for example, with community support in group homes. All regulations were expected to be written in plain English and reviewed for gender and intersectional equity (GBA+ analysis) (City of Edmonton 2020b, 2021). A commitment to transparency was also evident in "a publicly available online dashboard and map that compiles development activity trends, available infrastructure capacity, neighbourhood indicators and other evidence to identify the areas in Edmonton that are best suited for medium-scale, high-scale and mixed-use infill development" (City of Edmonton 2018). In other words, intensification is driven by an evidence base, rather than where residents are least likely to object.

Modernizing the building code

Many permits approved since the zoning reform in 2023 have been for mid-block townhouses and secondary suites, rather than small apartment buildings. The Edmonton planners we interviewed suggested one reason might be due to building code barriers such as double egress; however, they saw their role as advocating for building code change with the provincial government, rather than making changes themselves. They also said that ground-oriented homes are still reasonably affordable in Edmonton in relation to other Canadian cities, so the slow take-up of small apartment buildings, despite the absence of unit limits in many zones, may be due to cultural preferences. One provincial building code victory was allowing wood frame construction up to six storeys, which has benefited replicable energy efficient design (Edmonton planner interview).

Eliminating site design barriers

Under Edmonton's simplified zoning structure, medium-scale residential zones (RM) give developers greater flexibility with respect to design than the medium-density multiple family (RF6) zones they replaced (Edmonton planner interview). RM zones allow for three or more units arranged in any configuration on a lot, which lends itself more readily to row housing, stacked row housing, and small apartment buildings. RM zones do not impose maximum restrictions for units on a site. There is greater flexibility around setbacks to protect mature trees, and reduced setbacks if a mixed-use building with ground floor retail is proposed.

Figure 18: The winning entry, Goodweather, from the 2019 international Edmonton Missing Middle Infill Design Competition.



Source: Studio North.

The Edmonton developer said there is an increasing gap between “what pencils in” (ten units on a large lot) and several regulations that lead to increased costs beyond eight units. For instance, infill developments with eight or fewer units can have garbage pickup from the main street or the laneway, but ten-unit developments require communal private pickup from a rear laneway.

Rapid approvals

As mentioned previously, a municipal benchmarking exercise for the Canadian Home Builders Association (2022) ranked Edmonton in first place nationally for planning transparency, sixth for approval timelines, and sixth for development taxes, earning it a first-place ranking overall. Average approval timelines in Edmonton in 2022 hovered around seven months, in contrast to Toronto, where average approval timelines can be anywhere between 21 and 32 months (CHBA 2022).

The City's Infill Roadmap (completed in 2021-2022) included actions to improve the consistency and timelines for the infill development permitting process. Under the HAF funding, Edmonton has a newly created Housing Action Team, which works across the municipality to break down silos and increase overall housing supply. It brings together the urban planning and community services departments (including nonmarket housing and homelessness services) along with city finance (Edmonton planner interview).

Edmonton has an industry association for developers (BILD) and a specific industry group called IDEA (Infill Development in Edmonton Association). IDEA consists of medium-sized developers and development consultants who specialize in infill. We interviewed a development consultant who had previously worked with the City of Edmonton, where they saw how difficult it was for small developers to break into infill development and handle strategy, approvals, and obtaining financing. Similarly, we interviewed a city councillor who had undertaken research on ADUs before they started a small ADU development company. What is evident from these interviews is that small- and medium-sized development companies give regular formal and informal feedback to city staff on what is working and what is not to create more housing. Continuous learning is essential with the fast-moving body of evidence related to MM.

Development taxes

As part of Edmonton's Infill Roadmap, the City reviewed infrastructure requirements to support infill, ranging from stormwater to public transit to libraries. The goal was to “develop an equitable, transparent and predictable system to share the costs of infrastructure upgrades and renewal costs for infill projects” (City of Edmonton 2018). Despite development taxes being lower in Edmonton than in most B.C. and Ontario cities, Edmonton developers still see this as the major barrier to infill development (Edmonton planner interview). The question of how to cost-share infrastructure upgrades, which may be essential even without population growth, is under discussion, but is the sort of issue that requires provincial and federal action (Edmonton planner interview).

Despite development taxes being lower in Edmonton than in most B.C. and Ontario cities, Edmonton developers still see this as the major barrier to infill development.

Financial enablers

Edmonton allows ownership of MM homes through mechanisms such as lot splitting. It also allows for ADU (garden or backyard suite) ownership through Alberta condominium regulations. While this is a vital planning measure, it also requires changes from finance providers to facilitate small developers obtaining finance. One Edmonton interview subject talked about the difficulties in obtaining financing for their conversion of a single-family house into a fourplex:

“ Obviously, the GST is a barrier – you know there will be a bill at the end, but the amount is unknown. Then there is appraisal, especially if you want to build in a more climate friendly way or do something that’s beyond the typical, very standard house. You can run into problems with the bank and the down payment for the second mortgage, which just increases the amount of cash you have to put in.”

In Edmonton, the Alberta Treasury Bank, a Crown corporation that is unique to Alberta, has been a game changer in terms of finance for MM. They have kept abreast of zoning bylaw changes and anecdotally, have provided financing for 25 eightplex townhouse conversions over the past year (Edmonton planner interview).

*As promised in the Infill Roadmap,
**Edmonton maintains a publicly accessible
database with real-time development activity
as part of its culture of transparency and
commitment to continual evaluation.***

Is it working?

As promised in the Infill Roadmap, Edmonton maintains a publicly accessible database with real-time development activity as part of its culture of transparency and commitment to continual evaluation (City of Edmonton 2024b). Net dwelling permits increased steadily until 2015, after which it took a downturn, possibly related to Alberta’s economic downturn during that period. By 2022, net new home permits had returned to 2015 levels, although there was a decrease in construction activity (as there was across Canada) in 2023. The number of redevelopments of existing properties (duplexing, additional units, rebuilds) increased from 19% of all permits in 2015 to 34% of all permits in 2022. Single detached homes, the dominant form of development in 2005, have significantly reduced in numbers outside of greenfield developments, with almost as many apartments and multiplexes (32%) as single detached (37%) for infill redevelopments in 2022. Secondary and garden suites represent 8% of permits. Evidence suggests that Edmonton is starting to see MM results from extensive policy reform.

Anecdotally, the main beneficiaries of MM development are young first-time buyers from other provinces, moving from a “200 ft² condo in Vancouver to a 2,000 ft² duplex in Edmonton.” There is more student housing in secondary suites, including basement apartments, but not enough, and multigenerational families have also taken advantage of new multiplex opportunities (Edmonton planner interview).

Using one international comparative affordability measure, median house cost to median income, Edmonton continues to be the least expensive of Canada’s largest six cities. While Edmonton, Calgary, Montréal, and Ottawa were once considered “affordable” in 2004, with a median multiple of 3.0, Montréal and Ottawa ownership affordability is now considered “extremely unaffordable,” with median multiples of 5.8 and 5.3 respectively, while Calgary is “severely unaffordable,” with a median multiple of 4.6. Edmonton’s ownership affordability has worsened, but not nearly as much as other cities, with a median multiple of 3.6 (Cox 2024). It would be much too simplistic to draw a straightforward causal result from MM policy to increased supply to better ownership affordability, but it is a set of relationships that warrants further research.

The median multiple measure only includes home sales of detached, semi-detached, and townhouse structures. In terms of rents, Edmonton continues to be one of the least expensive of the 35 markets included in Rentals.ca monthly national tally of asking rents (Rentals.ca 2024). In September 2024, one-bedroom apartments in Edmonton were asking an average of \$1,376 per month and two-bedrooms an average of \$1,536 per month, less than half the amount asked for two-bedroom apartments in Vancouver and Toronto, and considerably less than the average of \$2,094 per month asked in Calgary. Rents had increased an average of 8% for a two-bedroom over the previous year in Edmonton (as is the case in all the least expensive cities, as households “vote with their feet” away from the most expensive cities toward cheaper alternatives), but compared with Quebec City, another traditionally inexpensive renter city, where an average two-bedroom rental increased 14% year in one year, Edmonton is still a relatively inexpensive rental choice (Rentals.ca 2024). Again, further research on the relationship between MM policy, increased supply, and rental affordability would be helpful.

Edmonton planners expressed some frustration with inadequate federal and provincial support for nonmarket and deeply affordable housing. Despite an excellent public housing developer (HomeEd), homelessness prevention and supportive housing coordination from Homeward, and a growing commitment to using public land for nonmarket development, it will be impossible for nonmarket housing targets to be met with existing programs. Certainly, most of the HAF money has gone to help nonmarket developers, mostly reimbursements for sale of public land. One example is 12 surplus school sites that will be redeveloped into 1,800 units of mixed-income infill housing, using a public-private development model (Edmonton planner interview). Supportive housing providers have benefited from allowing congregate housing in all parts of the city, as this was previously a barrier to development (Edmonton planner interview). Other impacts on nonmarket and deeply affordable supply require further research.

Edmonton is fortunate to have a strong culture of SME developers, unlike other large Canadian cities where a few large development companies dominate the field (Edmonton planner and developer interviews). There is certainly anecdotal evidence that Edmonton has been able to respond more effectively to MM policy reforms due to good partnerships and feedback loops among SME developers, planners, and politicians.

To summarize, Edmonton is making the most of the municipal tools that it has and continues to be a Canadian leader in MM infill. Because the new zoning bylaw was brought in in January 2024, it is too soon to be conclusive about increasing options leading to more affordable housing options (which in turn leads to lower rents and house prices), but the preliminary data suggests a decisive shift to MM, along with some wins for deeply affordable housing.

6.2 KELOWNA, BRITISH COLUMBIA

Kelowna is B.C.'s third most populous metropolitan area, after Vancouver and Victoria, and Canada's 20th most populous metropolitan area. As of 2020, 220,000 people lived in the Kelowna metropolitan area, 140,000 of which lived in the city proper. Kelowna is the fastest growing metropolitan area in Canada (Michaels 2022). Its most recent Housing Need Assessment (City of Kelowna 2023b) found that the city is expected to increase to a population of 204,000 by 2041. Like Edmonton, Kitchener, and so many other Canadian cities, Kelowna's main source of migrants are housing "refugees" from extremely unaffordable markets such as Vancouver and Toronto. They in turn have caused enormous growth pressures on Kelowna, located in one of the most productive agricultural regions in Canada with few options for sprawl.

Targets

Current Kelowna housing policy relies on three documents. Its 2020–2040 Community Plan, released in 2022, set ambitious general infill directions, including "vibrant city centres and curb sprawl, target growth along transit corridors, stop planning new suburban neighbourhoods, incorporate equity into city building, [and] promote more housing diversity (City of Kelowna 2022a). The pledge to "stop planning new suburban neighbourhoods" is an implicit target of 100% infill development, but the Kelowna planner said the actual target is "70–73%" within the existing core area, especially since the suburban areas are on steep hillsides that are not conducive to public transit, and 50% of urban land is set aside for agricultural uses (Kelowna planner interview).

In 2023, the City's updated Housing Need Assessment spoke of "adequate levels of ownership and market rental but... shortfalls in subsidized rental and supportive housing." (City of Kelowna 2023b). Overall housing targets are 18,750 to 26,470 units over the period 2021–2031. This comprises an existing deficit of 3,750 to 5,000 homes, mostly those affordable to low- and moderate-income households, 13,650 to 20,130 to meet demand from newcomers, and 1,340 likely demolitions.

In terms of specific sub-targets, the report describes a need to enable 500 to 1,500 supportive housing units and 4,500 to 6,400 subsidized rental units from 2021 – 2031. Its proposed tenure goal is 50% ownership, 20% market rental, 25% subsidized rental, and 5% other (mostly congregate supportive housing). Given that the current median ownership price is \$745,000, which is only affordable to very high-income families, much more affordable ownership housing will be necessary. The report also discusses specific demographic groups in need, including Indigenous, single persons, women-led, female lone parents, and renters aged over 65. Again, it is unlikely that the needs of these groups can be met by current ownership or market rental options. The Kelowna developer also spoke of new migrants – healthcare workers and university staff – who need rental housing while they “rebuild their credit” in Canada (Kelowna developer interview).

The Housing Need Assessment specifically points to MM infill housing to address some of the mismatches between needs and current supply. Ground-oriented affordable family-sized options, to fill the gap between one- and two-bedroom mid-rise apartments and four-plus bedroom detached homes, are to be encouraged through infill options like townhouses, multiplexes, and low-rise apartment buildings. MM might address the needs of younger middle-income Kelowna family households (Kelowna developer and politician interviews).

*Ground-oriented affordable family-sized options, to fill the gap between one- and two-bedroom mid-rise apartments and four-plus bedroom detached homes, are to be **encouraged through infill options like townhouses, multiplexes, and low-rise apartment buildings.***

Ending exclusionary zoning

The third document guiding housing policy, after the community plan and the needs assessment, is a comprehensive zoning bylaw, brought in at the same time as the Official Community Plan (City of Kelowna, 2022a).

In contrast to previous practice of having multiple “very detailed” zones (Kelowna planner interview), much of the city is now covered by a set of four “multi-unit zones.” Most of the core area of the city can now have up to six “ground-oriented residential units,” while apartments of up to six storeys are allowed on “transit-supportive corridors.” There is also a zone for up to three-storey townhouses on most serviced urban lots, and an optional “rental-only” tenure overlay for the apartment zoning. However, unlike Edmonton, there is a requirement for a specific “boarding or lodging house” overlay to be decided on a case-by-case basis, instead of allowing congregate housing as-of-right. This may delay much-needed supportive housing services, as well as seniors’ options.

Kelowna’s commitment to fast track approvals began with an Infill Design Challenge in 2016. A winning fourplex design led to a new zone that allowed this design as-of-right.

Real local democracy

Like many other cities, Kelowna is trying to turn away from a fragmented “each development is unique” system to one that allows a broad range of infill options through a streamlined system. The Kelowna developer, who has been working in that city for 16 years, says that the highly politicized infill process is only beginning to become more permissive with the 2022 zoning changes. Until recently, they said, there would be “hours of meetings just to put in a basement suite” (Kelowna developer interview). City staff have been collaborating and engaging in mutual learning with construction companies, small developers, and architects to make this process efficient, rapid, and predictable (Kelowna planner and developer interviews). There was an Infill Awareness event in 2023, and an Infill Symposium in September 2024 that attracted 210 participants (Kelowna politician interview). This process is intended to move public discussion from a politicized development-by-development approach to one that is more inclusive of diverse residents in a rapidly growing and changing city. The Kelowna developer sees this as a planner-led process, where “pilot projects” and “incremental steps” got politicians and neighbours “used to it” (Kelowna developer interview).

Kelowna’s commitment to fast track approvals began with an Infill Design Challenge in 2016. The competition was intended to energize local architects, builders, and developers to think through ways to improve affordability, and was judged by a multi-disciplinary jury. A winning fourplex design led to a new zone that allowed this design as-of-right (City of Kelowna 2024).

In 2021, the competition was expanded to include four winners, ranging from four to six units in one or two buildings, all suitable for a lot with a minimum dimension of 21 by 38 metres. The Infill Housing website now includes a one-stop shop where one can order the designs, calculate costs, and apply online for a permit. Plans are now afoot to add new as-of-right designs as needed. There is a particular interest in getting ADU designs that can fit behind existing properties (Kelowna planner interview).

The City is trying to develop an ongoing learning laboratory for SME developers, including owner-developers (Kelowna planner interview). The hope is that large developers that may have reached “saturation” with small condominiums in Kelowna will give way to a new generation of SME developer-builders that focus on MM (Kelowna developer interview).

Modernizing the building code

The Kelowna interviews took place as the B.C. government was bringing in new legislation to enable single-egress buildings. The Kelowna planner expressed optimism that this would lead to a resurgence of three- to four-storey small apartment buildings, which had previously been the “bread and butter” of the rental stock (Kelowna planner interview).

However, a concurrent change to the B.C. Building Code has made small apartment buildings more difficult. An electrical room is now required for buildings with more than six units. Previously, meters could be external and mounted in a closet-type device, but now require a separate room with clearance within the structure (Kelowna planner interview). The reasons behind this change are not well explained and the Kelowna planner and developer were both concerned that building code changes were not being tackled holistically to enable more affordable options.

Eliminating site design barriers

Unlike Edmonton and Kitchener, Kelowna has no light rail network. In fact, Kitchener-Waterloo is the least populous metropolitan area in Canada, with 600,000 people, to have light rail, and Kelowna is still less than half that population. Also, unlike Kitchener, Kelowna is not within commuting distance of a million-plus city. What this means is that it is harder to reduce parking restrictions while the population is reliant on limited bus public transit. Having said that, the provincial government no longer allows mandated parking requirements along identified transit corridors, which curiously does not include Kelowna’s largest bus interchange (Kelowna planner interview). There is a long-term plan to include public transit options, including bus rapid transit to the airport and the University of British Columbia’s Okanagan campus outside Kelowna, but Kelowna remains a car dependent city (Kelowna politician interview).

A greater barrier than onerous parking requirements in Kelowna is the third-floor setback. The third storey of a townhouse, multiplex, or apartment building can have only 70% of the massing. This appears to have some heritage, aesthetic or privacy rationale (the Kelowna planner is not certain) to make new development fit into a two-storey “norm”, but it does create an additional constraint for architects and reduces usable floor area (Kelowna planner interview).

Rapid approvals

Kelowna has identified more than 1,300 lots in the city's core area that are now eligible for fast track approval. This means that if the developer works with the pre-approved designs (Figure 19) discussed above, the development and building permit application can be approved within ten business days (City of Kelowna 2024).

The Kelowna developer pointed to increased construction and labour costs over the past year as a brake on development, arguing that rapid approvals are the only way to “outrun” increasing costs that can make developments unviable or too much of a risk to finance providers (Kelowna developer interview). There is simply no more time to “do a rezoning, wait six or seven years for another study, do another rezoning.” The Province is right to move in with rapid and sweeping change, even if there are “some mistakes” (Kelowna developer interview).

Figure 19: Pre-approved infill housing designs.



Source: City of Kelowna, 2024.

Development taxes

Development taxes are identified by developers as the largest barrier to supply and affordability in Kelowna (Kelowna developer and planner interviews). The Infill Housing web site tells small developers to expect Development Cost Charges of \$99,000 to \$235,000 per lot, assuming one unit on the parcel before development. In addition, engineering fees of \$60,000 to \$100,000 should be expected, along with costs of upgrading any roads, curbs, sidewalks, laneways, street lighting, water, sewer, electrical, and communication lines (City of Kelowna 2024). This is a structural issue: in many cases, sidewalks were never built, street trees never planted, and stormwater drainage systems have not been improved since the 1930s when they were originally built. As the Kelowna planner says, this level of fees might be acceptable for a 75-unit apartment building but not a multiplex or townhouse development, no matter how quick the approvals are (Kelowna planner interview).

The issue goes beyond direct development taxes to truly dysfunctional infrastructure for a rapidly growing city. Fortis, B.C.'s main electricity provider, requires a paid mounted transformer for every new development, which costs \$100,000, as well as perpetual maintenance of a 3 by 3 m² device that cannot have anything built above it. Instead of spreading energy costs at the block level, the cost is borne by the individual property owner. This is another provincial-level issue that needs to be addressed (Kelowna planner and politician interviews). Newcomers cannot be expected to pay the entire price for a long-term infrastructure backlog (Kelowna developer interview).

Financial enablers

The Kelowna developer said that MLI Select, the CMHC's mortgage insurance scheme, has been necessary to obtain finance for MM infill, but that changing criteria in relation to accessibility, affordability, and environmental sustainability makes it somewhat confusing to access (Kelowna developer).

Most of Kelowna's financial incentives for affordable MM housing come from the provincial government. BC Housing's \$40 million Secondary Suite Incentive Program provides homeowners with forgivable loans covering up to 50% of costs, up to a maximum of \$40,000, to add secondary suites or accessory buildings (garden suites, laneway houses) on the property of their primary residence. Loan forgiveness is contingent on homeowners renting the new units for five years at 40% below-market rent. There is a maximum house wealth limit of \$2 million and a maximum income of \$200,000 for a homeowner to be eligible (Seymour 2024).

Kelowna has offered two pieces of City land for BC Builds, the provincial "middle income" housing program. However, only 20% of the homes are affordable to median-income households, with the rest only affordable to higher-income households (Kelowna planner interview).

Kelowna withholds both property taxes and school taxes for a decade on rental projects. It is examining further ways to promote critically needed deeply affordable nonmarket housing. However, the B.C. government is not providing operating subsidies, both rent supplements and health or social services, to make permanent supportive housing viable. There are 180 tiny homes being constructed on City land by BC Housing, but their long-term viability as adequate homes is yet unclear (Kelowna planner interview).

Is it working?

Kelowna is seeing a shift in the type of units constructed. Apartment-style units, either for rent or purchase as condos, made up two-thirds of the homes approved in the first quarter of 2024. Permits for only 31 single-family homes were received, less than half the average during the same quarter over the past five years (Seymour 2024). However, overall applications are down in Kelowna, as they are throughout the country. Only 927 units of a projected 2,771 MM units, and zero affordable housing units (out of a targeted 416 units), have been approved in the first quarter of the year (Moore 2024).

Kelowna provides an example of a mid-sized city that is trying to rapidly change a single-family development culture to one that is more urban. However, the absence of basic urban infrastructure – from updated power and sewer networks to enhanced public transit and pedestrian amenities like trees and sidewalks – means that the municipal government is forced to offload the costs of urbanization onto newcomers. The limits of purely municipal action, even innovative and comprehensive zoning action, to enable affordable MM is evident in Kelowna.

6.3 KITCHENER, ONTARIO

Kitchener is a mid-sized city in western Ontario, with over 250,000 people in the municipality and almost 600,000 in the region (which includes two other mid-sized cities, Waterloo and Cambridge), according to the 2021 census. Waterloo Region is the 10th most populous in Canada. Kitchener's proximity to Toronto, 100 km northwest of the most populous metropolitan region in Canada, means that it has attracted many young households that may have been priced out of the "big city."

Kitchener is considered cutting edge in its MM enablers, at least in Ontario. Kitchener was one of few Ontario municipalities that has allowed duplexes city-wide since the 1980s. It was one of the first Ontario municipalities to allow up to three units and two buildings on a single lot, in 2019 (Buekhert 2019). This was increased to four units in 2024 as part of its HAF agreement with the federal government (City of Kitchener 2024a). Planning for increased densities near the regional ION light rail network (open as of 2019) was central to its Growing Together project, which encompasses MM zoning permissions and higher densities near rapid transit (City of Kitchener 2024c).

The Enabling Missing Middle and Affordable Housing Feasibility Study (MMAH) Report (City of Kitchener 2023) finds Kitchener is doing well at:

- Zoning reform;
- Approvals processes;
- Nonmarket and market culture of SME developers, including good information for first-time developers; and
- Affordable housing enablers, along with a clear definition of affordability, legalizing existing rooming, and including eviction prevention as part of their MMAH strategy.

It also finds that Kitchener needs to address (in order of priority):

1. Reducing or eliminating parking minimums, especially near transit;
2. Increasing density allowances to make MM economically viable;
3. Improving financing for affordable and nonmarket housing; and
4. Continuing to improve rapid approval processes.

Targets

Kitchener has a provincially imposed housing target of 35,000 new homes by 2031. Unlike Edmonton and Kelowna, whose official plans, housing need assessments, and zoning bylaws are all recent and well-integrated, Kitchener's housing-related work is still in its early days. Part of the reason for this is that the regional government has been responsible for affordable housing under the Ontario provincial system imposed in 2000, although there had been considerable municipal progressive action on public housing back in the 1970s (Kitchener politician and planner interviews). The official plan, which was approved in 2014, is currently being updated due to higher-than-anticipated growth, with a new projected population of 400,000 people in the city by 2051 (City of Kitchener 2024d). Zoning changes, mostly dating from 2016, are in the process of being updated. In some cases, zoning changes (such as legalizing rooming houses to serve populations in need) were identified in the 2020 Housing Need Assessment strategy (City of Kitchener 2020b) identified homeless, Indigenous, new migrants, single parents, students, young households, people with disabilities, and seniors.

The 2020 Housing for All strategy (City of Kitchener 2020a), which marked the first time in decades that the City, rather than the Region, produced an affordable housing document, had a strong emphasis on deep affordability, with several specific emergency shelter or encampment responses, and supportive housing proposals. MM responses included legalizing lodging houses (or rooming houses) and other congregate zoning in all residential zones, increasing the number of ADUs permitted on a lot, and enacting a rental replacement bylaw to preserve affordable units in cases where buildings with tenants are proposed to be redeveloped. These changes were enacted in early 2024.

The Growing Together land use and zoning framework (City of Kitchener 2024c) includes a goal of 100,000 new homes by 2051, with 20,000 of these being MM typologies of ADUs, multiplexes, and apartment buildings under six storeys. The MMAH study (City of Kitchener 2023) identified approximately 24,300 sites across Kitchener that could accommodate these MM types. If only 2% of these properties were redeveloped in this way, 20% of the City's forecasted new residents by 2051 could be accommodated in MM housing.

Like Edmonton, Kitchener's Official Plan includes minimum density targets in both urban and suburban areas: 150 residents and jobs in Major Transit Stations Areas (MTSA) located along the ION light rail transit line and 65 residents and jobs in greenfield development (City of Kitchener 2024a). The Kitchener developer was vehement that new subdivisions needed to be planned with multiple units on lots (Kitchener developer interview).

Ending exclusionary zoning

The new zoning bylaw of 2019, itself a greatly simplified and liberalized version of previous bylaws, is slowly being amended to be more permissive. As of 2024, congregate housing options (known as “lodging homes” in Kitchener) are now permitted as-of-right in all residential zones. While there are estimated to be many illegal lodging houses for the City’s large student population, the City has not seen many lodging house licence applications, possibly because some would not have been able to secure them, given that the previous zoning framework required a 400-metre separation distance. Some of them may also fail safety inspections. The City is currently assessing resources to support the new licensing framework (Kitchener planner interview).

The Kitchener planner says that 11 metres (approximately three and a half storeys) are currently permitted as-of-right, with official plan policies that allow for a minor variance for buildings up to 24 metres (approximately 8 storeys) at MTSAs (light rail transit stops). Previously, these would have required official plan amendments. Kitchener has also gotten rid of maximum floor space ratios in its MTSA’s, which it hopes will increase the viability of smaller apartment buildings, such as student residences (Kitchener planner interview).

Real local democracy

As is the case in Edmonton and Kelowna, Kitchener’s MM reforms are trying to move beyond the politicization of individual housing proposals, toward a more general acceptance of urban intensification and housing diversity. In the recent past, according to the Kitchener planner:

“ We have seen NIMBYism in some of our neighbourhoods, which has been a barrier. Especially when the profit margins can be so tight on smaller projects, adding six months or a year on an Ontario Land Tribunal hearing can really... make or break the financing of some of those projects ” (Kitchener planner interview).

There was extensive upstream consultation as part of the Growing Together project about the future shape of the city:

“ We would go to the farmer's market and events like the Multicultural Festival. We went to community centres, and we brought our 3D model of the entire downtown. And in that 3D printed model we had different building typologies. So, we would have, like a high-rise, a mid-rise, and a low-rise in little 3D plastic pieces. And we would say to people... we have these targets from the Province, and we have a direction to add... 10,000 more people to this geography within the next 25 years. So, we'll give you these different building forms and typologies, and you place them in the places that you think would be most appropriate, based on the height or the setback, or the location. And through that we had all these exercises of people placing those different building typologies in different spots, and I think in many cases we saw that “Aha” moment where they realized that it made sense to put the tall building next to the LRT line, and then to transition down to mid-rise... ” (Kitchener planner interview).

This front-ended consultation exercise paid off, as did the work of a local YIMBY (Yes in My Backyard) group, some of whom “live in mid-rises and high-rises and combat myths” and “make evidence-based delegations to council” (Kitchener planner interview) and activist political leadership willing to “push the envelope in a constructive way” (Kitchener politician interview):

“ We were really surprised how many people showed up in support and how few NIMBY voices were at the final council meeting. Historically, we would have expected, you know, 30 to 40 people in opposition to come out for a project of this scale. I want to say it was definitely less than ten, maybe less than five in this case ” (Kitchener planner interview).

The Kitchener developer felt that the LRT had been a game changer in residents’ image of the city. There had been predictions that no one would use it, but it is extremely popular, and people want to live near it. This has had a knock-on effect on attitudes toward car parking and apartment living. There appears to be demand for five or six more lines in the region (Kitchener developer interview). The Kitchener politician agrees: “Public transportation systems aren’t getting built as fast as the housing,” and that means that even if people want to live a more car-free life, it may be difficult (Kitchener politician interview).

Along with shaping public attitudes to density, Kitchener planners are trying to support “the experience and skillset” of innovative small- and medium-sized developers who can break out of the sprawl or tall dichotomy (Kitchener planner and politician interviews). Like Edmonton and Kelowna, Kitchener has a one-stop shop website with key information for MM development, with step-by-step instructions, application cost guides, and links to forms. While there is not a set of pre-approved designs, like Kelowna, there is a link to the ReHousing website, a University of Toronto Architecture School set of simple designs and site layouts for converting single-family houses to multi-unit homes (ReHousing 2024). The developer we spoke to had formed a family firm specializing in MM, from multiplexes to smaller apartment buildings, after leaving a much larger development firm in 2020 that specialized in high-rise apartments. Part of its mandate is developing nonmarket housing for agencies that will then provide services, recognizing that development and service provision are very different skill sets (Kitchener developer interview).

The additional costs of multi-unit housing are felt to be beyond the control of local planning in Kitchener.

Modernizing the building code

The additional costs of multi-unit housing are felt to be beyond the control of local planning in Kitchener. Four-storey buildings mean needing to provide an elevator, double egress, and meet many more requirements, which means that a project with 50 to 100 units might be economically

viable, but smaller apartment buildings might not. These are all issues for Ontario Building Code reform, with Kitchener’s Chief Building Official heavily involved with counterparts from around the province (Kitchener planner interview).

The Kitchener developer felt building code reform is harming new construction. They estimate there was 2,200 revisions over the past five to six years to bring the Ontario code in line with the national code, all adding to complexity and subject to interpretation by different municipalities. They would prefer one big change to the National Building Code and having it govern all provincial systems: “Except for greater seismic activity in B.C., building in Saskatchewan is not significantly different from building in New Brunswick, so why have this additional layer?” (Kitchener developer).

Eliminating site design barriers

The MMAH study analysis shows that parking costs have an extreme impact on development viability. Structured parking costs between \$50,000 and \$95,000 per spot, typically 5-11% of the total cost of a mid- or high-rise building. The maximum estimated ten-year gross revenue per parking spot when rented separately is just \$18,000. Parking requirements are currently being discussed as part of the official plan review. The Kitchener developer feels that the risks of deciding how much parking a development needs is better borne by a developer than the municipal government (Kitchener developer interview).

While there are no maximum unit counts, floor area ratio, or other density limits in the new downtown zoning framework, there are minimum setbacks of 4.5 metres from the street line and setbacks from other buildings (Kitchener planner interview). The MMAH study recommends increased height thresholds for low- and mid-rise buildings (i.e. from 4 to 6 storeys and from 7 to 12 storeys, respectively) across the city. It also recommends that additional density in high-rise forms be provided to support affordable housing delivery.

The MMAH study recommends relaxing or eliminating policies and regulations that inhibit delivery, such as requiring on-site truck turnarounds.

Rapid approvals

Kitchener says it has reduced approval times for housing from 17 to 5 months over the period 2019 to 2023 (Outhit 2023b). This was accomplished through a three-year development services review program that began in 2019, eliminated review redundancies, and digitized most elements. Kitchener now prides itself on the most rapid approval times of any major Ontario city: about 90 days for an official plan amendment, and 60 days for site plan approval (Kitchener planner interview).

The Kitchener developer still feels that there is “too much time report writing” as opposed to building. In response, they are rolling out some building templates and look forward to shorter approval times for pre-approved prototypes. They estimate 15 to 18 months for approvals and 9 months to build (Kitchener developer interview).

The MMAH study (City of Kitchener 2023) recommends further incremental approvals changes in Kitchener, some of which are underway:

- Simplify and reduce mandatory study requirements for affordable housing projects;
- Delegate, where appropriate and legislatively authorized, more approvals to staff including more heritage permits and lifting of holding provisions;
- Build upon and formalize the City's existing affordable housing concierge function, delivered by the project managers, to reduce approval time for MMAH;
- Streamline public meetings and digital engagement processes; and
- Consider template-based approval systems.

Development taxes

Ontario's Bill 23 introduced development charge exemptions for affordable housing in 2022, but Bill 39 walked back some of these exemptions the following year, after municipal protests. An audit examining the potential property tax impacts of development charge changes was never released publicly (Callan and D'Mello 2023).

Kitchener, like several other Ontario municipalities, decided to waive planning application fees for affordable housing units, even before recent changes to the Development Charges Act waived development charges for these units. But these waived fees are offset by an affordable housing account in the municipal budget, which has been approximately \$1–2 million over the last few years. The Kitchener planner says that there is a more systemic problem being exposed:

“For the past 100 years, many municipalities didn't put enough money aside for the life cycle costs for all of the infrastructure needs they have. And so you get to this point where you've built out a city of X size, and you have X billions of dollars of pipes and infrastructure and streetlamps and sidewalks and benches, and... how do you plan to maintain that for the next 100 years?... Is it fair to the next generation to account for these costs and put so... much cost and burden onto the price of their first home, whereas in many cases there are older generations that may have benefited from the real estate trends [and who]... may have a valuable property that... with their real estate gains could theoretically afford to pay higher development charges than some of the newer families or couples or individuals [entering the housing market]?” (Kitchener planner interview).

The Kitchener politician takes a slightly different perspective – that the solution to reliance on development taxes must come from provincial and federal governments:

“If we're going to change that, it's only really going to work if we see provincial and federal governments stepping up to help to help facilitate that change, because putting more burden on the property taxpayer with a system that is arguably still, one of the most regressive forms of taxation, isn't going to work” (Kitchener politician interview).

While Kitchener has higher development charges for suburban versus inner city development, “the next phase” is taking a “critical look at the detailed implications of hard and soft infrastructure... for example, how many times does a toilet flush and how much water might be used in a condo unit versus a six-bedroom house;” in other words, looking more closely at the “different unit types and their impacts” (Kitchener planner interview).

Financial enablers

The MMAH study included an economic analysis of five rental typologies: suburban townhomes, eightplexes, low-rise apartments in both central and suburban neighbourhoods, and ADUs. However, all but the ADUs generated too small a profit to be viable (City of Kitchener 2023). While the Kitchener planner says that there is a role for credit unions and other finance providers to rethink risk in relation to lower profit and smaller scale developments, “a better match between financial products and housing priorities,” this has not been an area that municipal government has traditionally engaged in (Kitchener planner interview).

A more pressing priority is a land inventory, so Kitchener can look at maximizing affordable housing outcomes from municipal, federal, and nonprofit lands. The Kitchener developer is currently engaged in a large-scale development on government land that may be a game changer: a total of 10,000 MM homes (mostly stacked townhouses and small apartments) that will be built by Habitat for Humanity by 2031 (Groleau 2024; Kitchener developer interview). This may be the scale of finance – up to \$400 million – that can engender a new approach to MM mixed-income and mixed-tenure development.

Kitchener is using its own government land to increase supportive and deeply affordable housing, with a Request for Proposals for a piece of leased land they hope will be able to accommodate at least 40 homes, as well as a recent land donation to Habitat for Humanity that is intended to accommodate an estimated 65 homes (Kitchener planner interview). But one of the tensions being explored is that “the need for deeply affordable housing is so great, that maybe MM isn’t always the best option in a housing crisis. Maybe, in cases where land opportunities are limited, and affordable housing is so lacking, something like an 18-storey building would be a better use of land [to maximize unit yield]” (Kitchener planner interview).

Figure 20: Rendering of a proposed 13-unit addition to an existing duplex in the City of Kitchener.



Source: Waterloo Region Record (September 23, 2023).

Aside from development tax subsidies and land, Kitchener has two dedicated project managers working on supportive and deeply affordable housing. They work with various local organizations and faith groups that have available land, and work to accelerate approvals for proposals so that projects funded by CMHC can achieve their deadlines for funding. While MM policy is not necessarily targeted to nonmarket housing providers, the Kitchener planner thinks that legalizing congregate housing options and moving away from unit-based housing limits are ways to support nonmarket MM options. They are also developing proposals with equity-seeking groups that previously may have been overlooked in needs assessments (Kitchener planner interview).

Is it working?

Kitchener prides itself that while most of Canada saw reduced development activity in 2023, Kitchener had a “banner year.” It exceeded its provincial housing targets by 135%, with 3,589 housing starts, and approved more than one-third of 35,000 new homes it wants to see built in Kitchener by 2031 (City of Kitchener 2024a; Nielson 2024).

Kitchener has reached these goals partly through growing its MM stock. ADU permits have increased ten-fold in a decade, from 69 units in 2014 to 690 in 2023 (Regional Municipality of Waterloo 2024, 48). It is exceeding its 60% target of development in the built-up part of the city, with 69% of approvals in 2023 being infill. It is also exceeding density targets of between 35 and 185 residents and jobs per hectare within 800 metres of its light rail stations. There is a goal of higher densities in suburban areas, 65 residents and jobs per square hectare, but no data on density achievements in its public dashboard (City of Kitchener 2024a).

Since the adoption of the Housing for All Strategy in 2020, the City has supported the creation of at least 617 units of affordable housing through a mix of financial support, fee waivers, City land, and expedited approvals. Furthermore, there are approximately an additional 117 units of supportive housing under construction. While this is a very high level of supportive housing for a city its size, Kitchener is still beset by a far less progressive provincial government than in B.C., where there are stronger targets and more supports for deeply affordable housing.

Kitchener is increasing development activity through a concerted effort to simplify zoning rules and encourage MM infill. It is too soon to tell whether the kinds of homes that are most needed – such as supportive housing, nonmarket deeply affordable housing, and affordable family-sized rental and ownership housing – can be engendered through existing senior government mechanisms, and whether the right supply is having an impact on housing costs.

6.4 SUMMARY OF CANADIAN PROMISING PRACTICES

The Kitchener developer said it best: “Missing Middle is not the magic bullet. It is simply one of many types of development that must be enabled to increase the supply of well-located affordable housing” (Kitchener developer interview). MM is a challenge, partly because getting approvals and finance has been so complicated, and larger developers have benefited from the dysfunctional status quo: “They’d rather [get permission] once for 300 units than 75 times for the same 300 units” (Kitchener politician interview).

Edmonton, Kelowna, and Kitchener all have slightly different emphases, in part because of working within three different provincial policy frameworks. But they have common features as well:

- Housing targets that reflect housing need assessments that include necessary price points and sizes, with a common frustration expressed by planners and politicians that senior governments do not adequately support deeply affordable nonmarket housing needs;
- Moving towards a simplified set of zones that are much less prescriptive, generally with less emphasis on unit counts, tenure, and setbacks, and more emphasis on development viability and access to public transit;
- An emphasis on cultural shift, not only in terms of acceptance of increased density, but encouragement of a new generation of small- and medium-sized developers, including homeowner-developers;
- Streamlined approvals processes that emphasize digital tracking and one-stop instructions;
- Integrated problem-solving approaches, with a growing recognition that development taxes and infrastructure installation charges are best dealt with at the precinct and city-wide level rather than attached to specific developments.

*“Missing Middle is not the magic bullet. It is simply **one of many types of development that must be enabled to increase the supply of well-located affordable housing.**”*

7. CONCLUSION: SYSTEMATIZING MISSING MIDDLE READINESS

Missing Middle (MM) housing – ADUs, multiplexes, and small apartment buildings – offers benefits to both owners and tenants through increased access to a range of housing options and affordability in amenity-rich neighbourhoods. Exclusionary zoning and gentrification of central city neighbourhoods have largely destroyed these options across North America over the past 50 years. It is only in the past decade that comprehensive approaches to reinstating MM housing have been attempted.

While some Canadian cities have made efforts to alter their single-family residential zones for MM housing, such up zoning has not worked back from a holistic perspective on how to enable necessary price point and size targets. Zoning alone, even if eliminating delays and blockages by third parties, cannot overcome design, building code, and financial barriers that often constrain these efforts. Lot sizes, floor area ratio, setbacks, building heights, parking requirements, and other design and building regulations for smaller multi-unit homes are still held to the same design standards as single-family homes. Zoning changes in municipalities must therefore be integrated with an understanding of the finance of MM development, particularly low-cost and nonmarket development, as well as addressing the fundamental incompatibility of “growth pays for growth” development taxes with a commitment to scale up adequate and affordable housing.

*While some Canadian cities have made efforts to alter their single-family residential zones for Missing Middle housing... **zoning alone, even if eliminating delays and blockages by third parties, cannot overcome design, building code, and financial barriers that often constrain these efforts.***

Based on our overview of the Canadian and international literature, as well as three Canadian promising practices, we suggest the following list of Missing Middle enablers inform federal, provincial/territorial, and municipal housing reforms:

1. Housing supply targets

- a. Municipalities across Canada need one set of federal supply targets and nonmarket/affordable sub-targets, with annual public reporting on approvals linked to infrastructure funding.
- b. Municipalities need one simple national/provincial/territorial definition of affordable housing, based on 30% of the following pre-tax household income categories:
 - i. Very low income: zero to–20% of AMHI
 - ii. Low income: 21–50% of AMHI
 - iii. Moderate income: 51–80% of AMHI
 - iv. Median income: 81–120% of AMHI
 - v. Higher income: 121+% of AMHI.

“Deeply affordable” housing meets the needs of very low- and low-income households, while “affordable housing” meets the needs of moderate- and median-income households.

- c. Municipalities should address how the majority of these supply targets will be met in the existing built-up area through enabling appropriate zoning and other regulatory mechanisms.
- d. Municipalities should map infrastructure capacity in their built-up area, including publicly available information on government and other land suitable for residential and mixed-use infill.
- e. Municipalities should identify affordable housing needs using income categories, as well as the needs of specific population groups such as students, seniors, Indigenous peoples, new migrants, racialized peoples, people with disabilities, single parents, and young families.
- f. Municipal housing action and official plans should address how these supply needs will be addressed through zoning and other municipal mechanisms (land, property and development tax waivers, density bonuses), including specific mechanisms to address very low- to moderate-income housing needs.
- g. Municipalities should create minimum density targets of 45 units per hectare for both urban and suburban development.
- h. Municipal housing and official plans should specifically address how MM housing typologies, from ADUs to small apartment buildings, can address affordable housing needs.

2. Ending exclusionary zoning

- a. Municipalities need federal guidance on a simplified and consistent zoning code, which would enable scaling of well-located MM and other replicable housing supply solutions:
 - i. Up to four storeys as-of-right (with the potential for six storeys as-of-right for nonmarket and deeply affordable housing, or in large municipalities with acute shortages, such as in the Toronto and Vancouver metropolitan areas);
 - ii. Up to 8–12 storeys as-of-right within 800 metres of public transit;
 - iii. Up to 20–30 storeys as-of-right within 400 metres of major public transit interchanges.

- b. Municipalities should move away from zoning based on maximum unit counts, floor area ratio, and other mechanisms that affect the viability of affordable MM.
- c. Municipalities should allow mixed-uses in all residential zones, including childcare centres and small grocery stores.
- d. Municipalities should allow congregate housing in all residential zones without distance limits, and work to legalize and license existing congregate housing.

3. Real local democracy

- a. Municipalities should develop open houses, online resources, design competitions, and other ways to increase public knowledge and acceptance about MM zoning.
- b. Municipalities should enable as-of-right approvals (no public hearings or third-party objection rights) for the majority of new housing.
- c. Municipalities should work with small- and medium-sized (SME) developers to evaluate and respond to barriers in developing affordable MM alternatives.
- d. Municipalities should have a single one-stop website with all the information a homeowner or SME developer needs to create a MM development.

4. Modernizing the building code

- a. Municipalities need National Building Code reform to enable simplified and replicable MM designs, including single-egress apartment buildings of up to six storeys, wood frame construction, and small elevators that can service low-rise apartment buildings.
- b. Municipalities need National Building Code reform to ensure that ground-oriented MM is enabled, including barriers to site setbacks.

5. Eliminating site design barriers

- a. Municipalities should allow flexible use of lots, with minimum permeable surface/open space, but eliminating minimum front, back, and rear setbacks, as well as building setbacks.
- b. Municipalities should eliminate minimum car parking requirements and let the market decide on appropriate amounts of car parking.
- c. Municipalities should eliminate lot size minimums and unit size minimums (other than those in the National Building Code), while considering unit size maximums for single-family home rebuilds.
- d. Municipalities should review prohibitive requirements, such as street-oriented unit entrances and garbage disposal loading bays, to help enable MM redevelopments.

6. Rapid approvals

- a. Municipalities should digitize all aspects of MM applications.
- b. Municipalities should eliminate multiple studies (school demand, transport modelling) for all developments or redevelopments of less than ten units.
- c. Municipalities should publicize replicable MM designs on their website.
- d. Municipalities should undertake a service standard of no more than 30 days for any MM application, and 10 days for a pre-approved design.

7. Development taxes

- a. Municipalities need immediate federal and provincial reform in the way that infrastructure financing is borne by municipalities. Options can include a greater emphasis on land value than property value, allowing municipalities to levy progressive property taxation (i.e. higher rates for units valued at more than \$2 million), use of a portion of income or sales taxes for infrastructure upgrades, and making infrastructure funding conditional on meeting housing targets.
- b. Municipalities should not levy development charges on any MM developments or redevelopments of less than ten units, or any developments or acquisitions operated by nonmarket providers.
- c. Municipalities should waive property taxes for nonmarket housing providers in return for affordable and deeply affordable housing.
- d. Municipalities should waive application fees for nonmarket housing developments.

8. Financial enablers

- a. Municipalities should lease public land for nonmarket and affordable housing, and support nonprofit landholders (including universities and colleges, churches, and charities) to lease their land for nonmarket and affordable housing.
- b. Municipalities should work with local finance providers to increase comfort with lending to homeowners and SME developers.
- c. Municipalities should provide grants or low-cost loans for developers of deeply affordable MM units, especially ADUs and small apartment buildings.
- d. Municipalities should allow lot splitting, 100% rental, strata ownership, and community land trusts for all MM developments.

NOTES

1. However, some jurisdictions such as Vancouver are considering minimum height limits of 6 storeys, and many jurisdictions include townhouses as part of their Missing Middle typologies.

2. In this research, we use the income categories developed by the Housing Assessment Resource Tool, based in turn on income categories used in U.S. housing policy. They rely on the international standard definition of affordability – 30% of median income – and Area Median Household Income (AMHI), where ‘Area’ is a Census Division (region or metropolitan area):

Very low 0-20% AMHI

Low 21-50% AMHI

Moderate 51-80% AMHI

Median 81-120% AMHI

Higher 121+% AMHI

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