

June, 2025

Missing Middle Housing

A Toolkit to Implement Missing Middle Housing
in Chicago Metropolitan Communities



Prepared by:

Metropolitan Mayors Caucus

433 W. Van Buren Street, Suite 450
Chicago, IL 60607

www.mayorscaucus.org

Opticos Design, Inc.

2100 Milvia Street; Suite 125
Berkeley, California 94704

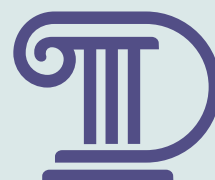
215 N Damen Avenue
Chicago, Illinois 60612
510.558.6957

www.opticosdesign.com

Missing Middle Housing term created by Daniel
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visit www.missingmiddlehousing.com

A special thanks to the Driehaus Foundation for supporting this effort.

This toolkit, along with the year of education and trainings for the Missing Middle Housing Peer Network, was made possible thanks to support from the Richard H. Driehaus Foundation.



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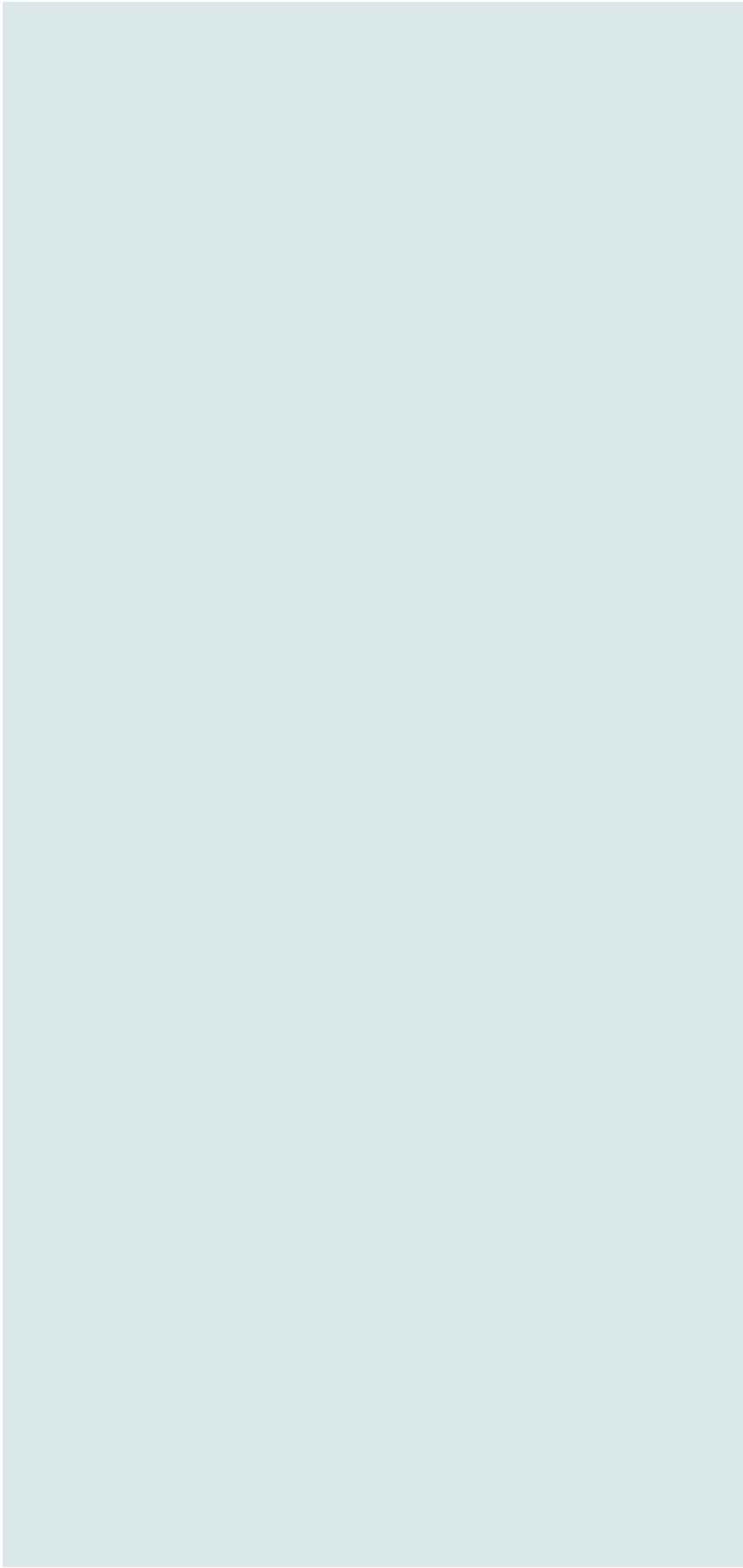
Metropolitan Mayors Caucus

The Metropolitan Mayors Caucus (MMC) is a membership organization of the Chicago region's 275 cities, towns, and villages. Founded in 1997 by then Chicago Mayor Richard M. Daley and leading Mayors from nine suburban municipal groups, the Metropolitan Mayors Caucus pushes past geographical boundaries and local interests to work on public policy issues. Today, the Metropolitan Mayors Caucus continues to empower and support municipalities to improve the region's quality of life through sharing of expertise, advancing multi-jurisdictional relationships and building consensus.

Opticos Design

Opticos is a team of urban designers, architects, and strategists that partners with clients who want to lead the way in providing vibrant, diverse, walkable urban places. Because we approach each project with innovation and creative problem-solving in mind, we function just as much as a think tank as a consulting firm. To us, architecture and planning must play a role in defining more sustainable, equitable, healthy, compact patterns of development that improve the quality of life for everyone. This starts with revitalizing existing urban places, but also must include the transformation of suburban places into more urban ones and the creation of thoughtful, new walkable urban communities.

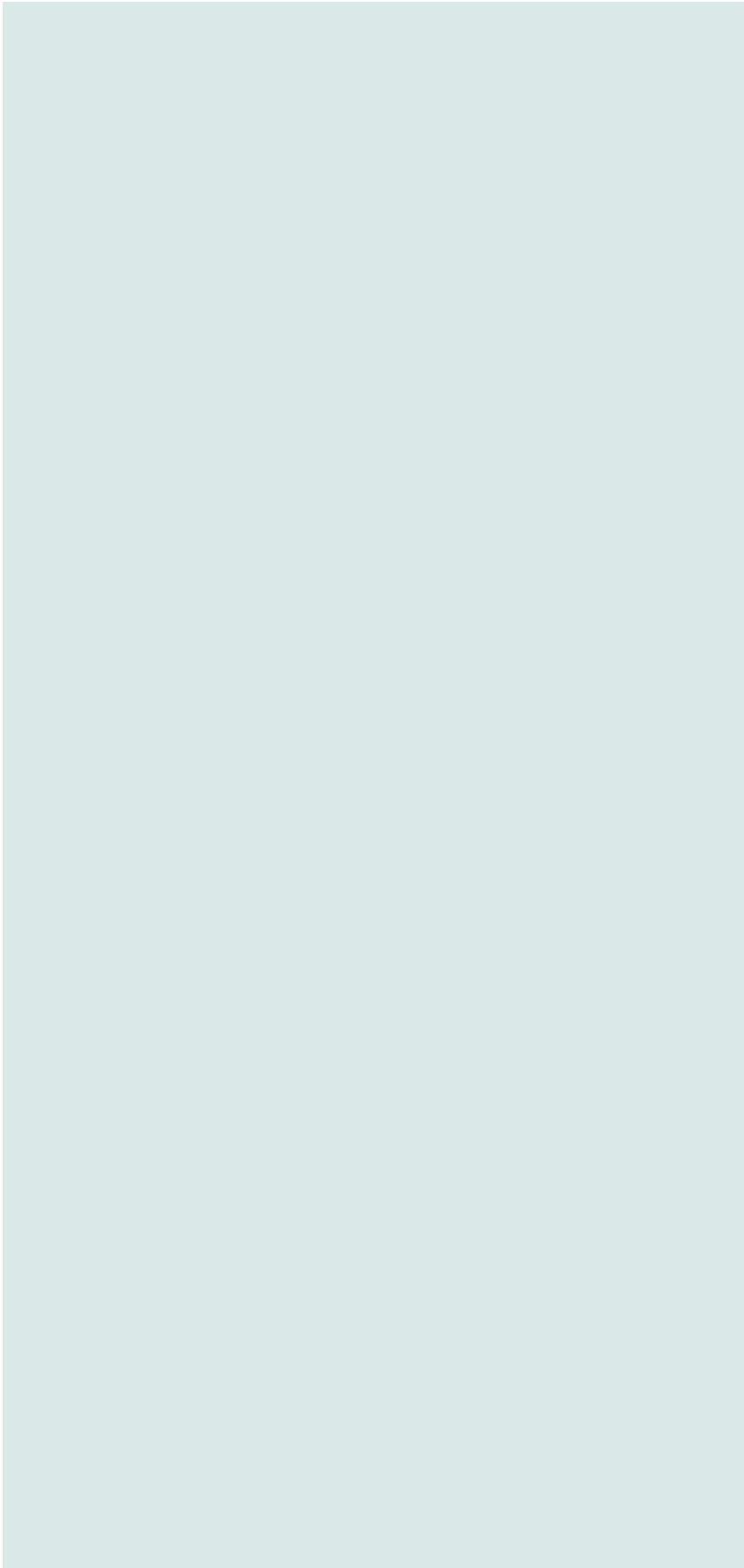
Opticos Design is well known as the architects of the Missing Middle Housing movement. In 2010, Opticos Principal Dan Parolek coined the term, in 2014 we created the Missing Middle Housing diagram, in 2015 the company launched a free online resource for all: missingmiddlehousing.com and in 2020, Dan Parolek authored the book "Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis." Our work in advocating for middle housing spans from designing middle housing types, master-planning walkable communities, analyzing barriers for communities across the Midwest and the country, and writing zoning that encourages middle housing types.



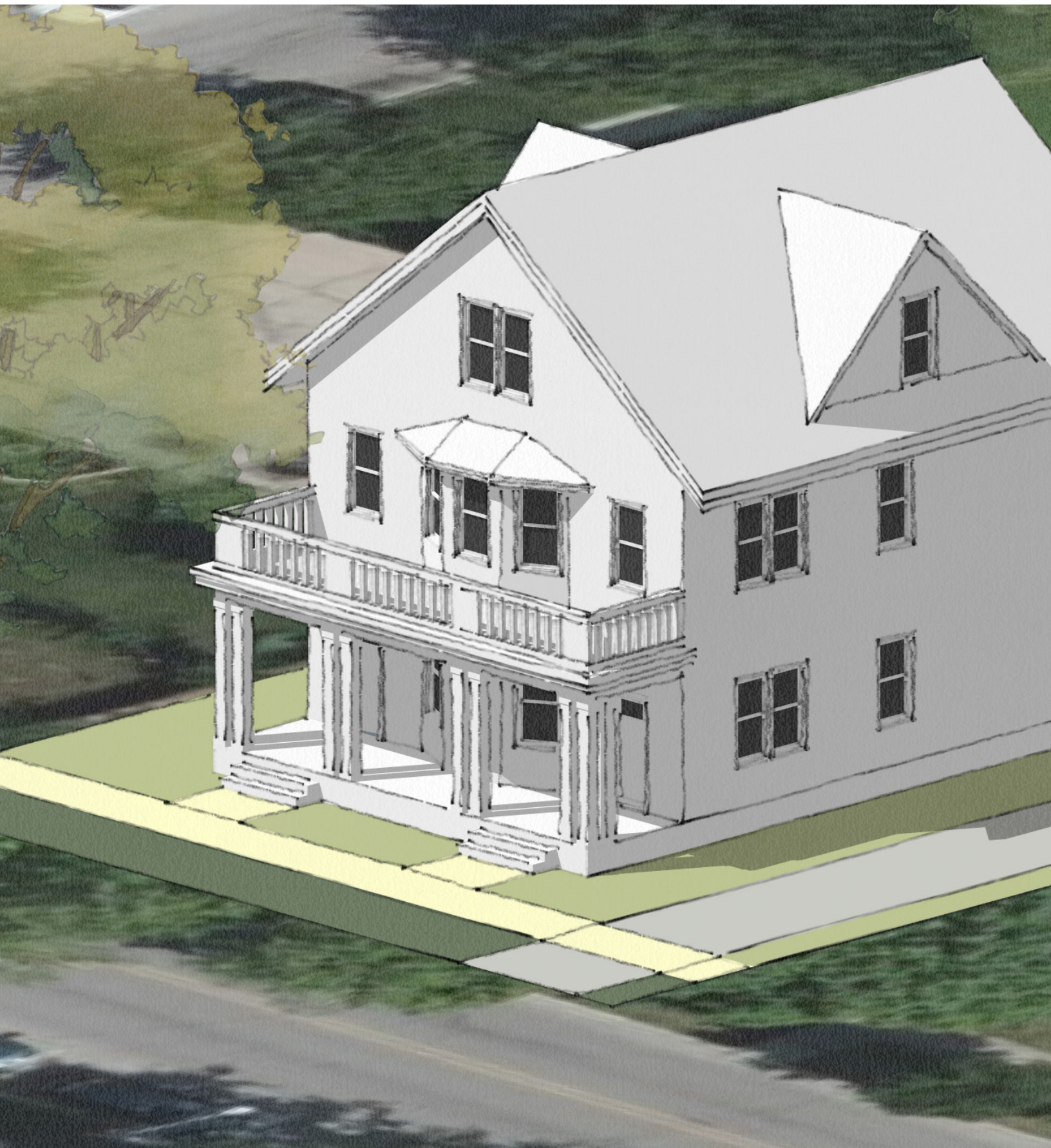
What's Inside?

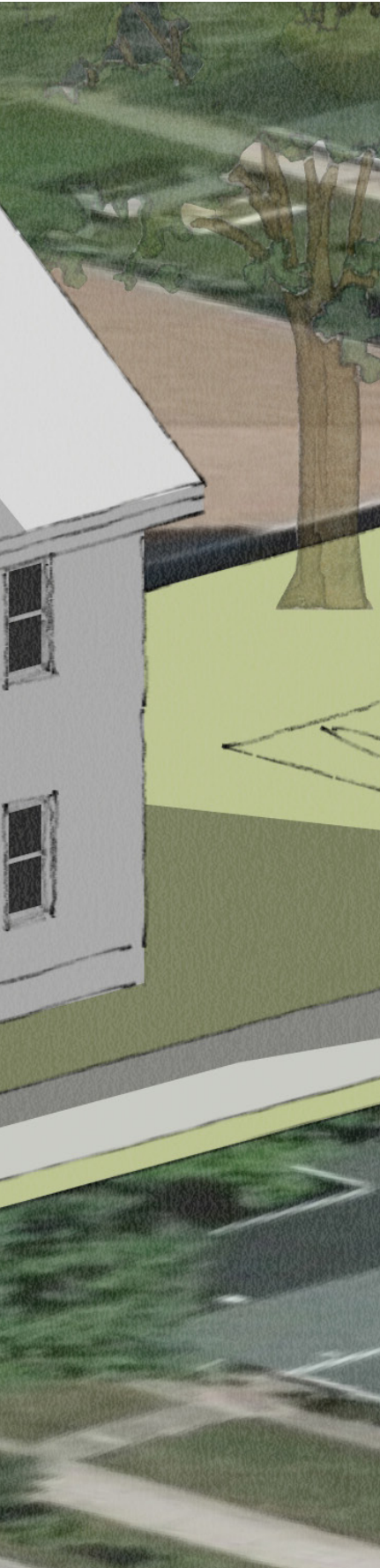
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Purpose + Objectives

CHAPTER

1

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1.1

The Missing Middle Housing Toolkit Purpose and Objectives

For over 20 years, the Metropolitan Mayors Caucus' Housing and Community Development Committee has convened mayors and municipal leaders who are interested in working together to address local housing challenges. Recognizing that there is no "one size fits all" solution to housing issues and priorities, the Committee works collaboratively as peers to share resources, discuss strategies, and develop ideas to help each community meet its unique needs.

This toolkit is the result of several years of collaboration. In 2021, the Housing and Community Development Committee identified "attraction of new Missing Middle Housing" as a top need for assistance. In December of 2022, the Committee's quarterly meeting focused on Missing Middle Housing. In the spring of 2023, a working group was formed to identify barriers to Missing Middle Housing and further specify what technical assistance was needed. In the spring of 2024, the Richard H. Driehaus Foundation provided support for technical assistance

to address the needs that were identified. A group of 18 municipalities then applied for assistance and participated in the "Missing Middle Housing Peer Network" over the course of one year.

Participants joined the peer network to learn how their communities can attract housing that meets the needs of first-time homebuyers, seniors looking to downsize, younger households looking for homes in walkable neighborhoods, and local workers such as teachers and municipal staff members. Culminating a year of trainings and discussions, this toolkit highlights proven strategies, relevant case studies, and actionable next steps. Rather than offering a "one size fits all" approach, this toolkit shows that effective strategies for enabling Missing Middle Housing differ from one community to another - and often within the same community as well. Municipal leaders, as experts on their own communities and neighborhoods, can use this toolkit to craft tailored, innovative approaches that address the evolving needs of their residents.



Process Overview

Peer network education

Opticos Design led a series of six training meetings attended by municipal staff, commissioners, and elected officials. Over 30 participants attended each meeting, with 18 jurisdictions represented. Meeting topics, selected in response to needs identified by the peer network, focused on the following:

- Understanding how Missing Middle Housing (or MMH) applies to your community;
- Zoning and policy regulations to encourage quality design;
- Building community understanding and support;
- Case studies in implementing middle housing;
- Regulatory and financial tools to increase development feasibility and attainability; and
- Overview and feedback on the draft MMH Toolkit.

Test fits

Using real-world sites suggested by peer network municipalities, Opticos Design created three “test fits” that visualize middle housing, compare these designs to current regulations, and identify which changes to existing regulations would enable more housing types. Over 40 sites were suggested by 18 peer network municipalities. After carefully selecting three sites that would be applicable for as broad of a range of communities as possible, Opticos Design drafted each test fit and incorporated feedback from the peer network and focus group input from developers.

Site study workshop

After a year of meeting virtually, a workshop brought peer network participants together in person to explore various MMH concepts. This hands-on, interactive exercise allowed participants to test out different Missing Middle Housing types on common lot sizes to understand site planning best practices and the role zoning regulations can play in enabling well-designed Missing Middle Housing.

Neighborhood toolkit

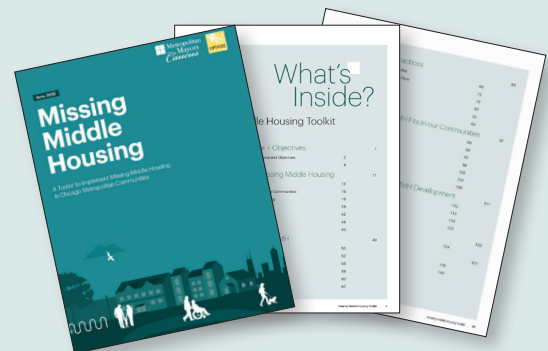
Culminating the process, the Missing Middle Housing Toolkit documents the insights gained at each stage and provides a menu of actionable next steps that municipalities – whether part of the peer network communities or not – can take to expand housing options in their communities. Each chapter draws on input from peer network training meetings and provides guidance tailored to the most common questions raised by participants.



Test fits: Over 40 potential sites were submitted, representing many opportunities for MMH throughout the Metro Chicago region.



Workshop: Over 30 participants attended to test out MMH concepts on example sites and discuss challenges in site design and layout.



Toolkit: The final report is intended as a resource for all peer network communities and local leaders to build understanding and identify next steps.

1.2 Introduction to the Peer Network

The peer network represents the wide range of unique needs and conditions that are present across our region, offering an opportunity to learn from similar and contrasting communities.

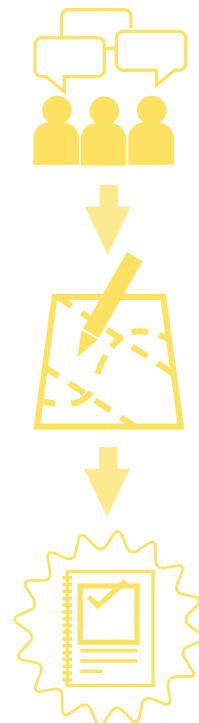
Reasons for joining the peer network varied widely across the communities who submitted applications. Some participants sought out examples of zoning strategies, while others had questions about financial feasibility from a developer point of view. Some were curious if Missing Middle Housing can add to ongoing housing affordability initiatives in strong housing markets, whereas others looked for ways to encourage

development on longstanding vacant lots. While some utilized the peer network for initial education, others sought to build upon strategies already in motion. The conversations consisted of varied viewpoints that offered insights across communities into the challenges and successes faced by municipalities that were at different stages of understanding and implementing Missing Middle Housing.

CLOSER LOOK

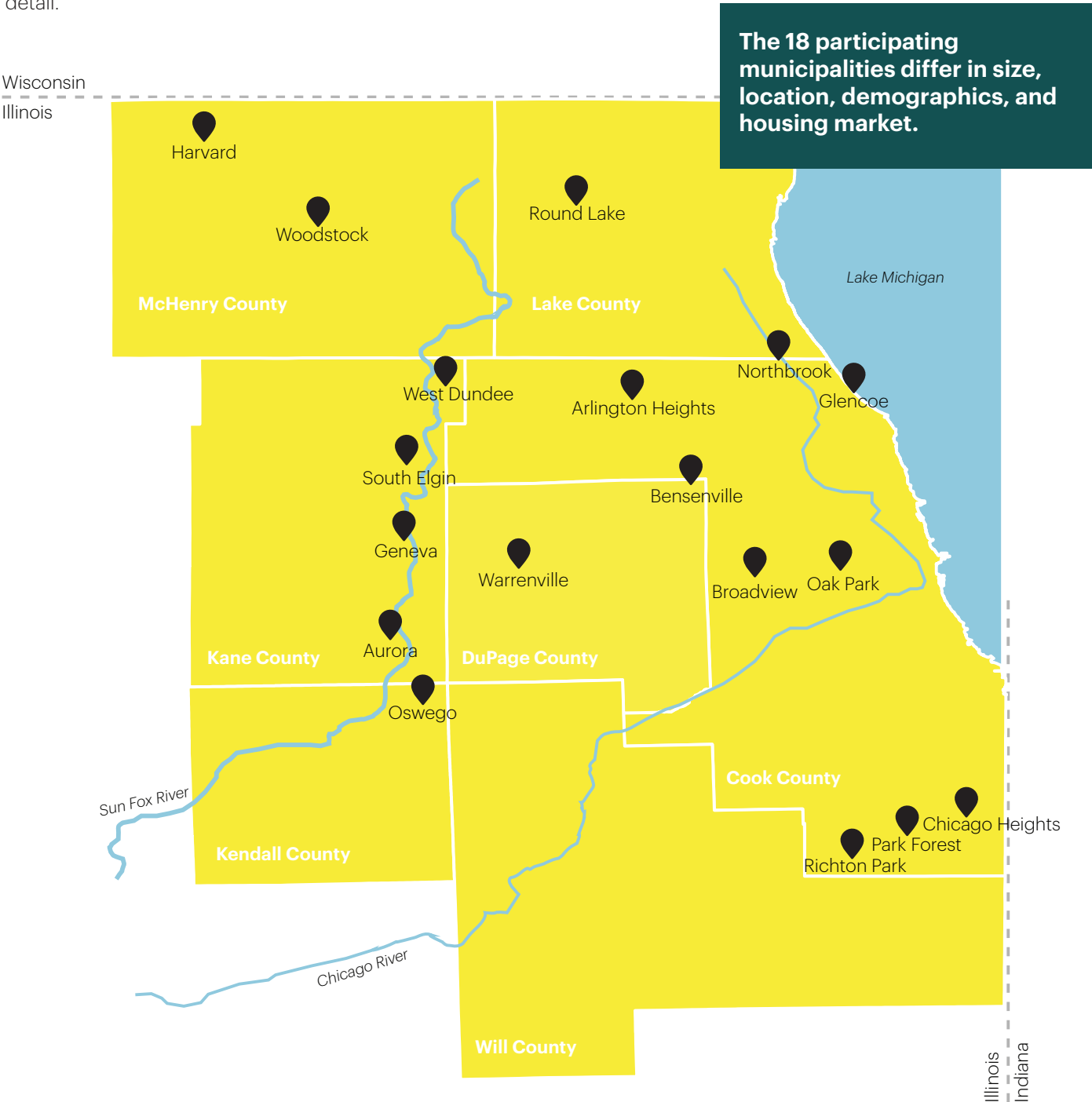
Much Can Be Learned From Steps Taken by Peer Network Municipalities:

- **Bensenville** allows duplexes in most of its single-family zoning districts.
- **Geneva** updated its downtown zoning district, leading to the development of duplexes.
- **Oswego, Park Forest** allows attached accessory dwelling units (ADUs) with single-family homes.
- **Oak Park** allows a variety of ADU types and has seen construction of over one dozen new ADUs.
- **Richton Park** updated zoning regulations to enable Missing Middle Housing as part of a transit-oriented development plan.
- **Round Lake** adopted a new zoning ordinance that allows ADUs with single-family uses.
- **South Elgin** allows attached or detached ADUs at the rear of a lot with single-family homes.
- **West Dundee** and **Park Forest** created zoning districts designed for certain Missing Middle Housing types.
- **Warrenville** adopted a design overlay zoning district to allow mixed-use and Missing Middle Housing.



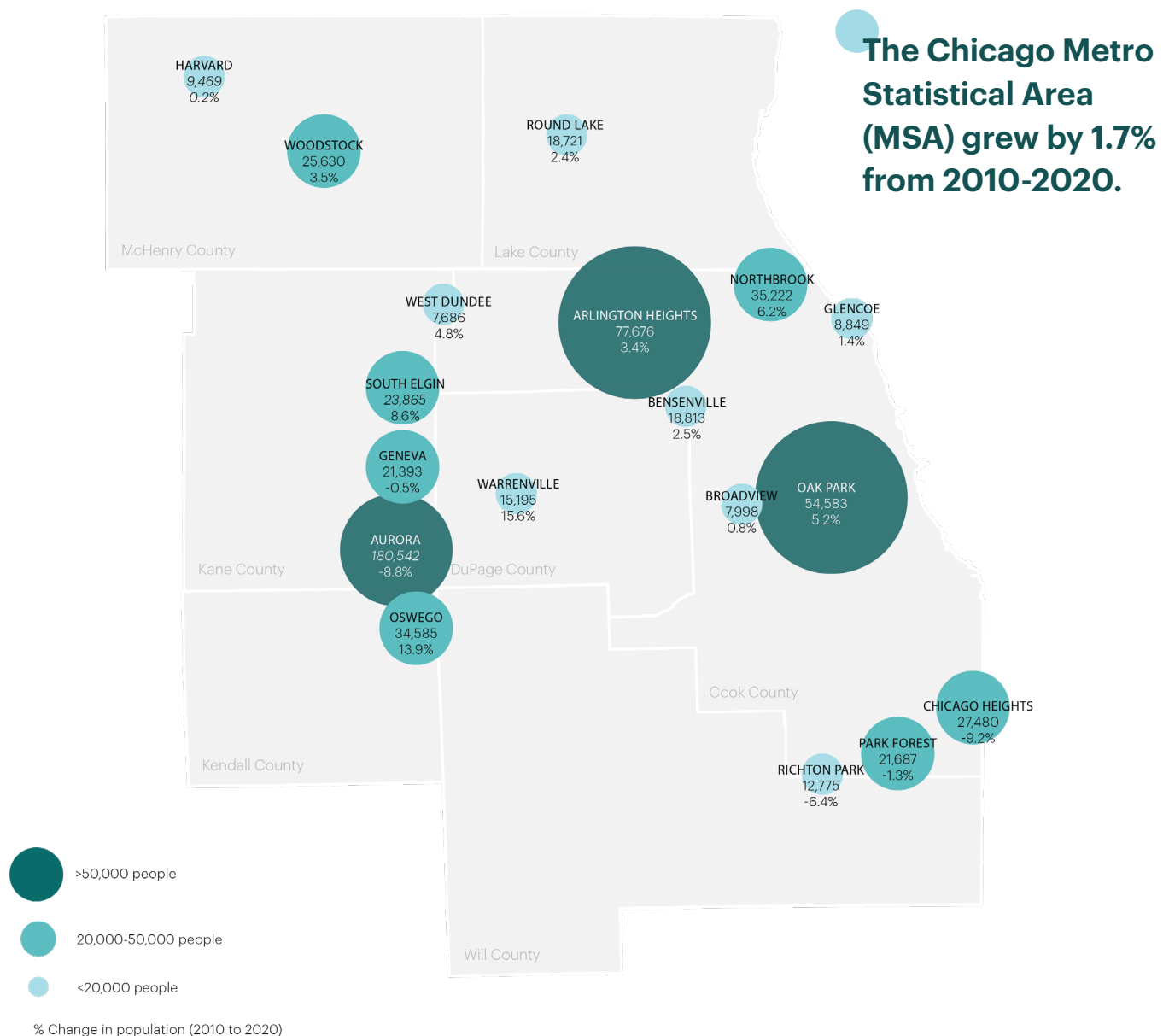
What is the Peer Network?

The Missing Middle Housing Peer Network brought together elected officials, commissioners, and planning leaders from 18 municipalities, all part of the Chicago-Naperville-Elgin Metropolitan Statistical Area (or MSA, which encompasses 14 counties across Illinois, Indiana, and Wisconsin). Some were actively involved in the MMC's Housing and Community Development Committee's earlier discussions, while others joined the peer network after learning about the opportunity to explore the topic in more detail.



Population and Population Change

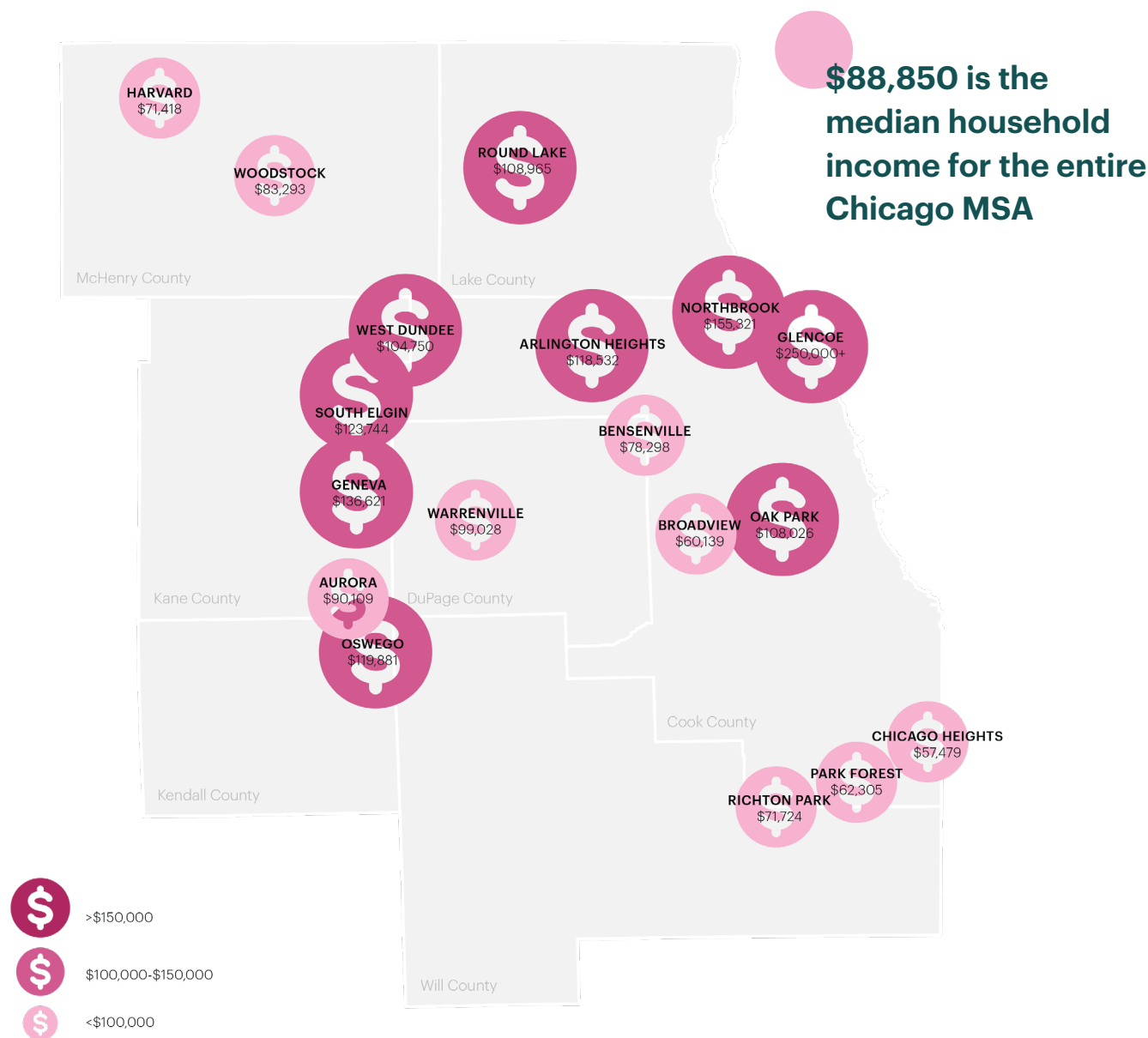
Understanding population and growth trends can speak to each community's unique housing needs. Growing populations may need to take more consequential steps to address a shortage of supply for both renters and new owners, whereas communities with shrinking populations may need to stabilize and diversify housing to match senior populations looking to age-in-place.



Source: U.S. Census Bureau 2010 and 2020

Median Household Income

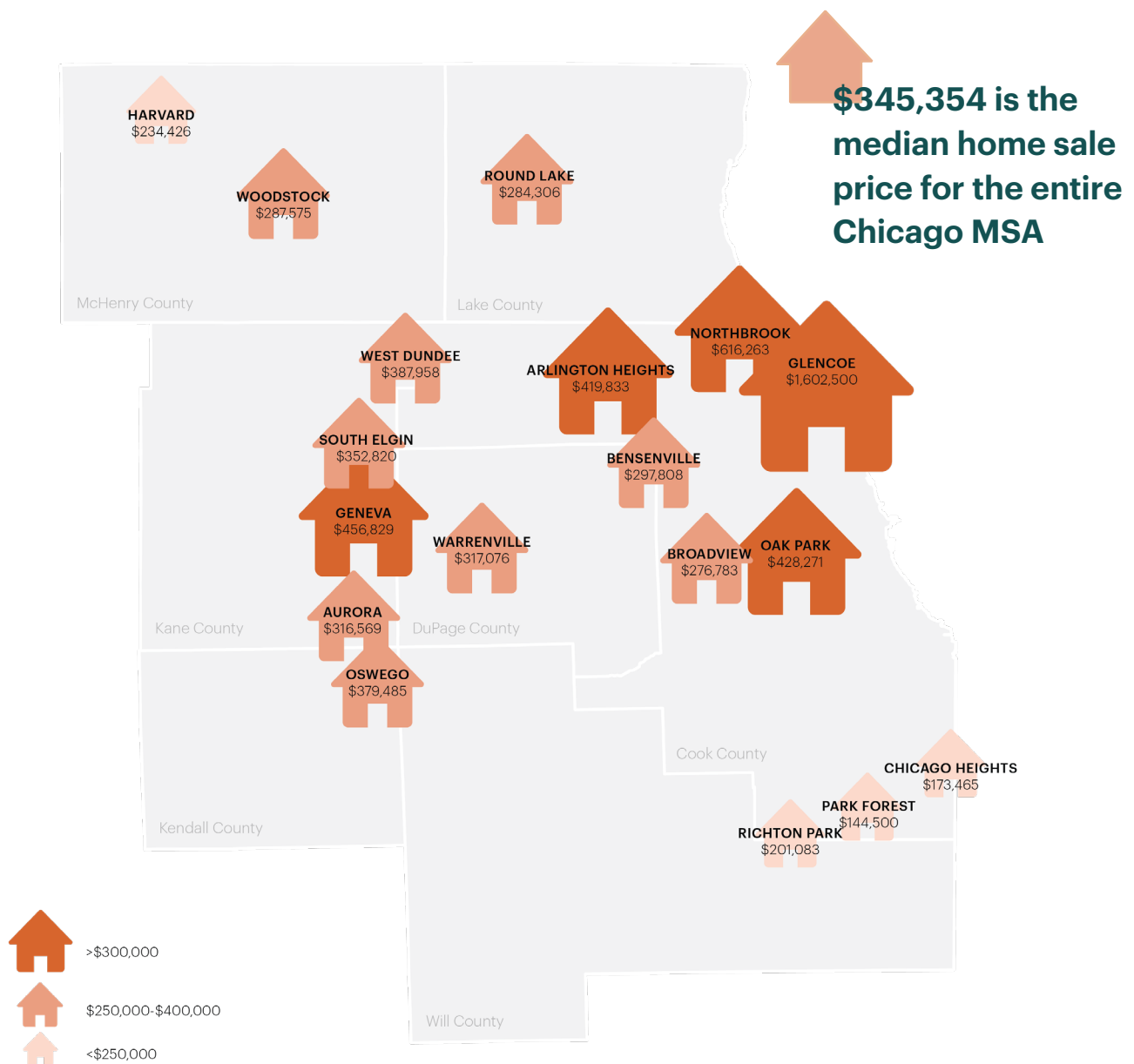
An important piece of understanding housing need is identifying the median household income for each represented community. Median household income may help indicate which housing types are most viable within a community. It is imperative to assess and prioritize strategies that support housing types that will be attainable for the local market.



Source: U.S. Census Bureau 2023

Median Sale Price of Single-Family Homes

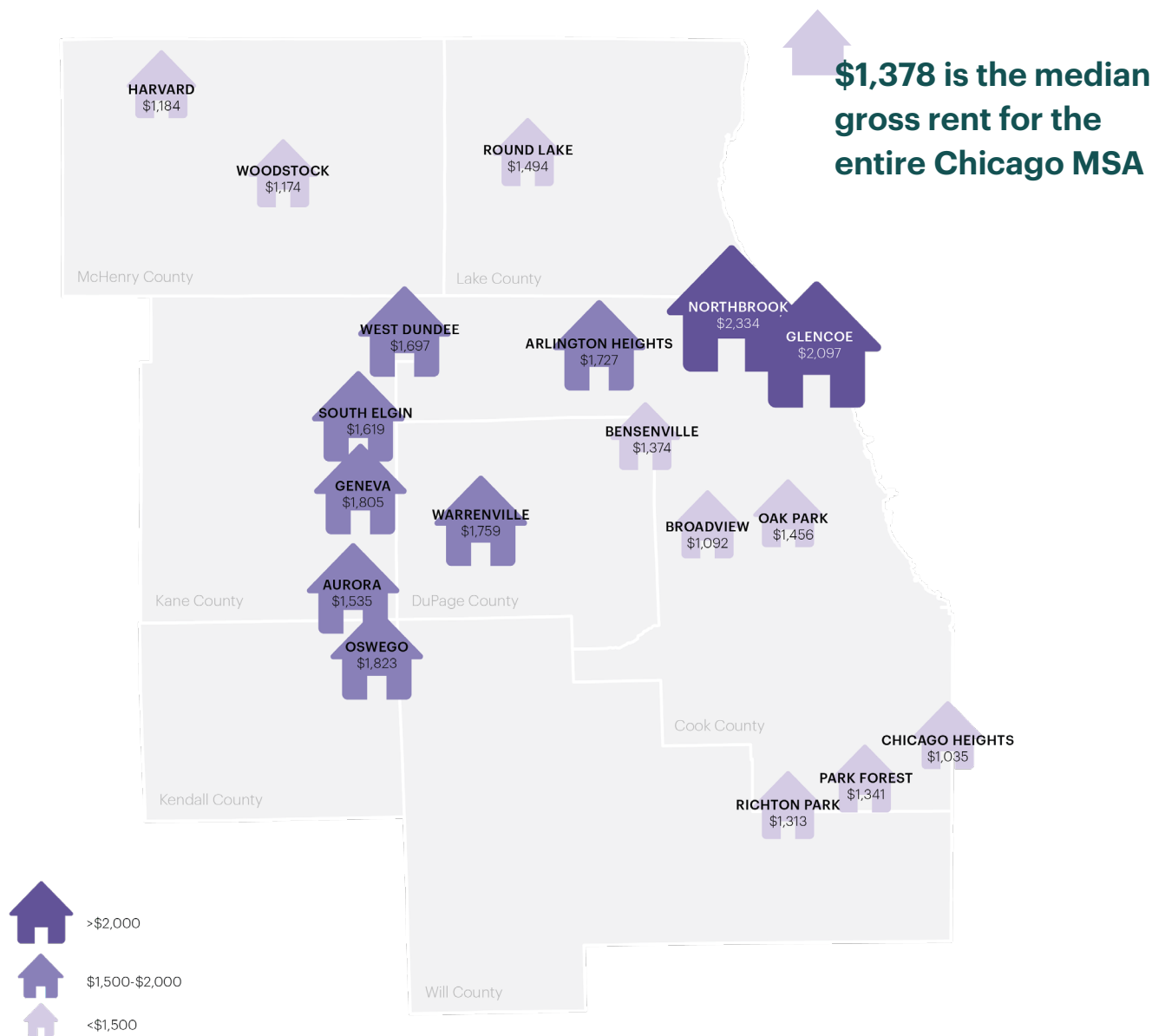
Median home price can be used to determine the state of the housing market in each community. High home values may indicate greater housing demand, and likely a need for expanding housing choice. Lower home values may identify markets where demand is lower than supply or fewer buyers are able to purchase homes.



Source: Redfin Data Center, 2024

Median Gross Rent

Median rent, like median home value, can indicate the strength of the local housing market. Communities with high median rent prices may have more cost-burdened households (those who spend more than 30% of their annual income on housing costs). It is important to evaluate whether median prices align with the median incomes of a community.



Source: U.S. Census Bureau 2023





About Missing Middle Housing

CHAPTER

2

Missing Middle Housing offers a promising solution to address the growing need for diverse, accessible, and attainable living options within communities, helping to create neighborhoods that are more inclusive and adaptable to changing demands.

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2.1

Missing Middle Housing Overview

Missing Middle Housing refers to house-scale buildings that contain multiple units and are located in walkable neighborhoods. They are compatible in form and scale with typical single-family homes, and are an effective strategy for "gentle infill" within existing residential neighborhoods.

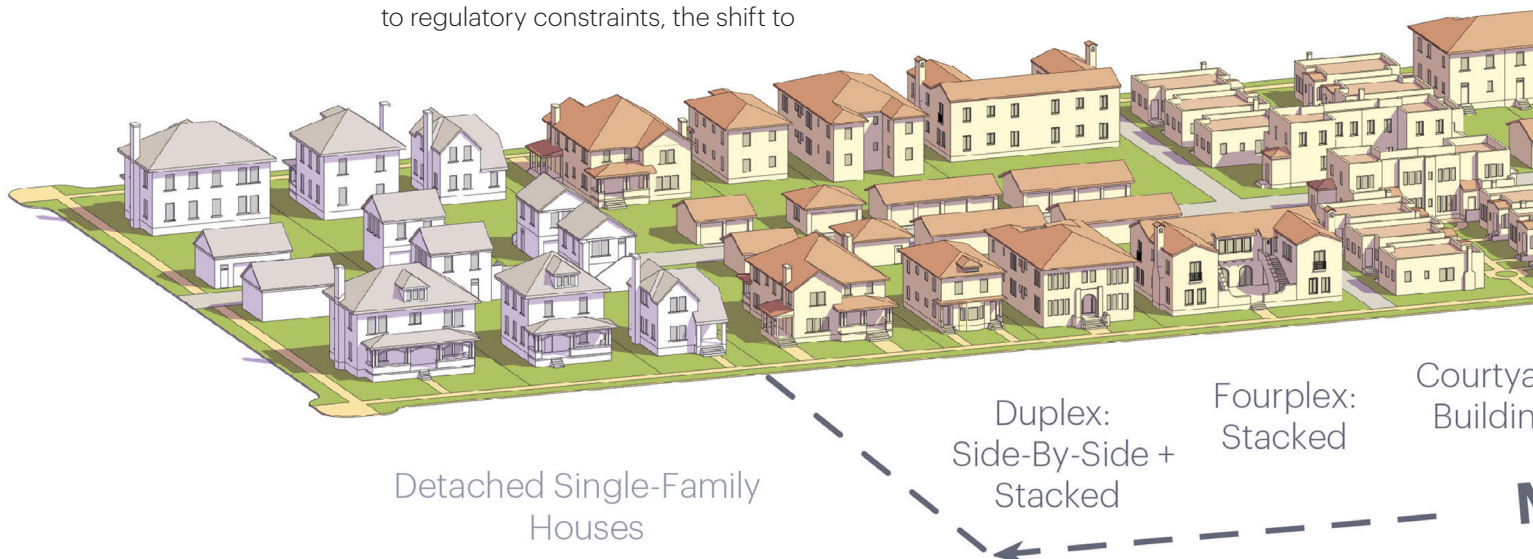
Missing Middle Housing (MMH) includes a range of house-scale buildings that contain more than one housing unit, such as duplexes, triplexes, fourplexes, and cottage courts, built to the same scale as a single-unit house. Missing Middle Housing responds to the shifting household demographics nationwide and can meet the need for more housing choices at different price points, including both rental and home ownership opportunities. Simple and well-designed, Middle Housing types achieve medium density and provide high-quality, marketable options between the scale of single-unit houses and mid-rise apartments.

They are called "missing" because very few of these housing types have been built since the early 1940s due to regulatory constraints, the shift to

auto-dependent patterns of development, and the incentivization of single-unit homeownership by the federal government. Before the 1940s, they were a natural part of the housing mix, helping to provide housing choices to people at a variety of stages in their life and income levels. Communities and organizations, including AARP, are realizing that Missing Middle Housing is important in helping neighborhoods thrive while providing housing choices as people age and desire to stay in their neighborhood.

When implemented thoughtfully, MMH can provide pathways to ownership through smaller starter homes, increase rental options in small-scale multi-family housing, and build generational wealth with opportunities for passive income.

Figure 2.1 The palette of Missing Middle Housing types provide a range of "middle" building types between the scale of a typical detached single-unit house and that of larger residential buildings.



Benefits of Missing Middle Housing

When implemented correctly, MMH can be an important place-making tool with many community benefits, including:

■ Provides housing options

MMH provides a middle-scale housing option with smaller-sized units that help keep development costs down. This attracts a different market of buyers and renters whose needs are currently not being met.

■ Promotes access to transit

MMH supports transit as a primary way to commute by adding housing units in transit-focused environments where driving can be a choice but not a necessity. Housing near amenities and transit is a key component of fostering active lifestyles within pedestrian-safe neighborhoods.

■ Fosters a sense of community

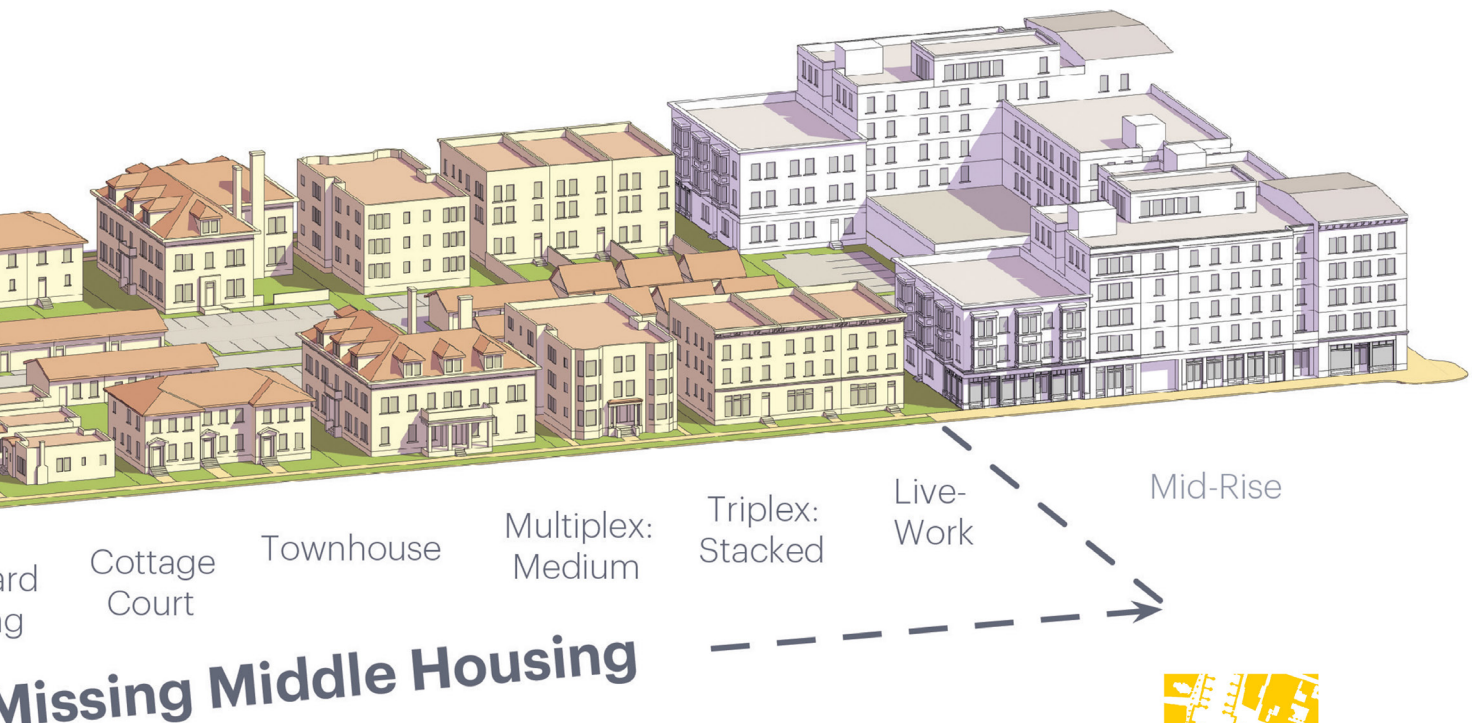
MMH integrates private and shared open spaces, promoting interaction between tenants and a sense of community that is important, especially considering the rise of single-person and older households. These types also encourage co-living, multi-generational living, etc.

■ Promotes sustainability

MMH uses land more efficiently by increasing the number of units per parcel, and consumes less energy than a single-unit house through shared walls and ceilings. These types also use less building materials to house more people.

■ Provide local equity-building opportunities

MMH can build local equity in the housing market. By allowing a wider range of housing types, MMH can increase attainable rental options, provide a pathway to homeownership for first-time homeowners, generate passive income that can lower housing costs for existing homeowners, and provide a low-cost to entry option for local builders. Because of their simple forms, smaller size, and Type V construction, MMH can be built incrementally over time with help by local developers and housing providers.



Missing Middle Housing

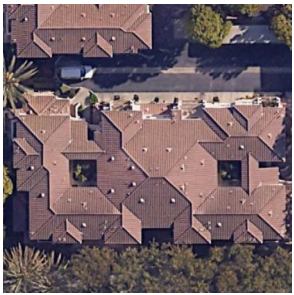


Figure 2.2 49 units, 30 du/acre. Building is 175' x 165', and three stories tall.



Figure 2.3 5 units, 29 du/acre. Building is 40' x 65', and two stories tall.

"Middle" in Two Ways

Importantly, Missing Middle Housing is "middle" in two ways. First and foremost, the term "middle" refers to the house-scale form and size that is compatible in width, depth, and height to a typical detached house. Second, "middle" refers to housing that is more attainable and able to deliver housing for middle-income families. Middle housing is designed to work on typical infill lots and use smaller units in buildings that can lower the land cost and be built incrementally over time. While MMH is not a guarantee of affordability, it is often called "affordable by design." These two aspects, along with the following advantages, make it distinct from other development types and highlight why MMH needs to be part of a broader housing toolbox for all cities.

Medium-Density but Lower Perceived Densities

MMH building types typically range in density from 8 dwelling units per acre (du/acre) to up to 52 du/acre, depending on the building type and lot size. It is important not to get distracted with the density numbers when thinking about these types. Density is an unpredictable factor that depends on many variables; as shown by the examples in Figures 2.2 and 2.3.

Built form is more clearly articulated by factors such as building height, footprint, and massing, meaning the overall shape or volume of a building. Due to the small footprint of MMH types, and the fact that they are usually mixed with a variety of building types, even on an individual block, their perceived density is usually quite low—they do not look like dense buildings (even though their densities may be quite high).

A combination of these MMH types provides a neighborhood with a minimum average of 16 du/acre. This is generally the threshold at which an environment has enough households to be transit-supportive; and at which neighborhood-serving retail and other services become financially viable.

Smaller, Well-Designed Units

The starting point for MMH is smaller-sized units (500 to 1,000 square feet). A common mistake by architects or builders new to building MMH is trying to force suburban unit types and sizes into urban contexts and MMH types. The challenge is to create small spaces that are well designed, comfortable, and usable. As an added benefit, smaller unit sizes can help developers keep their costs down, improving the proforma performance of a project, while making housing options available to a larger group of buyers or renters at a lower price point.

Off-Street Parking Does Not Drive The Site Plan

Trying to provide too much on-site parking can make a MMH develop project not viable. If large parking areas are provided or required, these buildings become very inefficient from a development potential or yield standpoint. As a starting point, these units should provide no more than one off-street parking space per unit. To enable lower off-street parking requirements, access to transit within walking or biking distance, and/or on-street parking availability can enable a lower need for off-street parking. Housing design that forces too much on-site parking also compromises the occupant's experience of entering the building or "coming home." This street presence and welcoming entrance can greatly impact marketability.

Simple Construction

Because of their simple forms, smaller size, and simple wood-frame construction, Missing Middle building types can help developers maximize affordability and returns without compromising quality by providing housing types that are simple and affordable to build.

Marketability

A final critical characteristic is that these housing types are very close in scale to single-unit homes and provide a similar user experience. For example, in these types, you enter through a front porch facing the street instead of walking down a long corridor or anonymous stairway to get to your unit. This makes the mental shift for potential buyers and renters much less drastic than making a shift to live in a large apartment building. This, combined with the fact that many baby boomers likely grew up in or near to similar housing types in urban areas or had relatives that did, enables them to easily relate to these housing types.

Moving the Needle on Housing

Missing Middle Housing offers an opportunity for architects, planners, real estate professionals, and developers to think outside the box and to begin to create immediate, viable solutions to address the mismatch between the housing stock and what the market is demanding: vibrant, diverse, sustainable, walkable urban places.

Balancing Attainability, Feasibility, and Livability

Missing Middle Housing Test Fits and recommendations aim for scenarios that fall within the "sweet spot." There are three criteria for assessing the success of Missing Middle Housing Types. If a scenario does not meet these criteria, then other housing types may need to be tested or additional incentives or subsidies would need to be considered in order to meet the goals of feasibility, attainability, and livability. Chapter 6 of this toolkit will explore these concepts further.

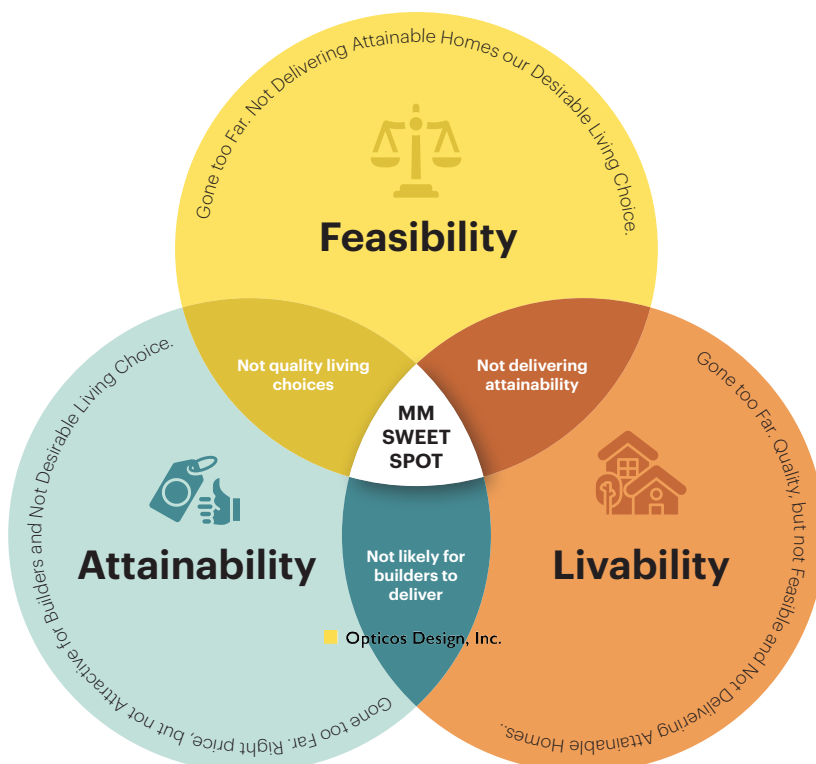


Figure 2.5 Shared open spaces can foster a sense of community and interaction between neighbors.

RiverHouse, Healdsburg, CA
Photo credit: Kim Carroll, Carroll Creative 2022



Figure 2.4 The simple forms, smaller size, and compatibility with simple wood-frame construction help maximize affordability and investment returns, and are consistent with the construction strategies familiar to most residential homebuilders, as shown in this under-construction MMH project in Papillion, Nebraska.



2.2

Why Missing Middle Housing is Needed in Our Communities

National and regional trends point to Missing Middle Housing as an essential strategy for communities to spur reinvestment and housing production.

Cities are Prioritizing Walkability for the Triple-Bottom-Line Benefit

- The improved physical and mental health of residents
- Environmental stewardship
- Economic benefits

Walkable Living in Demand

- There is a 20-35 percent gap between the demand and supply of walkable urban living choices, created by the fact that on the supply side, essentially two housing products are being provided: single-unit houses and big apartments.
- 60 percent of people favor walkable neighborhoods environments, with a mix of houses and stores rather than

neighborhoods that require more driving between home, work, and play.¹

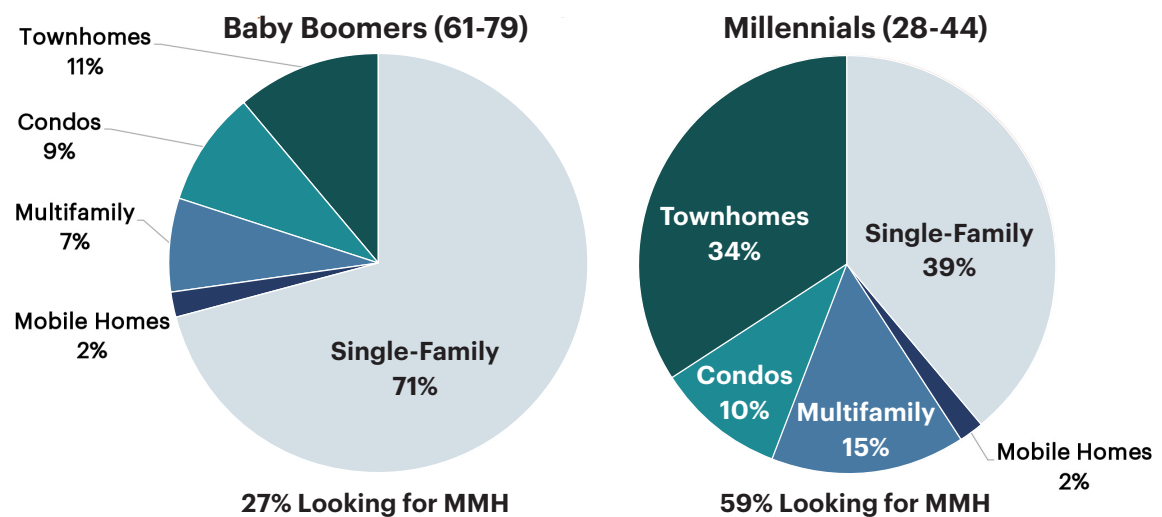
Housing Choices Have Been at Extreme Ends of the Spectrum

For the past 75 years, we have primarily been building detached single-unit houses and mid-rise/high-rise apartments, without addressing the market needs between these two ends.

Millennials and Baby Boomers²

- 56 percent of millennials and 46 percent of baby boomers want to live in more walkable neighborhoods.
- 59 percent of millennials and 27 percent of baby boomers are looking for MMH.
- Emerging students and young professionals are often not able to buy

Figure 2.6 This graphic from the American Planning Association shows a growing national demand for walkability and non-single-unit housing choices.



a single-family home yet, or would prefer other housing choices, along with access to amenities and public transit.

Office Tenants³

Office tenants prefer locations in walkable environments over typical suburban office parks by a ratio of 4 to 1.

Changing Demographics⁴

In 2021, 70 percent of households did not have children, but we are building as if they do. Further, nearly 30 percent of households today are single-person households, and this trend is anticipated to continue. Many millennials, baby boomers, and single-person households do not need or want a large yard or house to maintain.

10,000 Boomers Retire Every Day⁵

Half of these retirees have no retirement savings and depend on their social security payments averaging \$1,341 per month. These retirees require smaller and more affordable housing choices.

Shortage of 3 Million Units⁶

Across the U.S., we are 3 million units short of the demand for small-lot and attached housing units.

Regional Housing Needs⁷

Following national trends, the 7 county Chicago region has similar housing needs. See Chapter 8 for more information.

- From 2010 to 2023, the regional population of individuals 65 years and older has grown from 19% to 25%.
- Single-person households comprise nearly 30% of all households in the region, while two-person households make up an additional 30%.
- In every county, prices for single-family homes have risen faster than incomes and are out of reach for more middle-income households, despite remaining the most predominant housing type.
- The median asking rent in the Chicago metro area increased by 1.9% in May 2025 to about \$1,780 a month. Chicago was number 8 of the Top 50 metros in terms of year-over-year rent increases.⁸

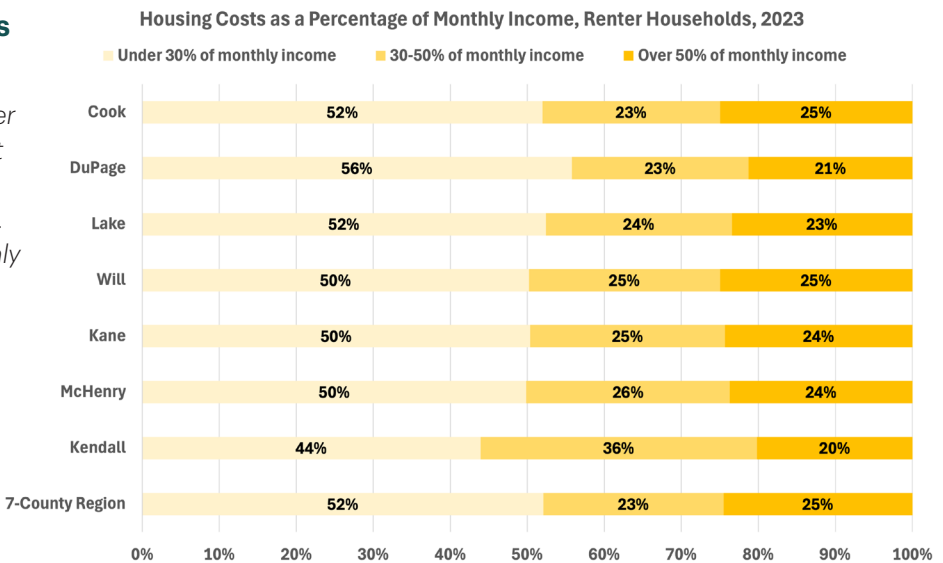
Sources

¹National Association of Realtors
²American Planning Association
³NAIOP Commercial Real Estate Development Association
⁴U.S. Census Bureau
⁵"Baby Boomers Retire", Pewresearch.org, 2010
⁶2023 Housing Underproduction in the US, Upforgrowth.org.
⁷ACS 5-year estimates
⁸Tucker, R. (2025, June 4). Retrieved from <https://www.cincinnati.com/story/money/real-estate/2025/06/04/cincinnati-one-of-only-four-metros-to-see-rents-hit-record-high/84026684007/>

CLOSER LOOK

Cost-burdened households in the 7-county region

Nearly half of renters and a quarter of homeowners are "housing cost burdened," paying over 30% of their monthly income on housing. Many pay over half of their monthly income on housing.



2.3 Important Attributes of Missing Middle Housing

Important Design Elements of Missing Middle Housing Types

Key design features distinguish Missing Middle Housing from other multi-unit housing developments. All Missing Middle Housing types share the following important characteristics:

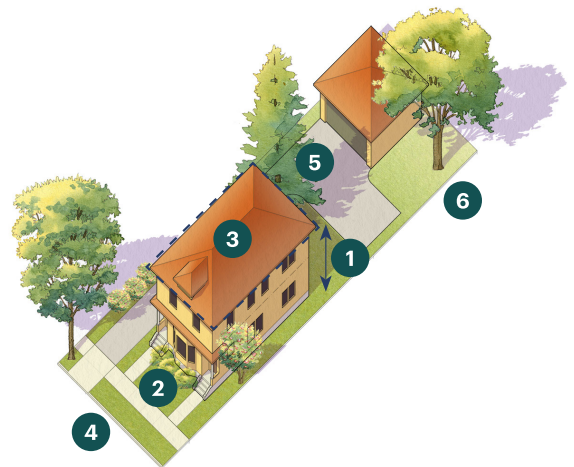
- **Height.** Like a single-unit home, MMH types are typically two to two-and-a-half stories maximum. A third story can be allowed with careful consideration of form and scale impacts on the surrounding built environment
- **Multiple units per building.** These types have anywhere from two to 12 units per building. Upper Missing Middle types may have a maximum of 20 units.
- **Footprint.** With a main body width of 50-60 feet along the street and up to 80 feet overall when secondary "wings" are included, MMH footprints are compatible with single-unit homes.
- **Off-street parking.** No more than one off-street parking space per unit is generally recommended to enable most types of MMH. Detached parking structures can help to maintain a house-scale form for the primary building in neighborhoods that have houses with narrower widths.
- **On-site open space.** Private open space is not needed and should not be required. Instead, a shared open space is provided in the form of a rear yard, a wide side yard, or a courtyard space.
- **Driveways.** Driveway design for MMH types should match the neighborhood context on a per-lot basis. If no alley is present, single-wide driveways are recommended when possible to avoid building frontages dominated by parking.

Source:

¹*Missing Middle Housing, Thinking Big and Building Small to Respond to Today's Housing Crisis*, Dan Parolek, Island Press

Figure 2.7 Important Form Characteristics of Missing Middle Housing

- 1 Maximum height
- 2 Number of units
- 3 Footprint / main body dimensions
- 4 On-street parking
- 5 Driveways (if any)
- 6 On-site open space



Important Elements to Regulate Through Zoning

Building on the important design elements, Missing Middle Housing requires zoning tools that are different from large-scale multi-unit housing development. For the successful application of MMH types, zoning and/or other applicable standards need to be calibrated to control the characteristics listed below.

■ Building Form + Scale

Overall building size (including maximum height, width, and depth) is best controlled by regulating lot width. Buildings the size of a house, or "house-scale," create an environment that is pedestrian friendly and ideal for residential zones.

■ Placement of Buildings, Parking, and Open Space

The location of a building's primary facade (how far a building sits back from the street), parking (limiting driveways and parking in the front of a building), and open space placement and layout help control neighborhood character.

■ Interaction with the Public Realm

The items listed above, as well as appropriate building frontage types (such as a porch or stoop) ensure that housing developments contribute to the overall quality of the public realm and create a pedestrian focused environment.



Figure 2.8 Walkable Centers buffers.

Location of Missing Middle Housing in Walkable Contexts

A critical characteristic of MMH types is that they are most effective when located within an existing or newly created walkable context. Buyers or renters of these housing types choose to trade larger suburban housing for less space, less yard to maintain, and proximity to services and amenities such as restaurants, markets, services, and employment.

For most towns or cities, the most walkable neighborhoods are those located near downtown, in the historic core, or around commercial centers. These walkable neighborhoods likely already have, or could support, many Missing Middle types. In addition, there are areas that are not yet walkable but have the potential to become so with pedestrian-focused improvements and zoning that supports additional mixed use centers or corridors.

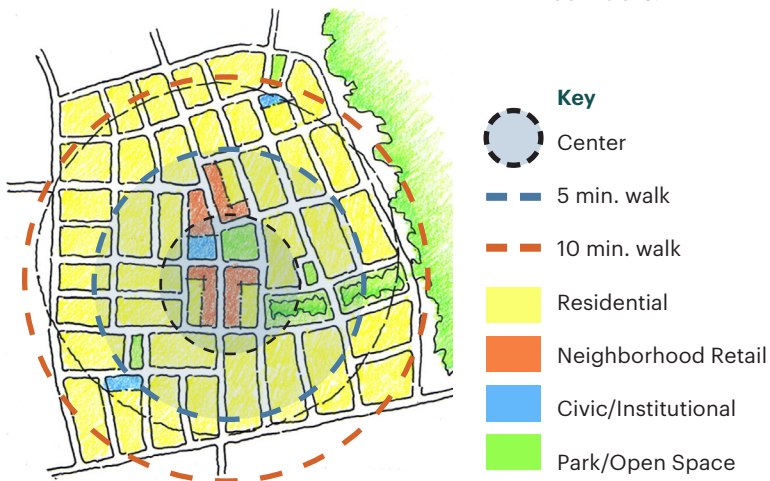


Figure 2.9 Proximity to neighborhood retail, open space, and civic buildings helps to support walkable, MMH-Ready neighborhoods.

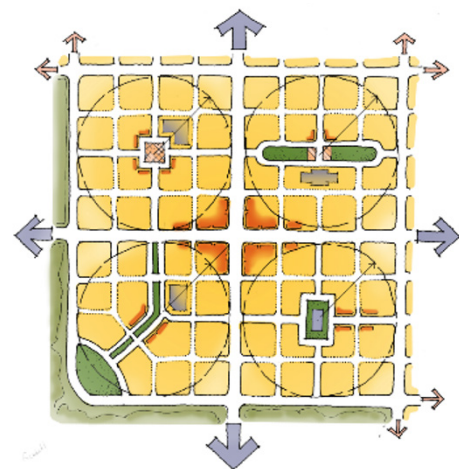


Figure 2.10 How multiple walkable neighborhoods form a walkable environment around the intersection of two major roadways.

Building Form & Scale

Elements of Building Form

The physical form of a building - its shape, size, height, and placement on a lot - is an important consideration when adding multi-unit housing within existing single-unit residential neighborhoods or establishing new neighborhoods. Controlling building forms helps to ensure that when new building types are introduced, they not only expand housing choice but also having a positive impact on the surrounding neighborhood.

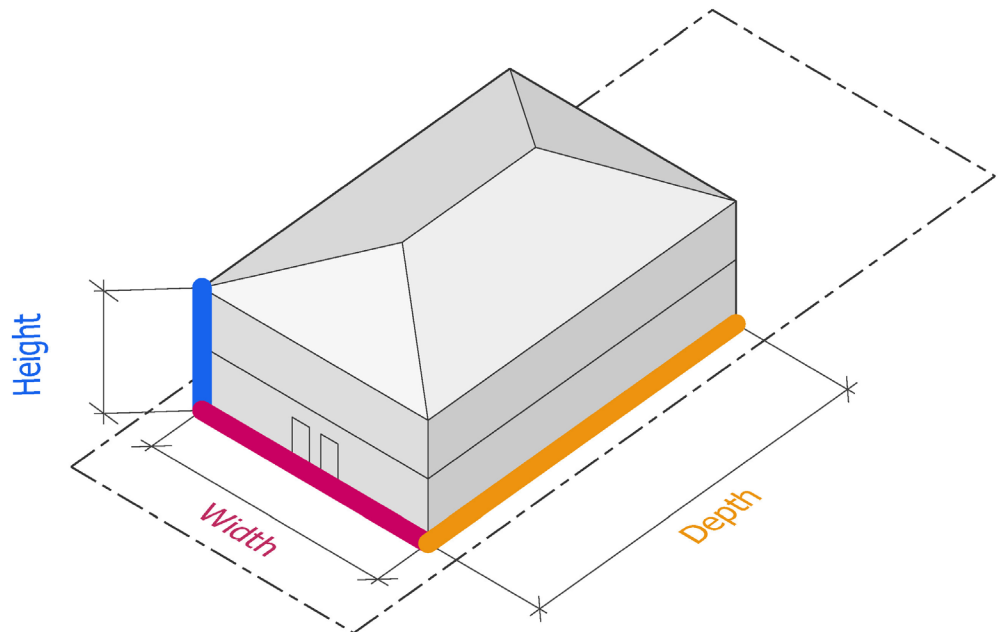
Because Missing Middle Housing includes a range of building types, varying in scale and intensity, they can easily be applied across a spectrum of built environments. Broadly speaking, buildings can be categorized into two groups: house-scale buildings and block-scale buildings (see the facing page for more details). Each MMH type has unique characteristics that dictate whether it works best in a house-scale or a block-scale application.

Best Practice for Regulating

Regulating by building footprint, height, and type can yield more predictable results and therefore ensure the correct application of house-scale versus block-scale building that align with the scale of the existing or desired environment.

Notes:

Each Missing Middle Housing type has building dimensions (height, width, and depth) that are specific to it, and based on accurate internal layouts. See Section 2.3 for dimensions specific to each type.



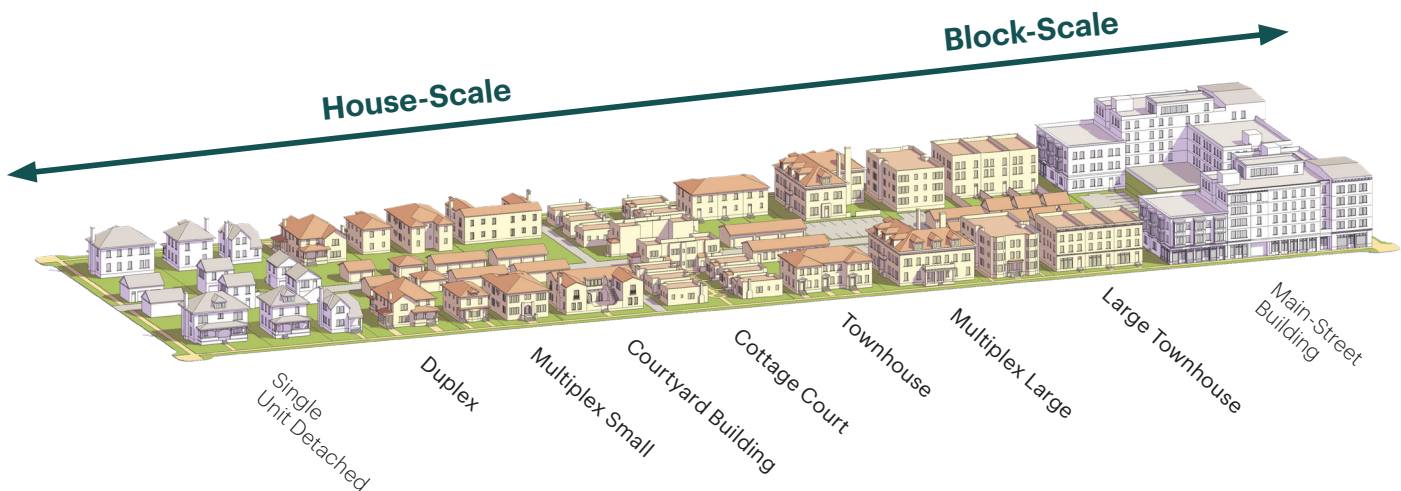
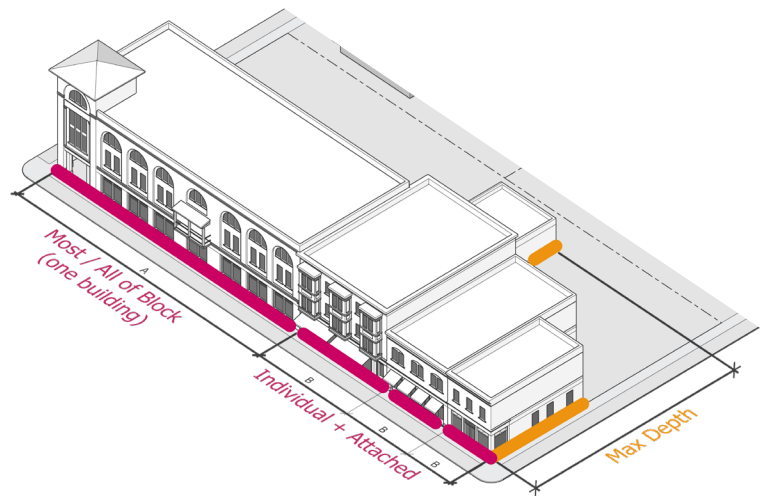
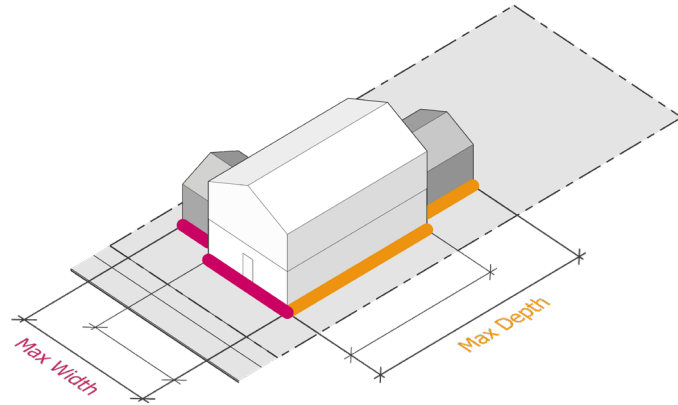
"House-Scale"

House-scale buildings are those that match the size and scale of a typical house, in terms of width, depth, height, and architectural details. House-scale buildings are typically a maximum 2.5 stories tall, such as single-unit houses, duplexes, triplexes, fourplexes, small multiplexes, cottage courts, and courtyard buildings. Building widths of these types range from 25 feet to 75 feet overall, including secondary wings. House-scale buildings will fit best in predominately residential zones.

House-scale MMH types can further be classified as small, medium, and large depending on the building footprint. This distinction can be helpful when considering which context specific MMH types work best.

"Block-Scale"

The footprint of a block-scale building occupies most of, if not all of, a city block; or, when multiple buildings are arranged together along a street, appear as long as most or all of a block. Examples include large multiplexes and townhouses. Block-scale buildings are most appropriate within a downtown fabric or directly along a major corridor. See Section 2.4 Upper Missing Middle Housing section for applications of block-scale middle housing types.



Lot Width

Importance of Lot Width

Zoning standards often regulate development by lot area to reinforce maximum allowed density. This approach may be appropriate for larger projects but not necessarily for infill lots. The approach of regulating using lot area prevents some housing types that are otherwise physically compatible with single-unit dwellings.

Applying lot width standards inherently controls the scale of buildings constructed on them. Lot width can be a more effective regulation than lot area because many projects can comply with the minimum lot area but still result in a building that is too large for its context. Even with low-density housing types such as a duplex, if allowed to fill up the building envelope, it can result in a building that is within the density limits but is larger than nearby houses in the same neighborhood. In conjunction with setbacks and height standards, a "buildable envelope" is created, ensuring a building's width, depth, and height dimensions cannot exceed that of the surrounding context.

Typical Lot Widths of MMH Types

The graphic on the facing page shows colored bars that display the typical lot width range for each MMH type. A range is provided to accommodate both parking access from an alley in the rear of the lot, which allows for a narrower lot, and parking access from the front of the lot, which requires a slightly wider lot.

Best Practice for Regulating

Regulating by lot width, and coordinating each lot size with the desired housing types and maximum building footprints, creates Missing Middle Housing development that is correctly scaled across a range of neighborhood scales.

The Palette of Missing Middle Housing Types with typical Minimum Lot Widths

The palette of MMH types is provided for reference to the ideal lot width range of each type.

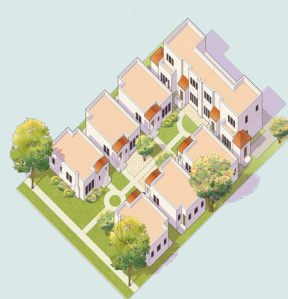
May consist of one or more "Lots of Record" when subdivision is taken into consideration for ownership purposes.



Duplex Side-by-Side
50'-75'



Duplex Stacked
40'-75'

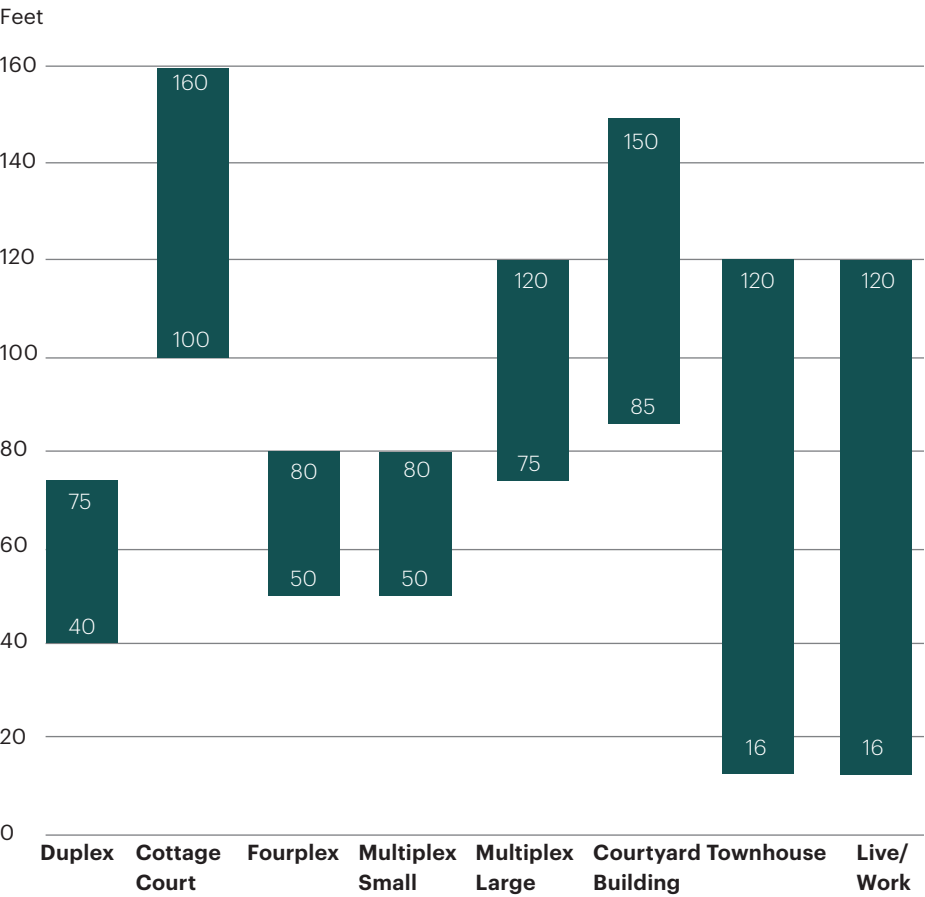


Cottage Court
100'-160'

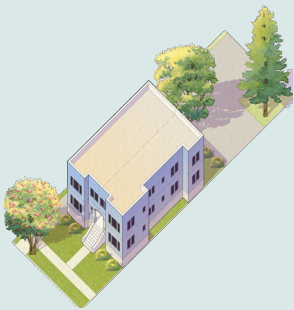


Fourplex
50'-80'

Lot Width Ranges for Typical MMH Types



Notes:
Width ranges of up to 120 feet for townhouses and live/work are assuming multiple attached housing units. Best practices limit these to a set or "run" of four to six attached units before a massing break is required.



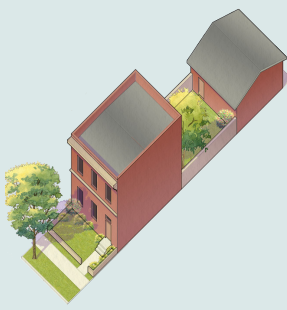
Multiplex Small
50'-80'



Multiplex Large
70'-120'



Courtyard Building
85'-150'



Townhouse
16'-25' per unit



Live/ Work
16'-25' per unit

Building Frontage

What is a Building Frontage?

A frontage is a ground-floor architectural feature (such as a porch, stoop, or storefront) that marks the entrance of a building and, therefore, provides a transition between the public and private realms. Frontages distinguish MMH from larger multi-unit buildings by mimicking the experience of entering a single-unit house from a privacy door, porch, or stoop as opposed to a long corridor.

Regulating frontages ensures that buildings interact with the public realm, and the transition between the two is designed to be pedestrian-scaled and encourage walkability.

The frontage types below are based on examples found in cities across the country. The most common frontage types in a particular neighborhood can be easily identified through a survey of existing conditions.

The Importance of Frontages

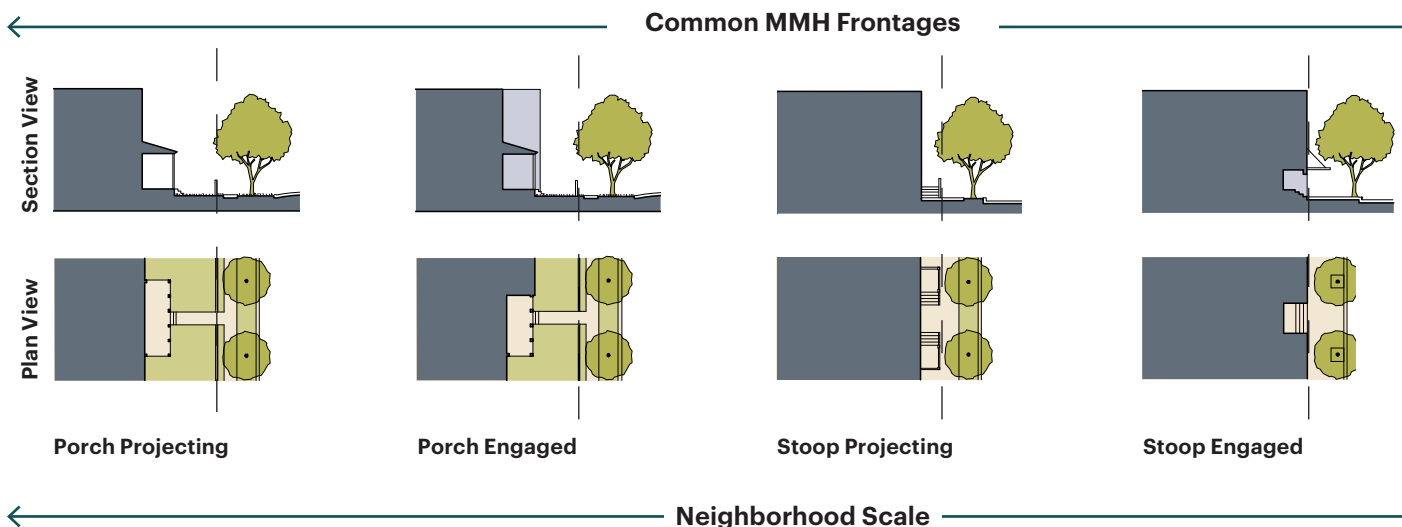
Because MMH types are often embedded in residential zones, frontages that are consistent with those used on single-unit houses, such as porches and stoops, help MMH contribute to the residential look and feel of neighborhoods where they are located.

A strong sense of community is an important benefit that Missing Middle Housing provides to a neighborhood, and frontage types play a key role in this by creating a strong connection to the pedestrian-oriented streetscape.

Buildings with blank facades or entries that are not visible from the street can appear anonymous. Creating clear, distinct entryways with room for socializing reinforces the neighborhood character of MMH types and provides for a more convivial and welcoming streetscape.

Spectrum of Frontage Types

Source: *Form Based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers*, Dan. Parolek AIA, Karen Parolek, Paul C. Crawford FAICP, Island Press



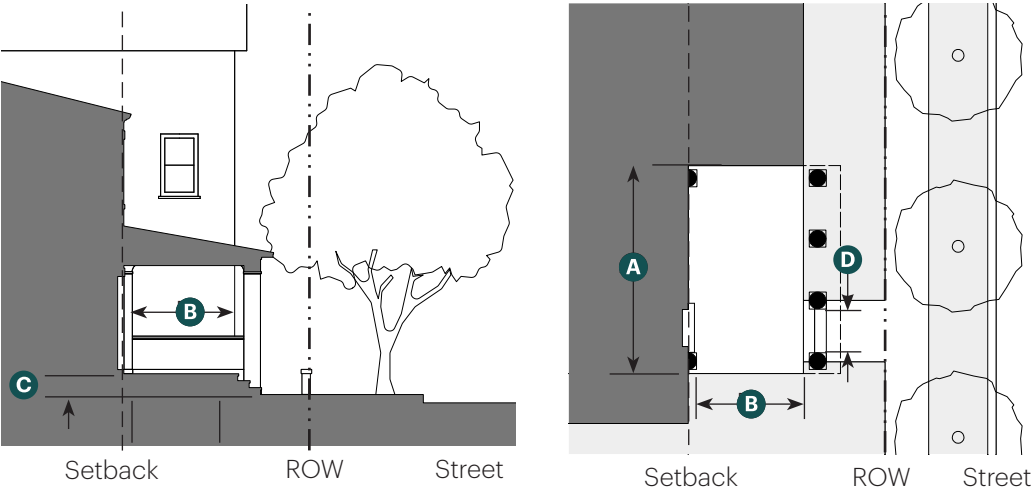


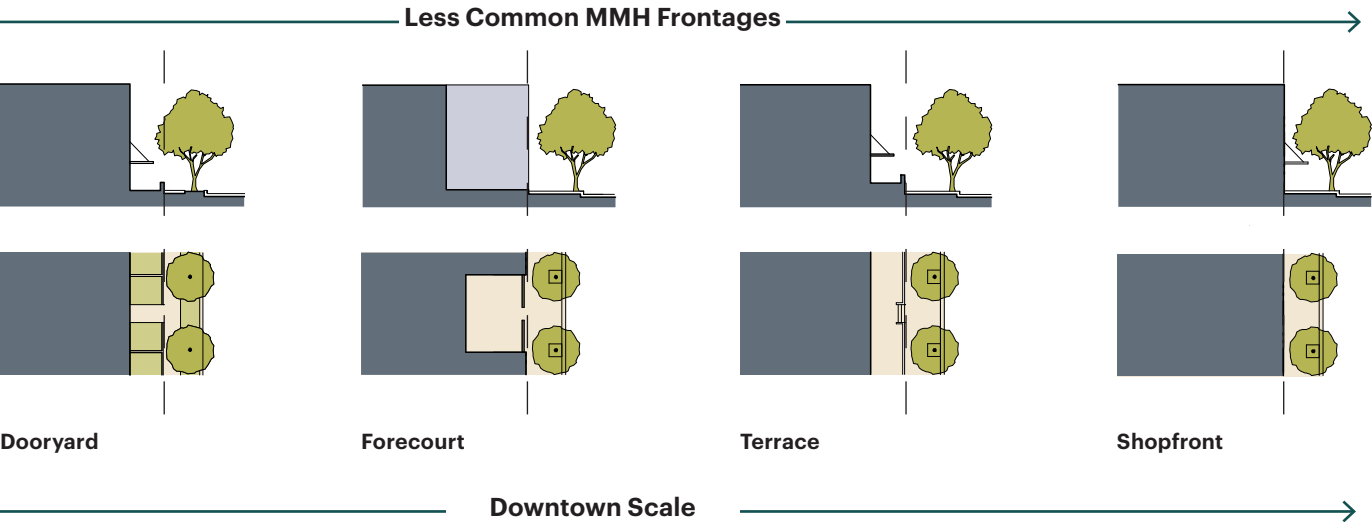
Figure 2.11 Example of regulations for an engaged porch.

- Key**
- A** Width
 - B** Minimum Depth
 - C** Finish Level Above Sidewalk (if applicable)
 - D** Pedestrian Access

Source: *Form Based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers*, Dan. Parolek AIA, Karen Parolek, Paul C. Crawford FAICP, Island Press

Best Practice for Regulating

The detailed regulations for frontage types should be based on measurements from good local precedents to ensure they are appropriate. For instance, setting the correct minimum depth for stoops and porches guarantees that they are usable, look like they are from the area, and that they improve the public/private interface by providing residents with a place to sit outside and greet their neighbors.



Parking Requirements

CLOSER LOOK

The Real Cost of Parking

Surface Parking:
\$1,500 to \$5,000

Surface Parking with Roof:
\$5,000 to \$10,000

Garage Parking:
\$25,000 to \$50,000

Costs are per parking space and inclusive of land costs. The costs shown above are US national averages from 2020.

Source: RS Means, www.rsmeans.com

Parking Design and Location

The number of required off-street parking spaces can greatly impact the feasibility of Missing Middle Housing, and is one of the most common barriers to enabling MMH. MMH building types rely on efficient use of available space on a lot for housing.

The diagrams below illustrate how parking requirements can quickly be a barrier to MMH ability to fit on typical lots. In this example, when the requirement is two parking spaces per housing unit, many smaller lots cannot accommodate the fourplex type because of the required parking spaces and driveways for access. However, a reduction to one or fewer spaces per unit opens up more possibilities.

Apart from the land required to accommodate high parking standards, development costs for parking spaces, especially enclosed spaces, quickly affect the feasibility and attainability of MMH type projects (see national averages for parking space costs at left).

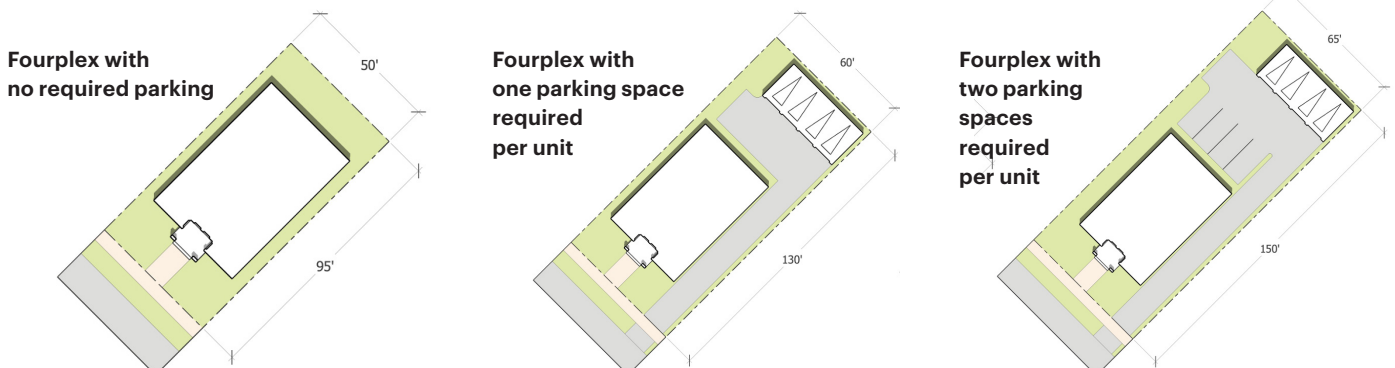
Best Practice for Regulating

Parking requirements should be coordinated to existing conditions, such as available street parking, proximity to transit or alternate transportation modes. These conditions have allowed communities to reduce or remove parking minimums, in turn controlling costs and increasing open space. For more information on how parking drives site design, see the "Addressing Parking Minimums" case study on page 78.

When parking is provided, the selection of surface materials and design of the parking lot should aim to minimize urban heat island effect and untreated stormwater runoff. For example, lighter-colored and permeable materials can be used. Reducing impermeable surfaces also contributes to stormwater mitigation measures.

Finally, when possible, parking should be located in the rear of MMH buildings, reserving the front for frontage types and private open space to enhance the pedestrian experience of the street. At a minimum, parking garages should be required to be setback behind the front facade of the building.

Parking Requirements + Feasibility



Open Space

Benefits of Open Space

Open space is essential to encourage active and healthy lifestyles, allow people to connect with nature, increase tree canopy in communities, and help mitigate the effects of climate change.

Open space is an important attribute of MMH types, and is provided as both shared and/or private open space on the lot. Well-designed open spaces can create an inviting place for residents to relax and interact, allow for community gathering, provide greenery and trees. In addition, well-designed open space activates the adjacent street and public realm and helps connect neighborhoods.

Design Considerations for MMH

- Design open spaces to function as semi-private/private/shared spaces depending on the MMH type.
- Protect existing trees on the lot to the extent feasible, and provide space for new trees.
- For narrower front or side setbacks, consider uses such as native gardens, swales for stormwater treatment, etc.
- Utilize lighter-colored and permeable materials for hardscaped areas.
- Use landscaping to define building entrances and access.
- In MMH types with more units, such as a cottage court or courtyard building, the open space serves as the main gathering place. It is important to design the space to be usable (and ideally multi-functional), place it in a central location, and orient surrounding building facades and entrances to frame it. Frontages such as dooryards, stoops and porches can be used to make the open space inviting and encourage interaction.
- In the case of larger sites, the design of open spaces should consider existing mature trees and natural features such as creeks, and integrate them into the site layout.

Open Space Best Practices for MMH



- A** Building frontage and entrance face open space
- B** Front setback landscaped, pathways reinforce pedestrian entrances
- C** Shade trees and green infrastructure

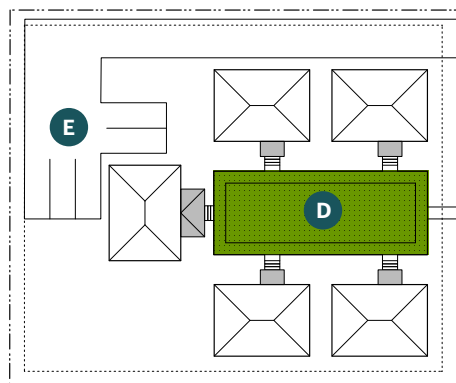


Figure 2.12 Left: Detached houses facing an open space.

Figure 2.13 Right: Open space within a cottage court.

- D** Recommended minimum 20 feet width for shared open space, building entrances from open space
- E** Open space oriented to street, parking at the rear of the lot

2.4 The Palette of Missing Middle Housing Types

Missing Middle Housing is a range of building types appropriate for different contexts.

Building types, meaning structures defined by their configuration, disposition, and function, are a fundamental element of urban design and development. Matching building types to the existing context based on their spatial requirements is essential to creating a cohesive built environment. The palette of MMH types

below identifies the ideal lot dimensions across the spectrum of types organized by scale. Each building type requires the minimum lot dimensions shown to provide a high-quality living environment for residents, and the maximum is the limit at which lots become too large to deliver



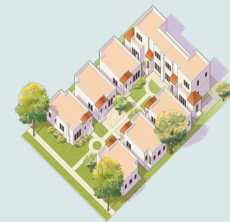
The Palette of Missing Middle Housing Types



Duplex Side-by-Side
2 units



Duplex Stacked
2 units



Cottage Court¹
5-10 units



Fourplex
3-4 units

Ideal Characteristics of Missing Middle Housing Types								
Vehicular Access	Front		Rear		Front		Rear	
Max. Height (Stories)	2.5		2.5		1.5		2.5	
Lot Width (ft.) ²	50' - 75'	40' - 70'	40' - 75'	30' - 70'	100' - 160'	90' - 150'	55' - 80'	50' - 70'
Lot Depth (ft.)	100' - 150'	100' - 150'	100' - 150'	100' - 150'	100' - 150'	100' - 150'	100' - 150'	100' - 150'
Area of Lot (sq.ft.)	5,000 - 11,250	4,000 - 10,500	4,000 - 11,250	3,000 - 10,500	10,000 - 24,000	9,000 - 22,500	5,500 - 12,000	5,000 - 10,500
Resultant Density								
Without ADU	8 - 17	8 - 22	8 - 22	8 - 29	18 - 22	19 - 24	15 - 32	17 - 35
With ADU	12 - 26	12 - 33	12 - 33	12 - 44	n/a	n/a	18 - 40	21 - 44

¹ Variation: Pocket Neighborhood. The lot for this variation is the size of most of a block, and the shared court is much larger, or consists of two or more shared courts. The individual cottages are expanded to include a mix of duplex and fourplex buildings.

² May consist of one or more "Lots of Record" when subdivision is taken into consideration for ownership purposes.

compact development patterns that support walkable environments.

The listed resultant densities are obtained from designing units that reasonably fit within each MMH building type. This differs from density regulations that predetermine how many units are allowed on a lot without regard for what can fit. In addition, the results vary depending on front or rear vehicular access to parking. The densities listed below correspond to each type's lot dimensions range.

Although lot area is regularly used as a zoning regulation, it should not be the primary regulation. Instead, lot width and the resulting building width should be prioritized. This approach provides more targeted regulations that have a greater

impact on the quality of the public realm and help to deliver more predictable building forms.

The dimensions shown in the palette below and on the subsequent pages result from years of on-the-ground research and design work by Opticos for private and public sector clients. These dimensions are meant to be used as a starting point and should be calibrated for each community's existing conditions, lot patterns, and desired community form.

The Palette of Missing Middle Housing Types



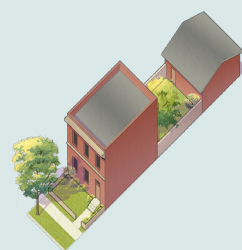
Multiplex Small
6-10 units



Multiplex Large
7-18 units



Courtyard Building
6-20 units



Townhouse
1 unit



Live/Work
1 unit

Ideal Characteristics of Missing Middle Housing Types

Vehicular Access	Front	Rear	Front	Rear	Front	Rear	Front	Rear	Front	Rear
Max. Height (Stories)	2.5		2.5 (3 ³)		2.5 (3)		2.5 (3)		2.5 (3)	
Lot Width (ft.)	55' - 80'	50' - 70'	70' - 120'	60' - 110'	95' - 150'	85' - 140'	n/a	16' - 45'	n/a	16' - 45'
Lot Depth (ft.)	100' - 150'	100' - 150'	100' - 150'	100' - 150'	110' - 175'	110' - 175'	n/a	85' - 120'	n/a	85' - 120'
Area of Lot (sq.ft.)	5,500 - 12,000	5,000 - 10,500	7,000 - 18,000	6,000 - 16,500	10,450 - 26,250	9,350 - 24,500	n/a	1,360 - 5,400	n/a	1,360 - 5,400
Resultant Density										
Without ADU	36 - 40	41 - 44	37 - 44	44 - 48	25 - 33	28 - 36	n/a	8 - 32	n/a	8 - 32
With ADU	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16 - 64	n/a	16 - 64

³In more intense neighborhoods, this type can be designed to have a third story, or a portion of a third story, depending on the intended physical character of the neighborhood.

Duplex Side-by-Side

Building Type Overview

A small- to medium-sized building that consists of two dwelling units, with a shared wall, and both units face and are entered from the street. This type has the appearance of a small-to-medium sized single-unit house and may include a rear yard.

Building Form

Small Missing Middle Housing Type

Key Characteristics

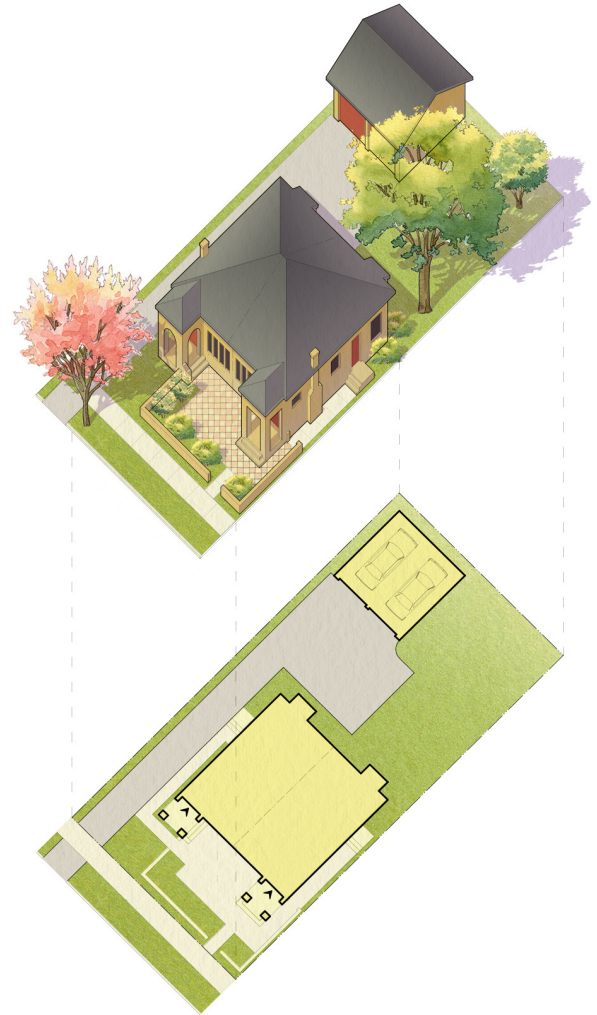
Height	1 to 2 stories
Number of Units	2 units
Frontage Type	Porch and stoop
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	50' - 75'	40' - 70'
Lot Depth (ft)	100' - 150'	100' - 150'

Resultant Density (du/ac)

Without ADU	8 - 17	8 - 22
With ADU	12 - 26	12 - 33



Regional Examples



St. Louis, MO



Columbus, OH

Duplex Stacked

Building Type Overview

A small to medium-sized building that consists of two detached dwellings units one on top of the other, both of which face and are entered from the street. This type has the appearance of a small-to-medium single-family house, fits on a narrower lots than the side-by-side duplex providing space for the front and rear yard.

Building Form

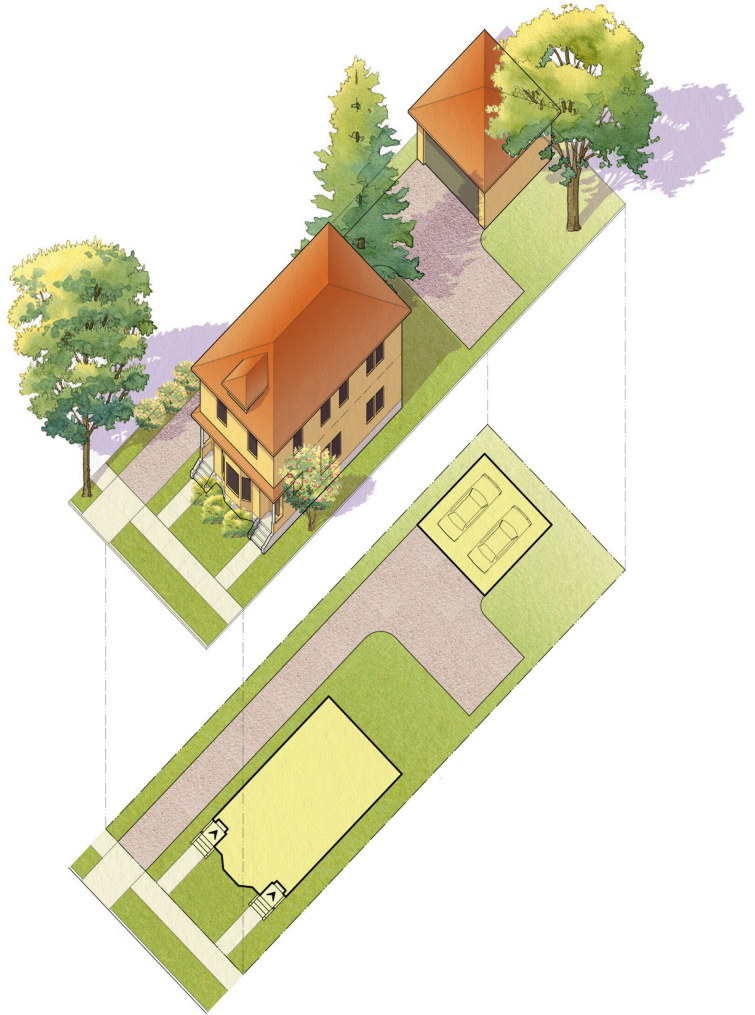
Small Missing Middle Housing Type

Key Characteristics

Height	2 stories
Number of Units	2 units
Frontage Type	Porch and stoop
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	40' - 75'	30' - 70'
Lot Depth (ft)	100' - 150'	100' - 150'
Resultant Density (du/ac)		
Without ADU	8 - 22	8 - 29
With ADU	12 - 33	12 - 44



Regional Examples



Detroit, MI



Duluth, MN

Cottage Court

Building Type Overview

A series of small, detached buildings on a lot arranged to define a shared court that is typically perpendicular to the street. The shared court takes the place of a private rear yard and is an important community-enhancing element.

Building Form

Small Missing Middle Housing Type

Key Characteristics

Height	1 to 1.5 stories
Number of Units	1-10 units
Frontage Type	Porch and stoop
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	100' - 160'	90' - 150'
Lot Depth (ft)	100' - 150'	100' - 150'

Resultant Density (du/ac)

Without ADU	18 - 22	8 - 24
With ADU	n/a	n/a



Regional Examples



Nashville, TN



Nashville, TN

Fourplex

Building Type Overview

A medium-sized building that contains four units, typically two on the ground and up to two above with a shared entry from the street. Although this type shows four units, a triplex has the same built form characteristics but contains one less unit. This type has the appearance of a medium-size single-family unit and may include a rear yard.

Building Form

Small Missing Middle Housing Type

Key Characteristics

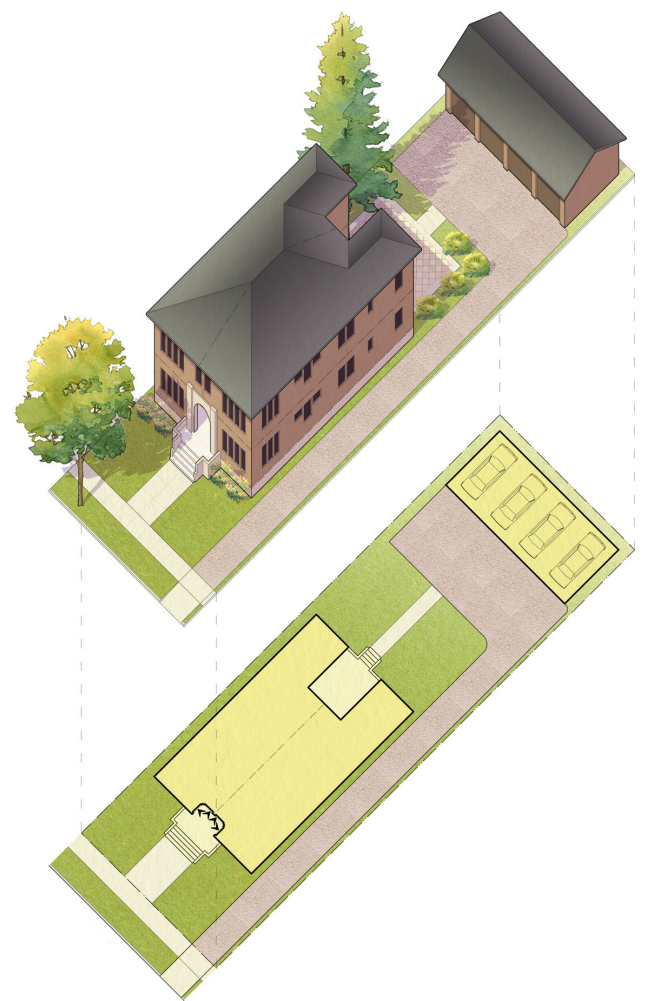
Height	2 stories
Number of Units	4 units
Frontage Type	Porch and stoop
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	50' - 80'	50' - 70'
Lot Depth (ft)	100' - 150'	100' - 150'

Resultant Density (du/ac)

Without ADU	15 - 32	17 - 35
With ADU	18 - 40	21 - 44



Regional Examples



West Dundee, IL



Chicago, IL

Multiplex Medium

Building Type Overview

A medium-sized building consisting of five to ten side-by-side stacked dwelling units, typically with one shared entry or individual entries along the front or sometimes along one or both sides. This type has the appearance of a medium-to-large single-unit house and does not include a rear yard.

Building Form

Medium Missing Middle Housing Type

Key Characteristics

Height 2 to 2.5 stories

Number of Units 5 to 10 units

Frontage Type Porch, stoop, and forecourt

Parking 1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	50' - 80'	50' - 70'
Lot Depth (ft)	100' - 150'	100' - 150'
Resultant Density (du/ac)		
Without ADU	36 - 40	41-44
With ADU	n/a	n/a



Regional Examples



St. Charles, IL



Lagrange, IL

Courtyard Medium

Building Type Overview

A medium-to-large-sized building consisting of multiple side-by-side and/or stacked dwelling units arranged around a shared courtyard. A medium footprint around a courtyard replaces the function of a rear yard and is more open to the street in low-intensity neighborhood

Building Form

Medium Missing Middle Housing Type

Key Characteristics

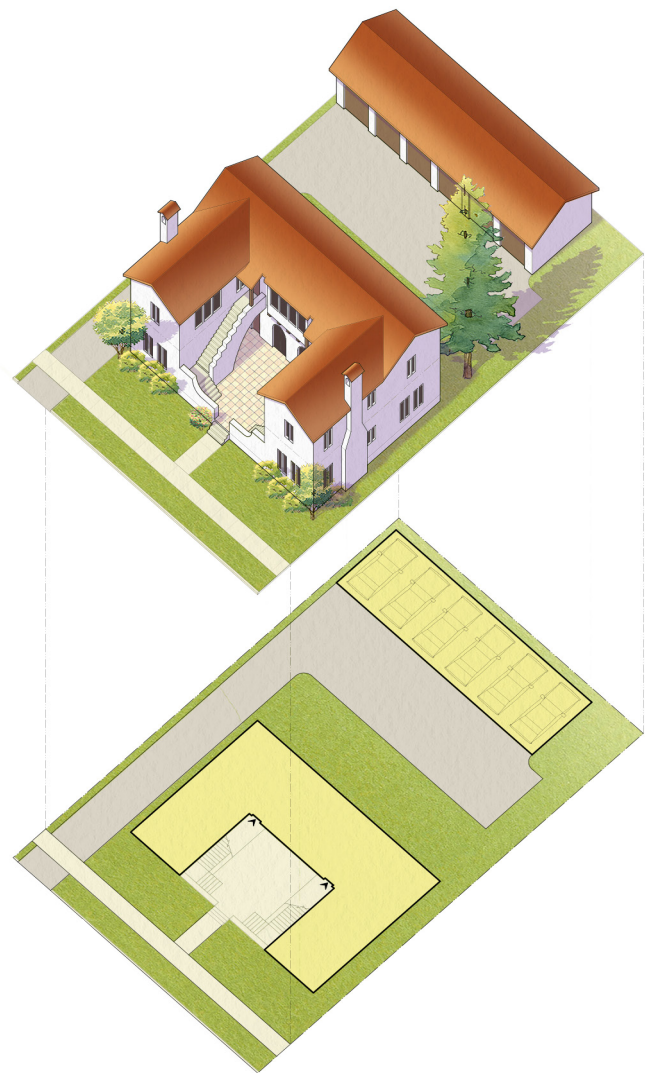
Height	2 stories
Number of Units	6 to 16 units
Frontage Type	Porch, stoop, forecourt
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	95' - 150'	85' - 140'
Lot Depth (ft)	110' - 175'	110' - 175'

Resultant Density (du/ac)

Without ADU	25 - 33	28 - 36
With ADU	n/a	n/a



Regional Examples



Omaha, NE



Nashville, TN

Townhouse

Building Type Overview

A small-to-medium-sized building containing one dwelling unit that is attached to other townhouses.

Building Form

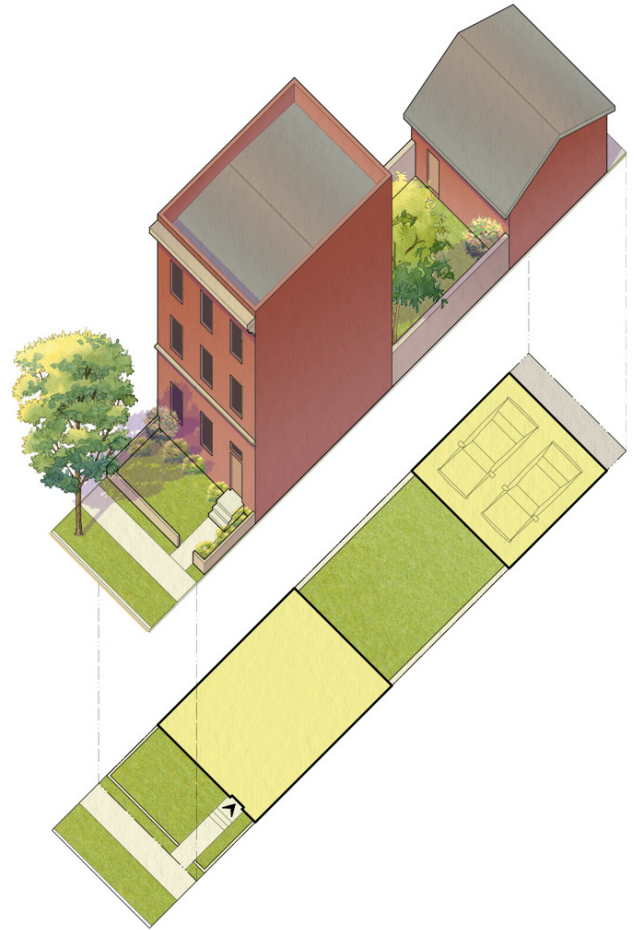
Medium Missing Middle Housing Type

Key Characteristics

Height	2 stories in low-intensity contexts; 3 stories in high-intensity contexts
Number of Units	Townhouses should be limited to 3-5 in less intense contexts. In more intense contexts, no limit should be placed on the run of townhouses.
Frontage Type	Porch, stoop, and dooryard
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	n/a	16' - 45'
Lot Depth (ft)	n/a	85' - 120'
Resultant Density (du/ac)		
Without ADU	n/a	8 - 32
With ADU	n/a	16 - 64



Regional Examples



Bloomington, IL



Arlington Heights, IL

Live/work

Building Type Overview

A small-to-medium-sized attached or detached building. This building type integrates a unit and separate flex space, accommodating a range of nonresidential uses. It is a great type for incubating small businesses.

Building Form

Medium Missing Middle Housing Type

Key Characteristics

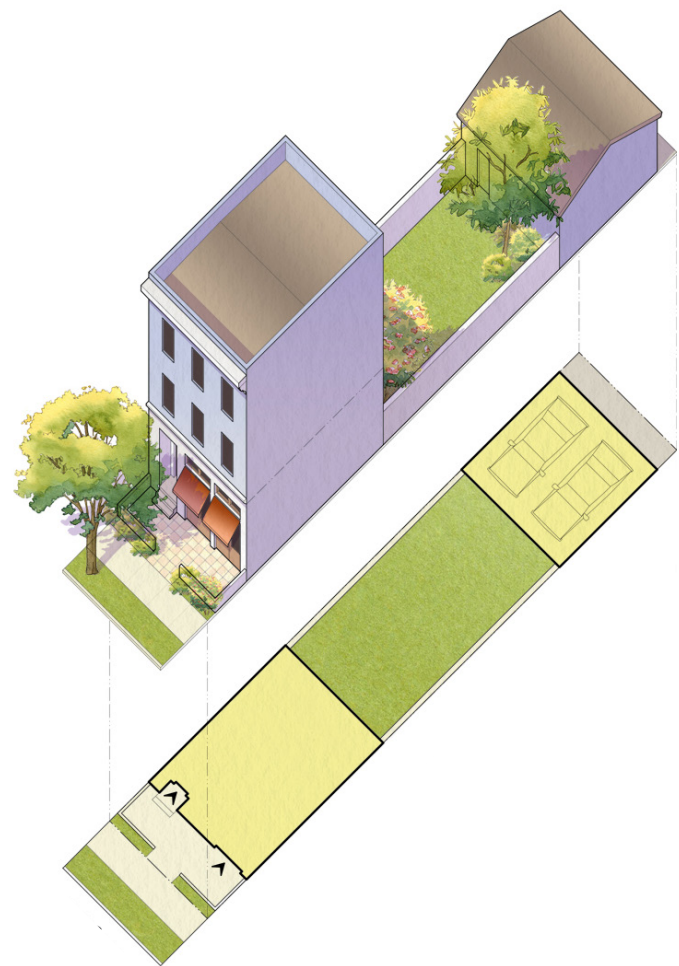
Height	2 to 3 stories
Number of Units	2 to 6 units
Frontage Type	Porch, stoop, and dooryard
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	n/a	16' - 45'
Lot Depth (ft)	n/a	85' - 120'

Resultant Density (du/ac)

Without ADU	n/a	8 - 32
With ADU	n/a	16 - 64



Regional Examples



Louisville, KY



St. Louis, MO

Multiplex Large

Building Type Overview

A medium-to-large size structure that consists of six to eighteen side-by-side or stacked dwelling units. Typically, there is one shared entry or individual entries along the front and sometimes along one or both sides.

Building Form

Large Missing Middle Housing Type

Key Characteristics

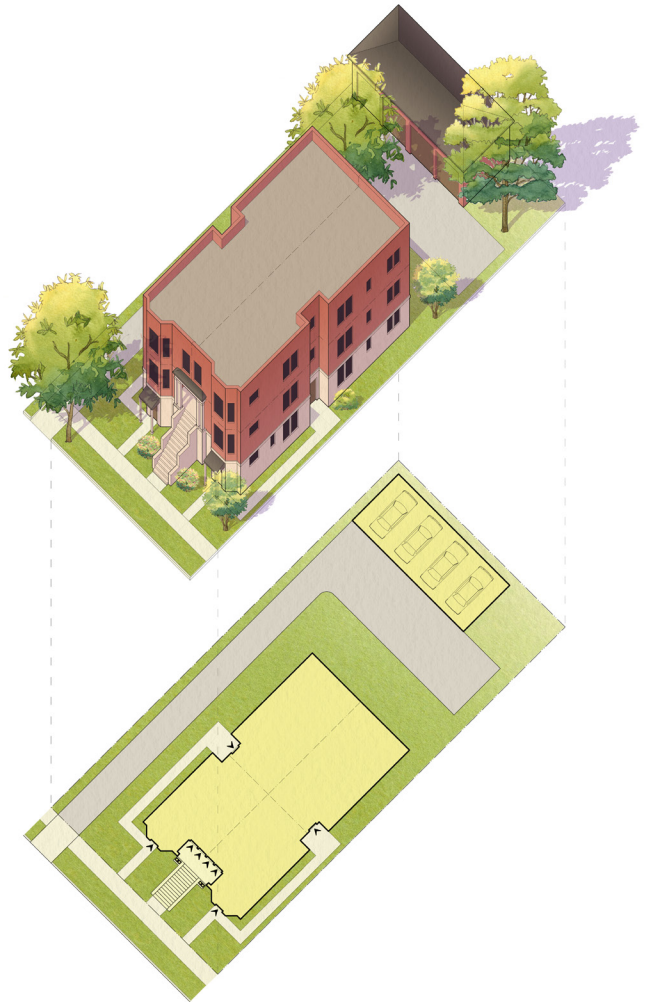
Height	2 to 3 stories
Number of Units	6 to 18 units
Frontage Type	Porch, stoop, and forecourt
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	70' - 120'	60' - 110'
Lot Depth (ft)	100' - 150'	100' - 150'

Resultant Density (du/ac)

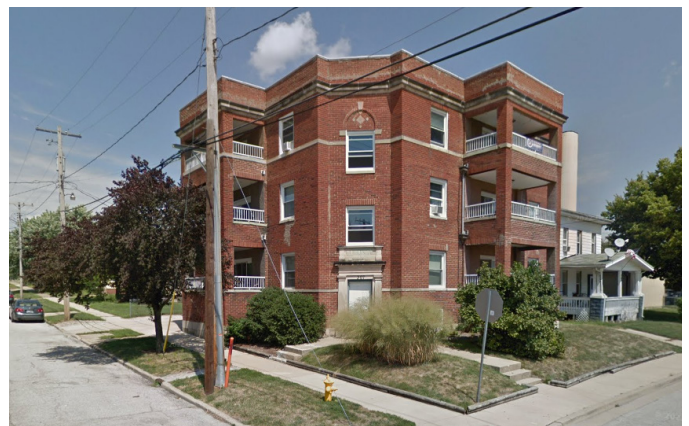
Without ADU	37 - 44	44 - 48
With ADU	n/a	n/a



Regional Examples



Detroit, MI



Bloomington, IL

Courtyard Large

Building Type Overview

A medium-to-large-sized dwelling unit consisting of multiple side-by-side and/or stacked dwelling units arranged around a shared courtyard.

Building Form

Large Missing Middle Housing Type

Key Characteristics

Height	2 to 3 stories
Number of Units	16 to 28 units
Frontage Type	Porch, stoop
Parking	1 space per unit

Lot Size and Density

Vehicle Access	Front Drive	Rear Alley
Lot Width (ft)	95' - 150'	85' - 140'
Lot Depth (ft)	110' - 175'	110' - 175'

Resultant Density (du/acre)

Without ADU	46 - 67	50 - 75
With ADU	n/a	n/a



Regional Examples



Oak Park, IL



Cincinnati, OH

CLOSER LOOK

Benefits of ADUs

Accessory dwelling units are a unique housing type that offer a high level of flexibility and can be achieved in various forms. Because of this, they offer many benefits:

- An increase in housing variety to the local community.
- Does not require the purchase of new land; can easily be constructed on a lot fit for a single-unit home.
- Suitable in a variety of locations.
- Creates supplemental income when rented out.
- Allows for independent living, family-care, and aging-in-place.
- Offers privacy for multi-generational housing.

Choosing the most appropriate configuration of an ADU should consider the following variables:

- Cost differences between a detached, attached, or junior ADU;
- The impact on the primary residence as an ADU will reduce the amount of open space on a lot or within the residence;
- The amount of parking that may be required or reduced; and
- Privacy, as attached and junior ADUs will result in shared walls that can transmit noise while detached will create shared open spaces and additional adjacencies to neighboring properties.

Accessory Dwelling Unit

What is an Accessory Dwelling Unit?

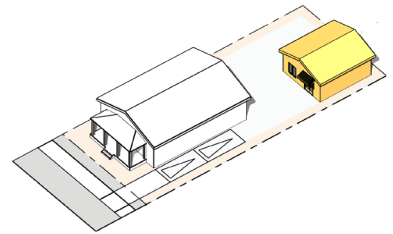
An accessory dwelling unit (ADU) is an attached or detached residential dwelling unit, often located in the rear of a lot or behind a primary dwelling. These units provide complete and independent living facilities; including permanent provisions for living, eating, cooking, sleeping, and sanitation. They are also referred to as "in-law units" or "granny flats."

Additionally, a "junior" accessory dwelling unit (or JADU) is sometimes used to refer to a unit that is less than 500 square feet and contained entirely within a single-unit house. A JADU typically includes an efficiency kitchen and space for sleeping. Sanitation space can also be included in a JADU, or it can share a bathroom with the primary residence.

Typical ADU Configurations Illustrated

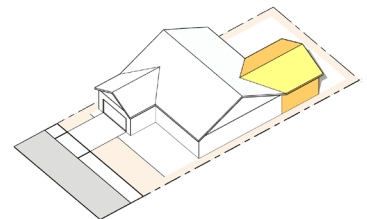
Detached ADU

An ADU that is physically detached from the primary structure on a lot. Achieved by erecting a new accessory structure or adapting an existing accessory structure to contain a residential unit.



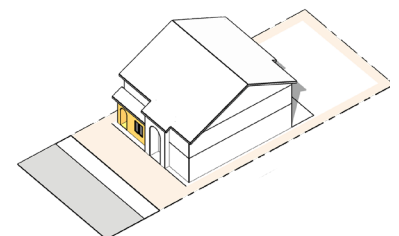
Attached ADU

An ADU that is physically attached to the primary structure on a lot, but can be entered separately. Created by converting a secondary wing into an ADU, or building a secondary wing with autonomous facilities.



Junior ADU

An ADU that is contained within a primary structure. When an existing residence has additional space, it can be converted into a JADU by adding key amenities for sleeping and cooking.



Other Housing Types

Innovation and Future-Proofing the Housing Stock

Apart from the Missing Middle types discussed in this section, there are also a variety of innovative housing configurations that provide additional flexibility and housing options. These types include co-housing, co-living, and micro-units that can support a wide range of household types and lifestyle choices. The small size and shared common spaces provide inherent flexibility and cost savings. Further, buildings that incorporate these types can easily adapt to market conditions and evolve over time.

One housing option that meets changing demographics (such as the growing numbers of empty-nesters, single-person households, and couples without children) and housing needs is the multi-generational house. This type allows a home-owner to stay on their property over many different life phases, if desired.

These types are often applicable within MMH buildings but can be tricky to align with standard zoning districts. Cities can support these configurations by ensuring that regulations do not prohibit small unit sizes or shared common spaces, particularly kitchens, within a building.

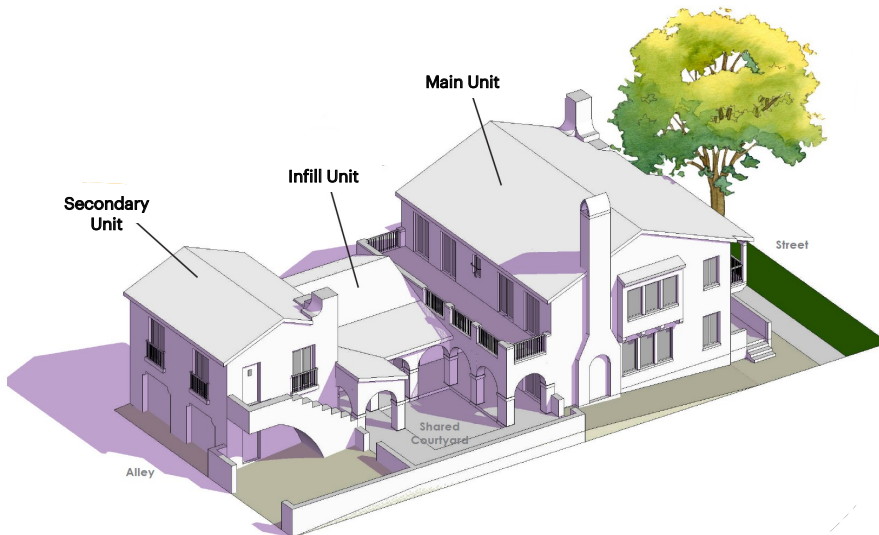


Figure 2.14 A multi-generation house where several attached housing units on a single lot that allow multiple generations to have both separate and shared living space.

CLOSER LOOK



Co-housing

One-to-two story residential buildings with common spaces designed for communal use.



Co-living

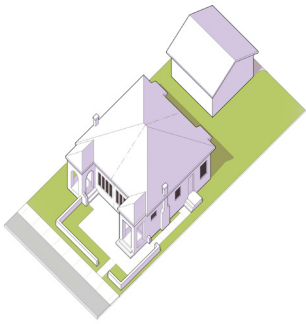
Three-to-four story buildings with units that share a kitchen and other communal living spaces.



Micro-Units

Very small studio units (under 400 sf) in an apartment configuration.

2.5 "Almost" Missing Middle Housing



Note: Refer to Section 2.2 of this chapter for an explanation of the characteristics of Missing Middle Housing types.

Getting it Right

Missing Middle Housing is more than just multiple dwelling units fit into a house-scale building form. The location, frontage, and scale of MMH are essential design elements that foster a pedestrian-focused environment in addition to creating a variety of housing choice. When these elements are executed to a high degree, they contribute to a lively streetscape and sense of place that meets the housing needs of multiple communities.

Not Quite Right

It is not uncommon to see a building that, at first glance, appears to fall into the category of Missing Middle Housing. Upon further inspection, however, there is something that is "not quite right" about it. The following characteristics are common multi-unit housing design mistakes:

- Location of parking at the front of the lot and lack of pedestrian frontages mean that they do not support the type of walkable contexts where MMH is most effective;

- Lack of easily identifiable entrances, street-facing windows, and/or frontages such as porches or stoops mean that they may not be contextually appropriate in neighborhoods where those types of building details constitute an important element of the physical character; and
- Lack of diversity of building types or design along a block creates clusters of the same, repetitive type. MMH works most effectively when a variety of housing types or facades are mixed along a block.

When the design elements laid out in Section 2.3 are excluded, the more qualitative benefits of MMH fall short. The examples on the following page provide much-needed housing and are generally house-scale, but they lack other important attributes of MMH. It is important that MMH types demonstrate good design so that they can be perceived as benefiting the architectural quality and livability of a neighborhood.

Figure 2.15 These two neighboring buildings display some key differences in scale and frontage, despite both housing the same number of units. The building on the left with its welcoming stoop, easily fits into the surrounding neighborhood of 2-story homes. The 3-story version towers above and the front door is no where to be found.



Applying the Criteria to Multi-Unit Types



Characteristics

- Multi-unit building
- Three stories, large lot coverage
- No ground floor frontage articulation
- Street frontage dominated by parking that eliminates any shared open space

Criteria of MMH

In a Walkable Context	✓
Multiple Units	✓
House-Form Building	✗
Pedestrian Building Frontage	✗
Parking behind Front Facade	✗



Characteristics

- Two unit building
- Two stories, 50 percent lot coverage
- Ground floor with no street-facing windows
- Frontage dominated by parking and front driveway does not contribute to public realm

Criteria of MMH

In a Walkable Context	✗
Multiple Units	✓
House-Form Building	✓
Pedestrian Building Frontage	✗
Parking behind Front Facade	✗



Characteristics

- "Tall and skinny" detached units are out of scale adjacent buildings
- Three stories, high lot coverage
- Frontage dominated by parking with driveway that does not create pedestrian-friendly public realm

Criteria of MMH

In a Walkable Context	✗
Multiple Units	✓
House-Form Building	✗
Pedestrian Building Frontage	✗
Parking behind Front Facade	✗

2.6 Upper Missing Middle Housing Types

In some cases, the scale and economics of a site may determine that typical Missing Middle Housing types will not deliver the necessary returns a developer is looking for. In these cases, Upper Missing Middle may be the solution.

Upper Missing Middle Housing (Upper MMH) are multi-unit buildings that are taller and deeper than typical house-scale MMH, not yet "block-scale," but can still be used as infill. Upper MMH types may include large multiplexes, courtyard buildings, and live/work units.

After determining that Upper MMH is the answer for a particular site, it's

important to get the building placement and design "right." Because these types have larger footprints, their presence in a neighborhood can impact the neighborhood scale and character more visually. Like the palette of house-scale MMH types, Upper MMH types have common characteristics to take note of, which are discussed on the following page.

CLOSER LOOK

Upper Missing Middle Housing Might be the Solution When...

Upper MMH may be a more suitable housing type in particular contexts, housing markets, and/or communities that have a greater housing demand. Here are a few key considerations:

- These types are most effective where a greater degree of change is happening or desired; meaning they can provide more housing units than house-scale MMH infill.
- They are better suited for areas of transition from house-scale buildings to block-scale buildings, such as corridors, commercial centers, or transit centers.
- If housing demand and land value are high, then the additional units in Upper MMH may be attractive to developers.



Getting the Details Right

■ **Height.** Upper MMH types can be anywhere between 3-4 stories, unlike 2.5 story house-scale MMH. Buildings greater than four stories tall may be categorized as mid-rise, and therefore not Upper MMH.

■ **Footprint and Form.** The width and depth of Upper MMH types exceeds that of a house-scale building and can be up to approximately 120 feet in width and 120 feet in depth. Due to size, any street facing facade should be articulated to increase visual interest and reduce monotony.

■ **Parking location.** Like other MMH types, parking should be located at the rear of a lot so as to not dominate the streetscape with drives and parking spaces. The types may support tuck-under parking so long as the streetscape is not diminished.

■ **Frontage.** Building frontage is especially important at the Upper MMH scale as frontage types create a pedestrian friendly environment and break down the scale of these large buildings.

■ **Setbacks.** At this scale, setbacks need to be reduced to accommodate larger building footprints.

■ **Open space/common space.** If open space cannot be provided on a lot, common interior space can be used to facilitate interaction between residents. Day-to-day interactions, such as running into a neighbor while checking the mail, is a small act but can go a long way in making someone feel like they are part of a community.



Figure 2.17 The above "slot homes" are oversized townhouses that maximize building footprint on the site but the units are expensive, and do not prioritize outdoor space. Below are townhouses with a smaller footprint that properly engage the street.

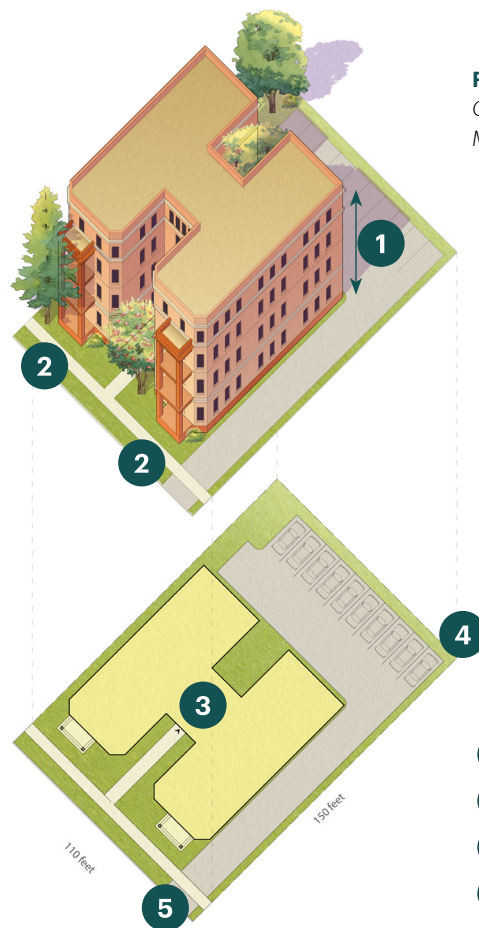


Figure 2.16 Important Form Characteristics of Upper Missing Middle Housing

- 1 Maximum height
- 2 Number of units
- 3 Footprint
- 4 Off-street parking
- 5 Driveways (if any)
- 6 On-site open space

2.7 Missing Middle Housing in the Chicago Region

Within seven counties represented by the Peer Network, approximately 28% of all housing units contain between 2-19 dwelling units.

A Brief History of MMH

There are many Missing Middle Housing types found within the Peer Network communities. Before the widespread adoption of automobiles, housing needed to be located close to areas where jobs were concentrated, since long commutes were inconvenient, therefore most MMH types are commonly found in older neighborhoods adjacent to downtown or smaller neighborhood centers. These housing types played a critical role in providing housing for workers and offering opportunities to build generational wealth.

Why is it Missing?

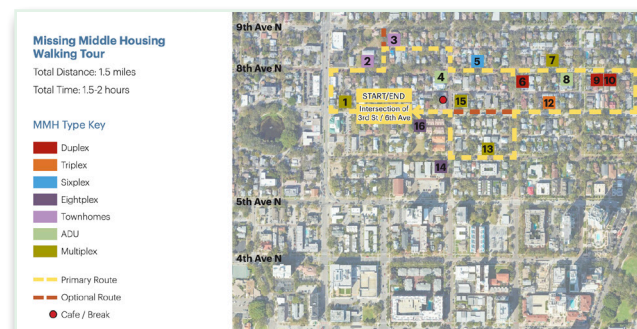
Changes to zoning codes, incentives from the federal government to build single-unit homes, and changes to real-estate finance made it either impossible or financially unattractive to build smaller, multi-family housing products. Municipalities rarely allow these types by-right and instead require developers to undergo lengthy or unpredictable processes to approve the construction of these types. However, recent shifts in consumer demand and alternative ways of thinking about zoning are encouraging cities to consider new opportunities to invest in MMH projects.

CLOSER LOOK

Identifying Missing Middle Housing Types in Your Community

Completing an inventory of existing Missing Middle Housing types in your community can be a helpful step when considering zoning reforms aimed at increasing housing production. Documentation of these types may be a helpful tool when engaging with the public about housing need and drafting zoning standards. Providing evidence that these types already exist in your community may help calm worries about increased density.

Mailboxes, electrical and gas meters, and window type and composition may help indicate housing types with multiple units. Additionally, the American Community Survey (or ACS) has robust data regarding housing inventory at the county and municipality level.

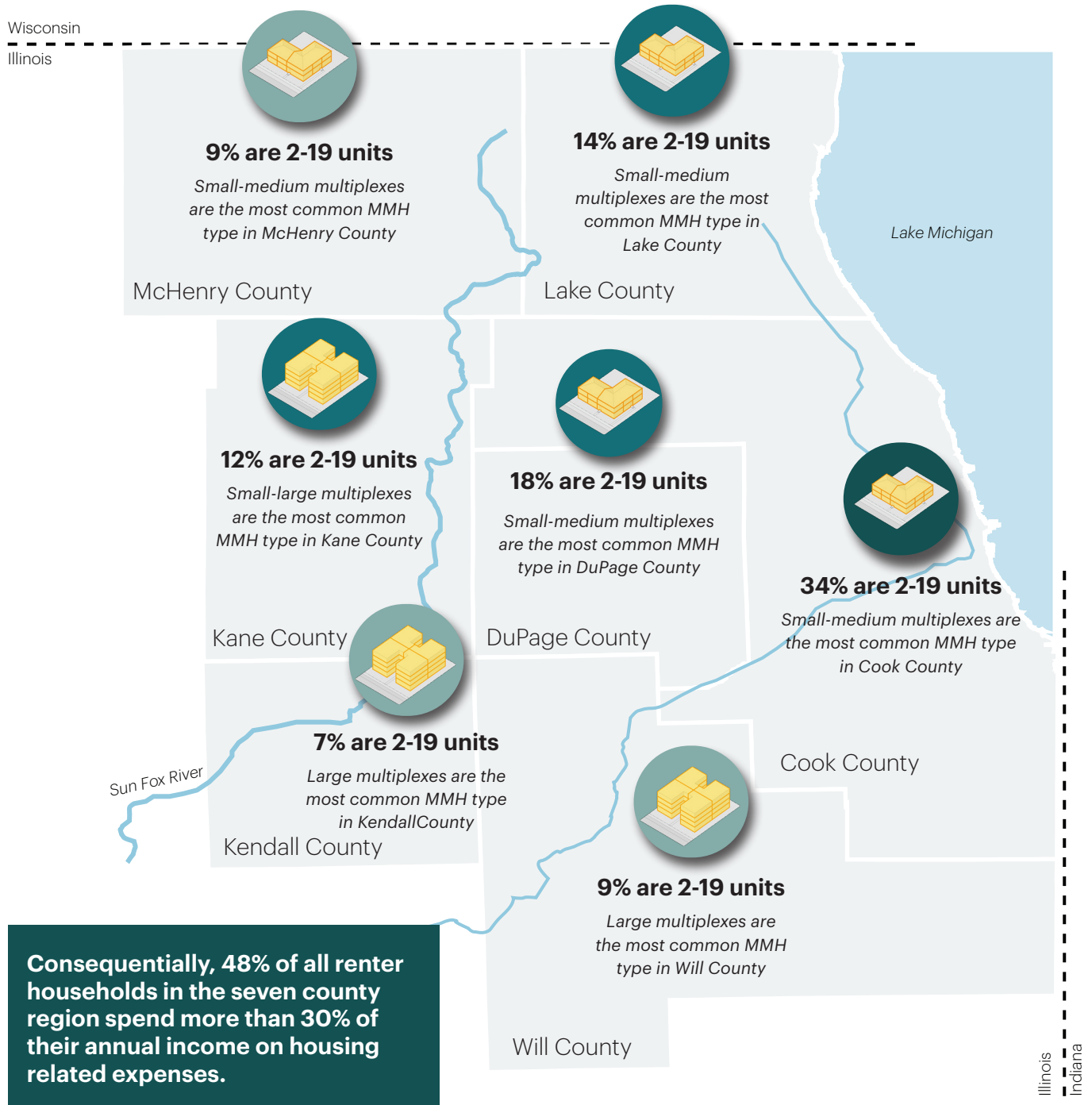


A walking tour to see built examples of local MMH types is a great way to engage community leaders and local residents



The Seven County Region

From 1940 to 2025, the total production of Missing Middle Housing types as a share of the entire seven county region housing stock has decreased from 45% to approximately 15%. Today, single-unit houses account for 50% of all housing in the same region. Decades of restrictive housing policy have discouraged the production of Missing Middle Housing, contributing to a widespread shortage of attainable housing.





Source: Google Maps



Barriers to MMH

CHAPTER 3

“Missing” is used to describe MMH because decades of regulatory barriers, development practices, and community perceptions have rendered these housing types nearly impossible to build. Today, most examples of MMH are found in historical neighborhoods and serve as reminders of past policy and building practices. Renewed interest and need for these types is bringing reform that seeks to remove current barriers.

In this chapter

Removing Barriers at Every Level	50
Planning and Zoning Barriers	52
Financing Barriers	56
Cost and Complexity of Building Codes	58
Community Concerns	60
Lack of Small-Scale Developers and Builders	62

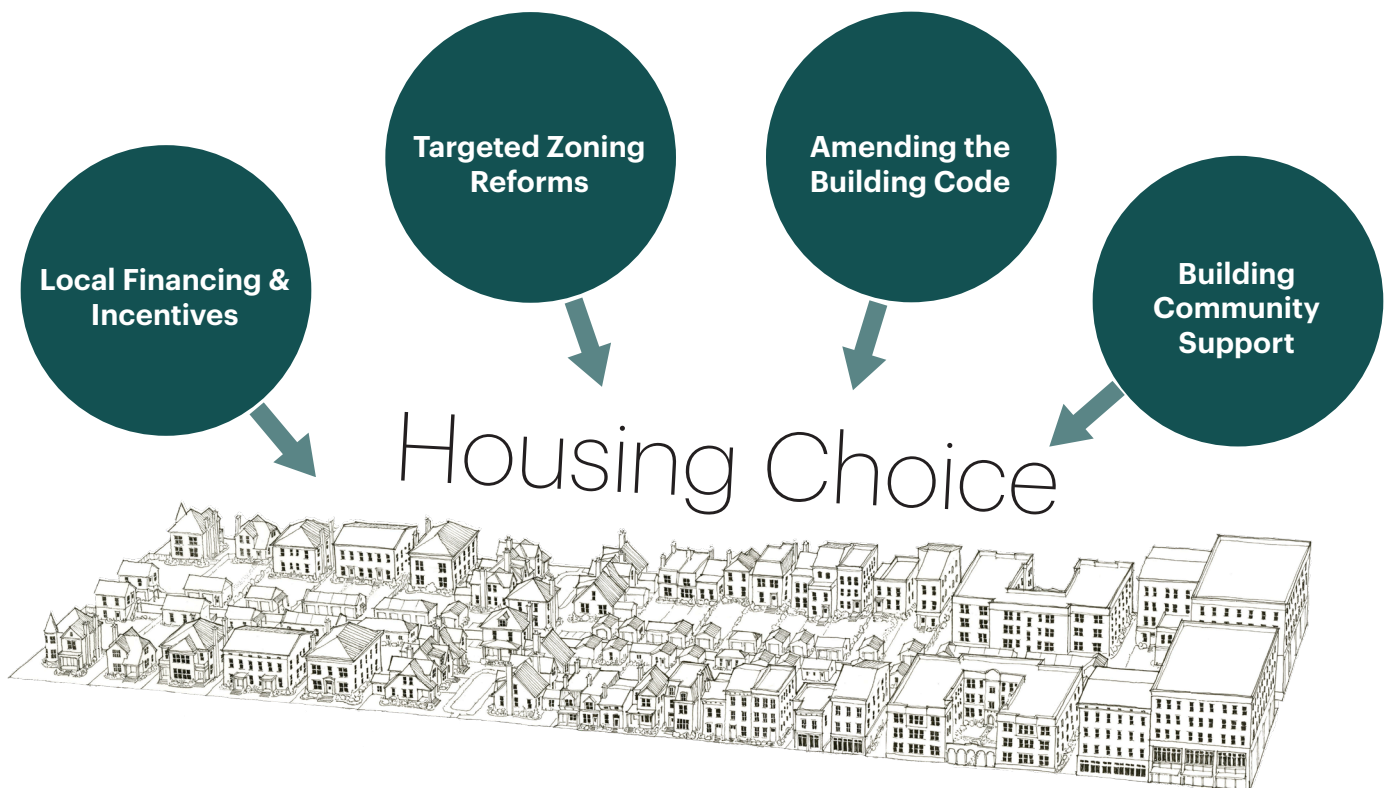
3.1 Removing Barriers at Every Level

Despite its challenges, MMH is a necessary pursuit needed to increase housing supply and fill the growing demand for neighborhood living. Because these types use simple, lower-cost construction methods and approach land more efficiently with shared and smaller units, the end product is more attainable.

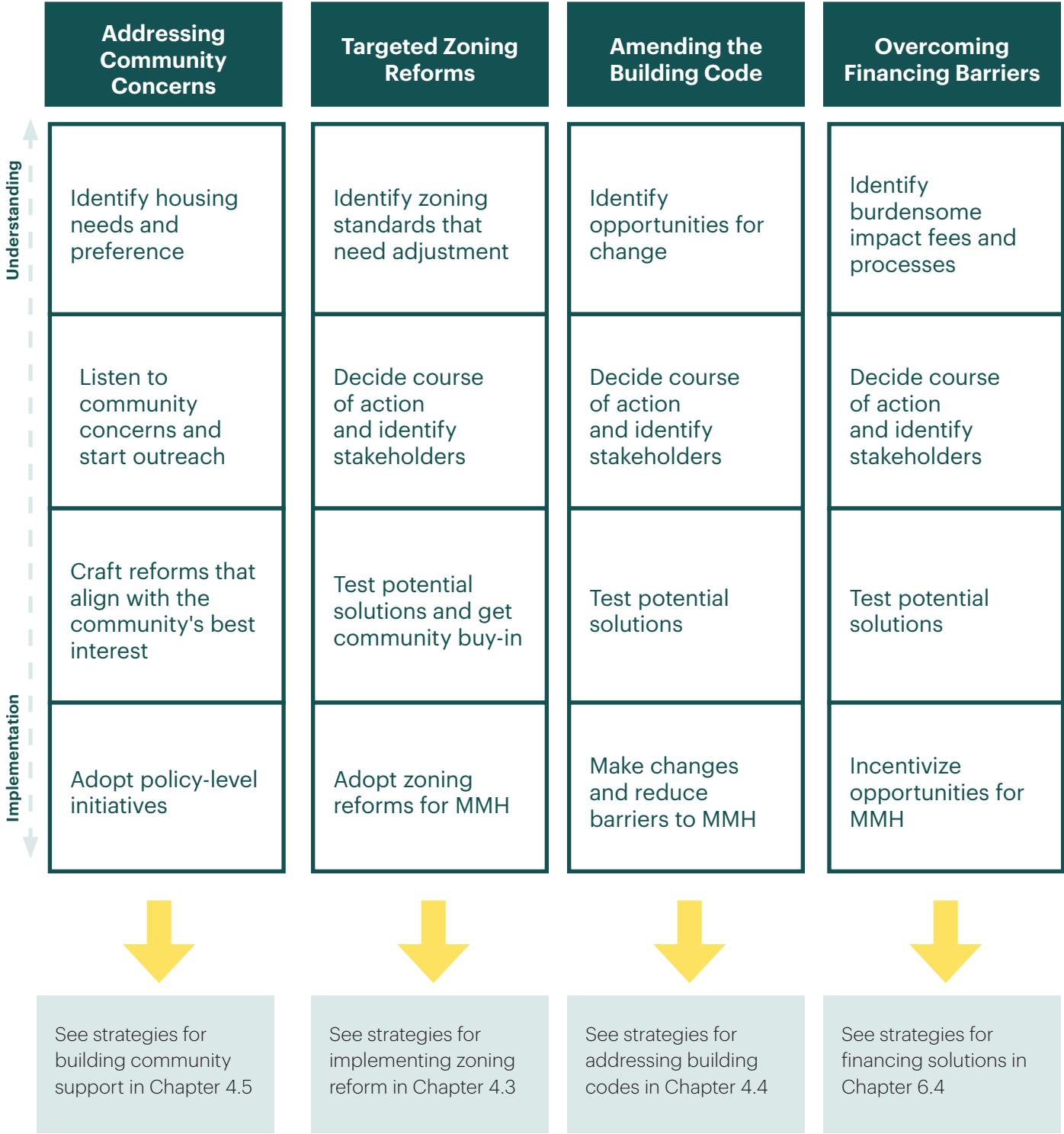
The following pages explore the obstacles that often prevent MMH from being built in our communities, including planning and zoning, financing, the cost and complexity of building codes, and community opposition. When embarking on housing reforms, overcoming these challenges may seem like an impossible task if taken on all at once, but incremental change is just as worthwhile as heavy-lifting reforms.

Getting the process started

A key step in building holistic support for MMH is to create a realistic timeline, identify the most achievable and necessary reforms, engage the public, and work with key stakeholders. There is no one-size fits all approach. Where is your community at in the process? It is time to take the next step, beginning with removing barriers one at a time.



Building a Community that Supports and Enables MMH



3.2 Planning and Zoning Barriers

Local planners, elected leaders, and community residents are speaking up about Missing Middle Housing and its community benefits, but there are still numerous forces preventing its development. First and foremost, our local zoning codes are preventing small, multi-unit development.

Missing Middle Housing types are not easily classifiable by current industry standards. MMH types are regularly categorized under the umbrella of “multi-unit housing,” which captures its ability to house multiple dwelling units, but fails to recognize the differences between “house-scale” and much larger, “block-scale” building typologies. Building with just 4 units are often classified the

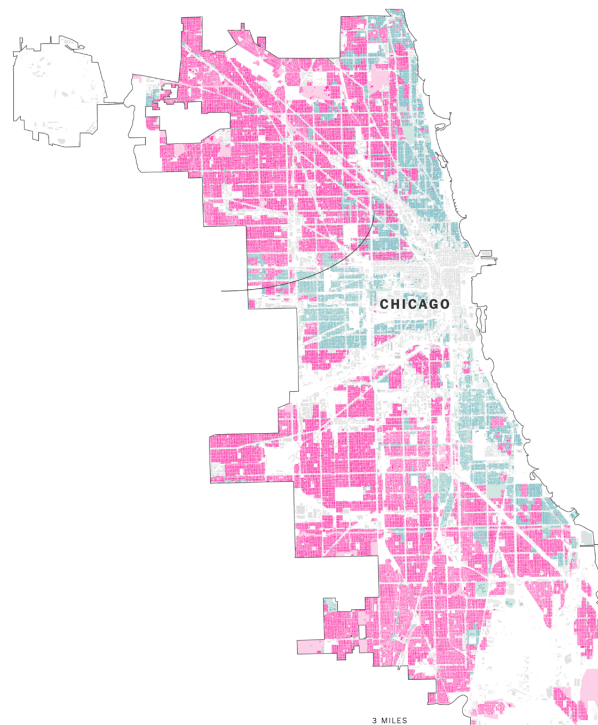
same as buildings with over 50 units even though their impact on the surrounding neighborhood is very different. Because of this, zoning districts where MMH could be an effective housing type are typically designed to promote only single-family houses and limit multi-family. It’s a zero-sum game. See the following page for an introduction to the most common zoning standards that create barriers for MMH.

CLOSER LOOK

The Prevalence of Single-Unit Zoning

A 2019 analysis by the New York Times and UrbanFootprint found that approximately three-quarters of residential land in many U.S. cities is zoned for detached single-unit homes. The analysis found that **79% of residential land in the City of Chicago was zoned for detached single-unit homes.**¹ The map at right, taken from the New York Times article, displays these areas in pink. While comprehensive data for the broader Chicago region is limited, the Chicago Metropolitan Agency for Planning's 2020 Land Use Inventory revealed that 89% of residential land in the region was utilized for detached single-unit homes.

¹Source: Badger, Emily, and Quoc Trung Bui. (2019, June 18). Cities start to question an American ideal: A house with a yard on every lot. *The New York Times*.



Most Common Zoning Barriers that Limit Missing Middle Housing

■ Permitted Uses do not Allow MMH.

Problems quickly arise for MMH types in the use section of zoning codes. In many circumstances, especially in residential zoning districts, multi-family uses of any kind are not permitted or only permitted with a special use permit. Requiring a special use permit adds unnecessary time and review for small-scale developments, which can be detrimental to its ability to get through entitlements.

■ Lot Size Minimums and Density.

Lot size minimums and density standards can significantly limit housing development by imposing restrictions on how many homes can be built on a given parcel of land. Large minimum lot sizes require more space per dwelling, reducing the overall number of units that can be constructed in an area and requiring larger lots for multi-unit buildings compared to what is required for a single house, even if the size of the overall building is similar. Similarly, density standards that cap the number of homes or residents per acre can prevent developers from pursuing MMH types.

■ **Floor Area Ratio (FAR).** FAR standards can limit housing development by restricting the total amount of building space allowed on a property relative to its size. A lower FAR means that developers can build only a limited amount of floor space, which reduces the number of units they can construct, even on larger lots, whereas high FAR standards in areas where multi-unit buildings are prohibited can yield large and bulky single-family houses. The latter scenario can drive up housing costs and create a shortage of housing units.

■ **Setbacks.** On typical 50-60 foot wide lots, side setbacks can greatly restrict the amount of developable space. Most MMH types require a building width of 25 feet or greater. If the side setback restricts the buildable lot width to less than 25 feet, most MMH types are ruled out. It is important to understand what typical lots sizes are within a given zoning district to ensure regulations are creating reasonable built outcomes.

■ **Parking Requirements.** MMH building types rely on efficient use of available space on a lot for housing. For this reason, parking requirements can quickly become a barrier, as parking spaces take up valuable land on a lot that could otherwise be used for housing or shared open space. While reducing the required number of parking spaces is a challenging task, it is important to remember that reducing parking requirements does not prevent parking from being built. Like all other standards in this list, it is critical to understand the tradeoffs created when our standards require an allocation of land to parking, setbacks, or landscape buffers that smaller lots simply cannot achieve when trying to offer more than one dwelling unit.

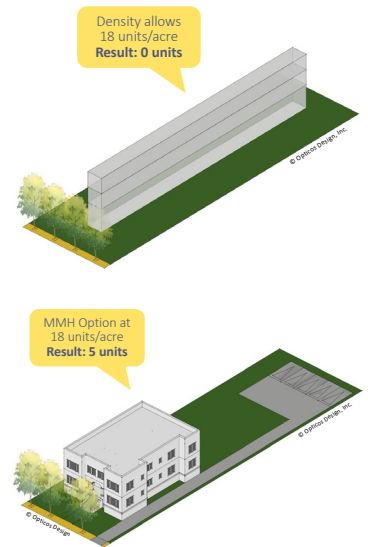


Figure 3.1 In this example, the zoning district studied allows 18 units per acre which could accommodate up to 5 units on a typical size lot (bottom image). However, the setbacks required for multi-unit buildings (top image) leave such little remaining buildable area that no development is achievable.

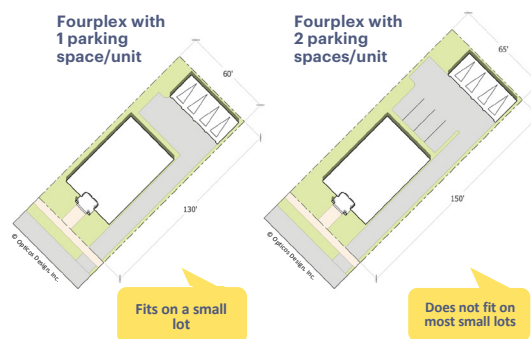


Figure 3.2 This example shows the difference in land required when parking standards call for one space per dwelling unit (left) compared to two spaces per unit (right). A typical neighborhood lot was 60' x 130'; whereas deeper lots were more difficult to find in this community.

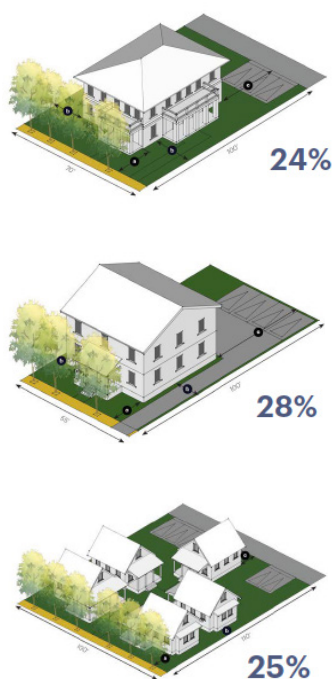


Figure 3.3 Many MMH types, like the triplex, fourplex, and cottage court shown above, have a similar percentage of building coverage as a single house.

Additional Zoning Barriers

■ **Building coverage.** Building coverage, or impervious surface, may be too low to accommodate MMH building footprints especially on smaller lots. Small multi-unit buildings should have similar lot coverage requirements as a single house.

■ **Height limits.** Standards for height may not be well coordinated with the existing neighborhood context. Additionally, height is often measured in feet rather than stories, which can create building height limits that are too low for typical construction needs. In other cases, building height is set too high, therefore incentivizing tall and skinny single-unit houses that are bigger than the surrounding context. Small MMH types like duplexes and fourplexes should fit within the same height limit as a single-unit house.

■ **Adjacency and landscape buffers.**

Adjacency standards and landscape buffers are intended to ease the transition between contexts with different scales of development. Because multi-unit housing is often classified as one land use type, regardless of building scale, these requirements are often applied unnecessarily to MMH, which then limits available space to build on a lot or requires purchase of a much larger lot.

■ **Owner occupancy requirements.**

Some zone district standards require at least one dwelling unit on a lot to be owner occupied. While well-intended, this regulation can create cumbersome provisions that prevent MMH types that function best as rental products. This

requirement may be difficult to track and administer.

■ **Additional review processes required for multi-unit buildings.**

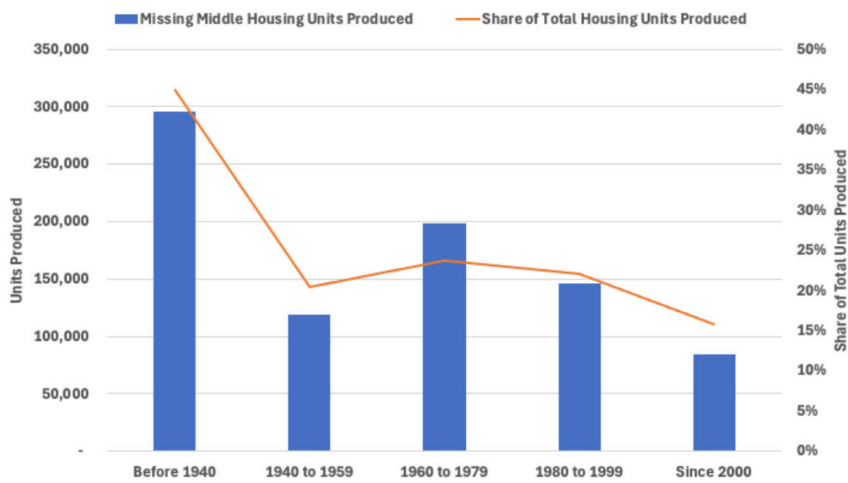
Because house-scale and block-scale multi-unit housing are classified as the same in most zoning codes, smaller multi-unit infill housing projects are often subjected to additional review processes and permit requirements. These extra steps create additional fees and add extra time spent trying to get a project approved, which impacts the feasibility of MMH projects. Additional reviews and public hearing may be appropriate for very large buildings, but are typically not necessary for buildings that are constrained to a limited size.

■ **Additional commercial requirements applied to multi-unit buildings.**

In some cases, multi-unit buildings must comply with additional requirements that are intended for commercial or mixed-use buildings, such as tree planting requirements, the creation of publicly accessible sidewalks, and more.

■ **Under-utilized multi-unit zoning districts.**

No matter how well crafted a multi-unit zoning district may be, it will be ineffective if it is under utilized or inadequately mapped. Often, we find that a jurisdiction may have a zone intended for two-unit, townhouse, or multi-family uses but it is only applied to a very limited amount of geography. Single-unit zoning districts are often the most common zoning district applied in many municipalities, tipping the balance even more in favor of single-family development only.



Production of MMH declined from over 45% of all housing units produced in the Chicago region prior to 1940 to around 15% of all housing units produced since 2000.

Figure 3.4 Production in MMH types declined from 300,000 in pre-1940 decades to less than 100,000 since 2000. Source: U.S. Census Bureau American Community Survey

How Well Does Your Code Work for MMH?

Parsing through an entire zoning ordinance and understanding how its many pieces are impacting housing development is a big task, but beginning with a few key standards can go a long way in recognizing where the barriers for MMH begin.

A "code audit," meaning an analysis of existing standards to understand what outcomes are encouraged or limited, is a powerful tool for communicating the need for zoning reform with planning leaders and the local community

■ **A simple, quick audit can highlight specific zoning standards that may not be aligned with housing goals.** Chapter 5 Best Practices will take a closer look at some common zoning barriers and provide alternative solutions. While reviewing this chapter, take a look at your zoning code to see where you currently stand with MMH policy!

■ **A more extensive audit, or code diagnosis, will look at a spectrum of zones and the related standards to understand if they support specific MMH types.** After completing a full code audit, it is possible to redefine select districts by holistically refining the zoning standards to allow the desired range of building types through proposed text amendments, introduction of new districts, or a full ordinance update.

See Chapter 5 for a simple code audit example!

?

Is the minimum lot area greater than 5,000 square feet per unit?

☐ Yes

☐ No

☐ Other

☐ I'm not sure

?

Does the zone allow any MMH types?

☐ Yes, at least 1 by-right

☐ Sort of, allows at least 1 with conditions or by special exception

☐ No

☐ I'm not sure

?

Are the side setbacks greater than 7 feet?

☐ Yes

☐ No

☐ Other

☐ I'm not sure

Barriers to MMH in the City of Greenville						
Barriers to MMH	Plan-it Greenville Comp Plan	Greater Pleasant Valley	Greater Sullivan	Green Avenue	Greenville Spartanburg	Greenville West Side
Max. Density Allowed: (Too Low)	●	●	?	?	?	●
Min. Lot Area: Too High	●	●	●	●	●	●
Max. Lot Coverage: Too Low	?	?	?	?	?	●
Max. Lot Coverage: Too High	?	?	●	?	?	●
Min. Off-Street Parking: Too High	?	?	?	?	?	●
Buffer Yards Required	?	?	?	?	?	●
Min. Open Space: Too High	?	?	?	?	?	●
Fire Sprinklers Required 3-units ²	●	●	●	●	●	●
Content is Supportive of MMH	●	●	●	●	●	●
MMH Types Identified	2 ¹	?	2 ¹	2 ¹	2 ¹	5

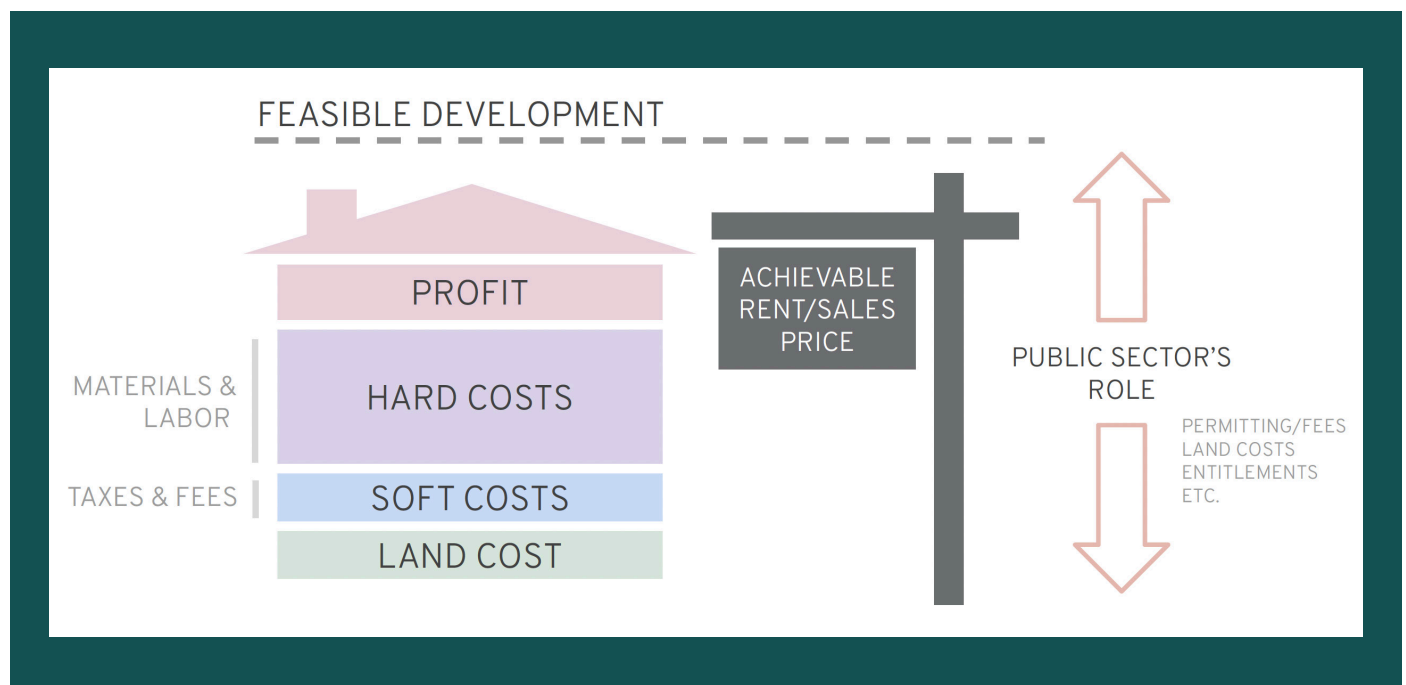
3.3 Financing Barriers

Changing regulatory standards is a critical first step. However, additional financing challenges can sometimes be the hardest barrier to overcome. Missing Middle Housing requires a different development approach.

Housing development involves a series of costs that developers must pay, which are passed on to the consumer through sales price or rent. These expenses include land costs, hard costs (site work, materials, and labor), soft costs (fees and taxes), and profit (return on investment). In most cases, developers are far more comfortable pursuing what they already know will be profitable: the single-unit house. In the United States, construction costs often rise with added units due to higher impact fees, complex permitting processes, higher costs per square foot for

multi-unit buildings, and increased parking requirements. These realities tend to stack the playing field against the development of Missing Middle Housing. While some of these costs may seem unrelated to zoning or planning, it is imperative to understand the correlation between our regulations and the impact on economic development. Local leaders must do their part to minimize unnecessary expenses to multi-unit building development in their community. See the following page for a more thorough discussion of these topics.

Figure 3.5 A breakdown of the cost of development which directly impacts the sale or rent price. Image Source: Casacadia Partners.



■ **Financing tools:** Often, typical financing assumptions and tools are not easily applied to smaller multi-unit residential projects. While some middle housing types, such as a duplex or triplex, can use a typical construction loan and conventional residential mortgage, more often banks are not as familiar or comfortable with these types of products. Buildings with more than four units must use commercial financing which can deter smaller developers or builders from pursuing these types of housing. The Federal Housing Administration (FHA) can help support middle housing types with lower down-payments for duplex, triplex, and fourplexes if the owner occupies one of the units.

■ **Regulatory Processes:** A study by the National Association of Home Builders (NAHB) estimates that aggregate cost of regulation imposed by government during development account for between 10- 25% of the final price of a new single-family home built for sale. While clear regulations are necessary, it is imperative to understand how these processes impact different aspects of constructions and development. The NAHB study states that “in an environment where housing is regulated in a complex way by a variety of federal, state and local entities, it is useful to have a numerical estimate of how much regulation exists and its

aggregate dollar value at present when contemplating new policies or revising existing ones.”¹ Identifying the local breakdown of cost can help evaluate how changes in the regulatory and entitlement process could provide direct and meaningful reductions to the overall cost of delivering new housing.

■ **Impact Fees:** Impact fees are one-time charges imposed by local governments on new developments to help fund new or expanded public facilities such as roads, sewers, schools, parks, fire, and emergency response services. While these provide important benefits, it is critical to understand their impact on small projects. Most often, these fees are charged per unit and are the same amount whether a unit is 500 sq ft studio or 5,000 sq ft home. These fees often make MMH types economically infeasible and incentivize a developer to either do a single, large house or many more units that can spread these costs out over a very big development.

¹Source: Paul Emrath, *Government Regulation in the Price of a New Home*, (Washington, DC: National Association of Home Builders, May 2021), <https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2021/special-study-government-regulation-in-the-price-of-a-new-home-may-2021.pdf>.

CLOSER LOOK

Why is the Playing Field Stacked Against Missing Middle Housing?

According to the Pew Charitable Trust, the per square foot cost of multi-unit building construction is higher than single-unit houses in the United States and Canada, but not abroad. In the US, the cost per square foot to build a single-unit home is \$145, a low-rise multi-family apartment \$204, and a mid-rise multi-family apartment \$225. The rise in construction costs seen here, but not abroad, hint to regulatory roots, not inherent differences in construction. Much can be said about the effects of the structure and requirements of building codes but it is important to note that local zoning codes can have a similar effect. Additionally, parking requirements, larger lot size minimums (and therefore land costs), and permitting procedures can similarly increase the construction costs of Missing Middle Housing Types.²

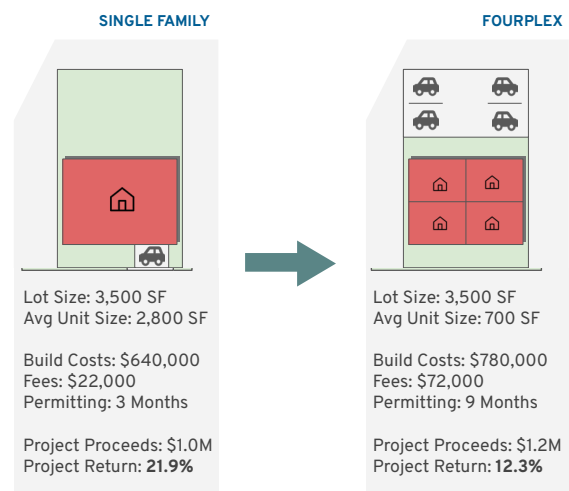


Figure 3.6 Images Source: Cascadia Partners

²Source: The Pew Charitable Trusts. (2025, February 27). Small single-stairway apartment buildings have strong safety record.

3.4 Cost and Complexity of Building Codes

Building codes, including the International Residential Code (IRC) and International Building Code (IBC), directly contribute to the cost and complexity of Missing Middle Housing.

Building codes set forth the minimum design and construction requirements for life safety, covering aspects related to structural integrity, fire safety, accessibility, and essential systems such as plumbing and electrical systems. The IRC applies to detached single-family and two-family structures, as well as townhouses with fewer than three stories. The IBC covers all other types of buildings, including many Missing Middle structures with three or more units. The IBC notably categorizes all multi-unit buildings the same, whether they are 3 or 150 units.

The IRC is often seen as more flexible and easier to use compared to the IBC, moving from a two-unit building to one that falls under the IBC (even with just three units) can significantly increase construction costs. Features like sprinklers, elevators, and extra sewer or water connections can make smaller multi-unit buildings much more expensive to build.

Additionally, many home builders avoid projects governed by the IBC due to the more complex review process and the limited availability of local tradespeople experienced with IBC projects.

States and cities have begun to recognize the challenges the IBC presents for small builders and developers, citing the added costs that are passed on to buyers and renters. As a result, several jurisdictions have amended local or state building codes to allow buildings with up to four or six units to fall under the IRC. This includes states like North Carolina and cities such as Memphis, Tennessee. Similarly, the 2015 IRC, adopted by many Illinois communities, required all residential buildings to contain sprinklers. Several municipalities, such as Peoria, have amended this section to mitigate extra costs. These local amendments help communities better address their housing needs and make MMH easier to build.



A duplex under the jurisdiction of the IRC.

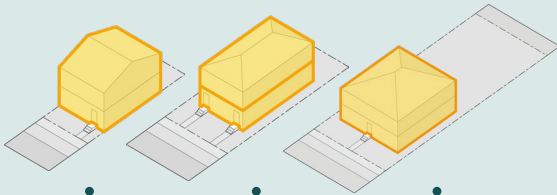


A mixed-use building under the jurisdiction of the IBC.

Quick Guide: IRC vs. IBC

Single-unit, townhouse, two-unit and less than three stories

Includes Missing Middle types such as a small house, townhouses, duplexes, and ADUs.



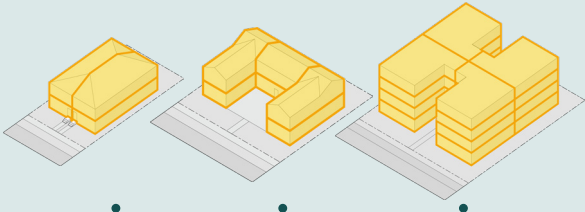
International Residential Code (IRC)

simpler, more prescriptive

- | Requirements |
|---|
| <ul style="list-style-type: none">• Limited fire resistance (1-hour fire wall for duplex between units, 2-hour for townhouse)• Sprinkler not always required• One exit per unit• Basic accessibility requirements, but not ADA compliant |

Multi-unit, commercial, mixed-use, or greater than three stories

Includes Missing Middle types such as fourplexes, multiplexes, and courtyard buildings.



International Building Code (IBC)

more complex

- | Requirements |
|---|
| <ul style="list-style-type: none">• Requires detailed fire-rating of stairs and walls (based on occupancy, type, and height)• Sprinkler system required• Multiple exits, fire escapes, wider corridors• ADA compliant• Includes prescriptive and performance-based provisions |

"The typical cost of building a second stairway and connecting the two via a central corridor on every level (as required by the IBC) is equal to approximately 6% - 13% of the total construction costs. The additional stairway and corridor consume around 7% of the building's floor area."
- Pew Charitable Trust

3.5 Community Concerns

In addition to the technical barriers, community opposition often challenges middle housing development because of public perception.

52%



of Peer Network participants noted that community opposition is one of the most prevalent barriers to housing initiatives.

Pushback from a community can prevent smaller developers from even considering building middle housing projects because of the increased time and risk of getting approval. The irony is that the unintended consequence of this type of community pushback is that larger projects are incentivized because they are the only entities that have the funding and legal projection to tolerate high levels of risk and time related to the entitlement process. Some of the commonly heard concerns regarding Missing Middle Housing types include scale of development, parking and congestion, and added density.

"These housing types will increase traffic and on-street parking"

70% of the Peer Network participants reported parking as a concern their community held about housing diversity. It is important to carefully select the desired building types, with special consideration given to the local infrastructure and local parking capacity, for a specific location. But generally, MMH types present a gentler increase in both traffic and density than large multi-family developments. If parking and traffic concerns dominate community conversations regarding housing diversity, it is critical to discuss the trade-offs and unintended impacts of requiring too much parking (which often drive bigger buildings or higher costs) as well as potential strategies for mitigating these concerns on a neighborhood scale rather than project by project basis.

"These housing types are too big"

Residents are commonly concerned about the scale of multi-unit housing developments. In these instances, it is important to recall the difference between house-scale and block-scale buildings and provide reassuring examples. Because they often look like single-family houses, some people may not notice the features that differentiate single-family and MMH types, such as more than one front door, or multiple meters. Neighborhood preference surveys and community walking tours are successful tools to educate the public about these housing types and identify different scales that exist when speaking about multi-unit development.

"The added density will be a burden on our infrastructure and schools"

One third of the Peer Network participants reported school and infrastructure capacity as a community concern. As stated above, the density created by MMH is subtle. However, it is important to consider how multi-unit development effects local infrastructure. Considering that MMH often serves empty nesters, single-person households, and couples without kids, it tends to have inverse effects on school capacity by generating taxes without adding enrollment. Projecting school enrollment can be helpful to ensure that accurate information is used to guide discussions about new types of housing in a community.

Case Study: Building Public Support

Champaign, IL



Learn more by clicking the icon!

Population

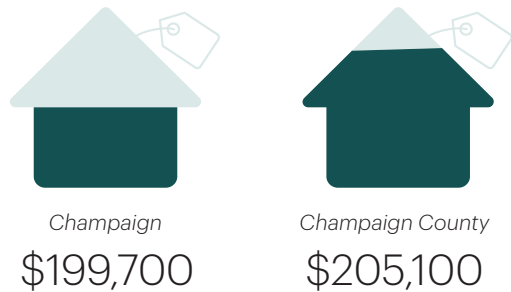


88,882 people

Annual Median Income



Median Home Value



Images taken from Champaign's community engagement efforts focused on the design of multi-unit buildings.

Key takeaways

- 1 Neighborhood engagement can inform regulations for well-designed middle housing.
- 2 Successful regulations focus on building scale rather than density.

Summary

In 2015, development pressures in Champaign's In-Town neighborhood, located just west of downtown, led to the construction of several new apartment buildings that sparked neighborhood concerns regarding their size and design. To reconcile these concerns with City Council direction to expand housing choices and supply, City staff initiated a zoning reform process for In-Town that began by directly engaging the neighborhood.

The City paused new development in In-Town and set an expectation for an efficient process that would result in new regulations in around 180 days. City staff held two neighborhood meetings that invited residents to share what design aspects of existing buildings they liked and did not like. City staff then held six meetings with a resident working group to craft a new zoning district.

The resulting In-Town Development Standards set a new approach to zoning that regulates the size and design of buildings, rather than density, and reduced parking requirements. Since 2018, the In-Town neighborhood has added eight new middle housing buildings that provide a total 229 homes. While the neighborhood and housing types chosen may differ from suburban communities, Champaign's process of engaging neighborhood residents offers a model that can be replicated in a wide variety of communities.

Source: City of Champaign, IL

3.6 Lack of Small-Scale Developers and Builders

Local developers are less likely to pursue unfamiliar housing types due to perceived risk. If there are no comparable products on the market, it can be a challenge to get developers on board.

Many Peer Network communities reported that few local developers seemed to be seeking Missing Middle Housing development opportunities, and for good reason. In addition to facing higher costs, permitting obstacles, challenging land use and regulatory barriers, local opposition, and risk-averse lenders, it makes sense that developers are more interested in pursuing the building types they know will be easy to construct, cost-effective, and have high returns.

In this circumstance, it is important to foster an environment that allows small developers to thrive by minimizing barriers and providing the necessary resources to make these projects pursuable. In order to make middle housing a viable and attractive solution, cities must go beyond just allowing it to actually incentivizing these building types. Middle housing is often well-suited for local developers that are focused on revitalization of their neighborhood and community.

Figure 3.7 A lack of market comparison or available units.
Source: Casacadia Partners, Peer Network Presentation 5

Nothing Comparable on the Market



Recent Sales Comparables:

Detached Home:

- 5bd/5ba
- 2,800 sqft
- \$1,495,000 / Unit
- Sold: Feb. 2025

Duplex:

- 2bd/3ba
- 2,400 sqft
- \$875,000 / Unit
- Sold: Sept. 2024

Fourplex:

- 2bd/1.5ba
- 1,100 sqft
- \$440,000 / Unit
- Sold: ??

Case Study: Building A Small Developer Culture

South Bend, IN



Learn more by
clicking the icon!

Population



103,453 people

Annual Median Income



Median Home Value

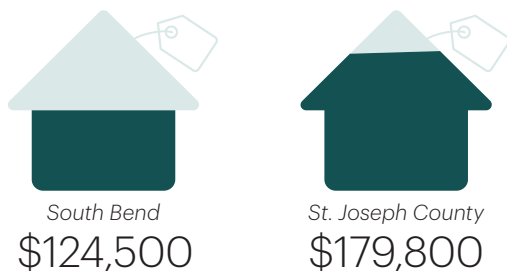


Figure 3.8 The Incremental Development Alliance (IDA) grows the capacity of regular people to develop hard-working, love-able small buildings in their neighborhoods.

Key takeaways

- 1 The key to incremental development is the embrace of small and replicable ideas.
- 2 Real estate development is an opportunity for community organizing and local partnerships.

Summary

Historically, great places were shaped by local builders, business owners, and community leaders. Today, however, development opportunities often go to organizations with significant capital that are more focused on profits than neighborhood building, exacerbating challenges in cities like South Bend, Indiana, a rust-belt city with a 24% poverty rate.

Mike Keen, an Indiana University South Bend professor, sought to change this dynamic. Keen bought 20 vacant lots in South Bend's Near Northwest Neighborhood, which had seen little development for over 40 years, and began building relationships with residents and business owners. In 2017, he partnered with the Incremental Development Alliance to host a community workshop and test the city's zoning code. He also organized small developer receptions at his home, including homeowners and businesspeople. These steps had tangible outcomes. Over time, property values in the neighborhood increased, and Keen's work is projected to generate \$15.2 million in private investment and \$300,000 in annual tax revenue by 2031—a 2,334% increase.

In 2019, South Bend embraced this model and launched the Economic Empowerment Department, supporting local developers with resources like financing templates, pre-approved housing plans, and workshops. This approach helps developers without wealth or formal training transform undervalued properties while making the development field more reflective of the community.¹

¹Source: Herriges, D. (2021, October 20). A new generation of town makers. *Strong Towns*.





Best Practices^{CHAPTER 4}

This chapter presents a spectrum of best practices—ranging from broader policy reforms to small-scale interventions—that support the development and integration of Missing Middle Housing.

In this chapter

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Neighborhood Planning and Small Area Plans	72
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4.1

Comprehensive Plans and Housing Studies

As adopted policy, Comprehensive Plans and housing studies play an important role in setting the stage for thoughtful implementation of middle housing through land use as well as identifying priority areas and strategies related to the future growth of a community.

Comprehensive Plans are intended to provide guidance on a wide range of big-picture decisions including housing, jobs, and transportation. These plans often include extensive public engagement to understand the needs and vision of the

broader community. For communities grappling with where and how to get started on incorporating middle housing, it is recommended that Middle Housing be identified and studied at the Comprehensive Plan level.

CLOSER LOOK

Best Practice for all Levels of Planning

This chapter explores how cities can incorporate Middle Housing at various steps in the planning process. Whether your community is tackling zoning or updating the Comprehensive Plan, it is important to remove barriers and help enable Missing Middle Housing in your community throughout each stage of planning!

■ **Comprehensive Plans** set housing and land use goals for the whole community that should be coordinated with infrastructure and mobility planning.



Define Middle Housing and identify potential opportunities for MMH, setting a goal for attainable housing choices within walkable neighborhoods.

■ **Neighborhood Plans** visualize how new housing can be integrated into existing neighborhoods, aligned with other local investments, and supported by community.



Demonstrate how middle housing types can fit within the character of a neighborhood and help support local services and amenities. It is helpful to also test for feasibility.

■ **Zoning** implements the strategies and goals set forth in the Comprehensive and Neighborhood Plans, ensuring that the underlying standards align with the adopted policy and the community's vision.



Amend base zoning districts and allowed uses to enable middle housing types that fit the local market, providing regulations to ensure the appropriate scale and character.

When incorporating Missing Middle Housing at the policy level, the following considerations can help build understanding, support, and momentum for broader housing choice.

How to effectively prioritize housing:

- Establish clear steps and standards for implementing walkable and mobility-friendly patterns of development, especially for new neighborhoods and centers.
- Analyze typical lot sizes and the different patterns of development that exist in your community, then make connections to which types of buildings fit within those lot conditions and patterns.
- Identify neighborhoods that are appropriate for the sensitive infill and allowance of duplexes, triplexes, fourplexes, and accessory dwelling units.
- Locate additional opportunity areas that could support more intense upper Missing Middle types and discuss key concerns/considerations for this scale of development.
- Clarify the level of transformation desired within different areas of the community and assess potential for additional housing types.

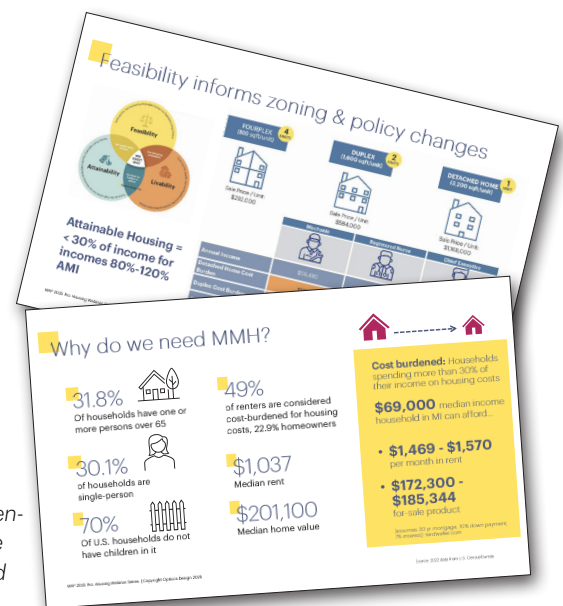
How to set clear goals and objectives based on actual identified needs:

- Clearly articulate the desire for and benefits of diverse housing options. It is important to frame this with both qualitative data and quantitative feedback.
- Define middle housing and identify the specific “house scale” and “block scale” building types that are appropriate in your community.
- Utilize market analysis to help identify target audiences and price points that demonstrate the need and potential for an expanded menu of housing choices.
- Describe efforts to preserve the existing middle housing stock alongside new strategies to meet the demand for new housing.
- Remove or adjust density ranges to accommodate a broader and more predictable range of housing.
- Call for parking reform that is tied to broader transit-oriented development initiatives, transportation planning, or a proposed/existing bike plan.

Figure 4.1 The Lake Bluff, IL Comp Plan process included community engagement to understand and explore different housing choices and visualized what Middle Housing could look like on opportunity sites.



Figure 4.2 A comprehensive plan should explore who your housing is and is not serving.



Identifying "MMH Ready" Areas

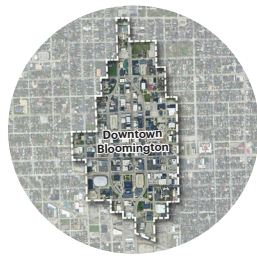
Cities can start to better understand where to prioritize changes that enable middle housing by mapping existing and potential "MMH-ready areas." This task can be helpful in order to set the proper vision and craft implementable goals at the policy level.

MMH is most successful when located in proximity to amenities and services. These areas may include larger "centers", like downtown or a major institution. But centers may also be smaller, such as a locally-serving neighborhood center or active, commercial corner or crossroads.

In many cases, identifying walkable centers and the neighborhoods surrounding them

is sufficient to establish a robust area for reintroducing Missing Middle housing types. In other cases, it may be necessary to look further and identify areas that have the potential to transform into such walkable centers through coordinated policy, design, and development efforts.

The purpose of this type of mapping is to identify areas that are most suitable for Middle Housing and look more closely at how the zoning in these priority areas could better support MMH. While areas outside these walkable centers have the potential to support MMH, this effort can help establish priority areas used to test changes to the underlying zoning districts before applying more broadly.



Downtown Bloomington

A citywide destination for retail, food uses, service, employment, entertainment, and recreation that is supported by surrounding neighborhoods with mixed-density housing.



Neighborhood Center

A neighborhood destination of food, shops, and services that provides convenient services to the immediately adjacent residential neighborhoods. A neighborhood-serving destination is smaller and less intense than a community-serving destination.



Transformable Mixed-Use

A community or regional destination for retail, food, and/or services. While many of these areas in Bloomington provide the mix of uses to be an active destination, they are often auto-oriented and require a car to access the amenities.

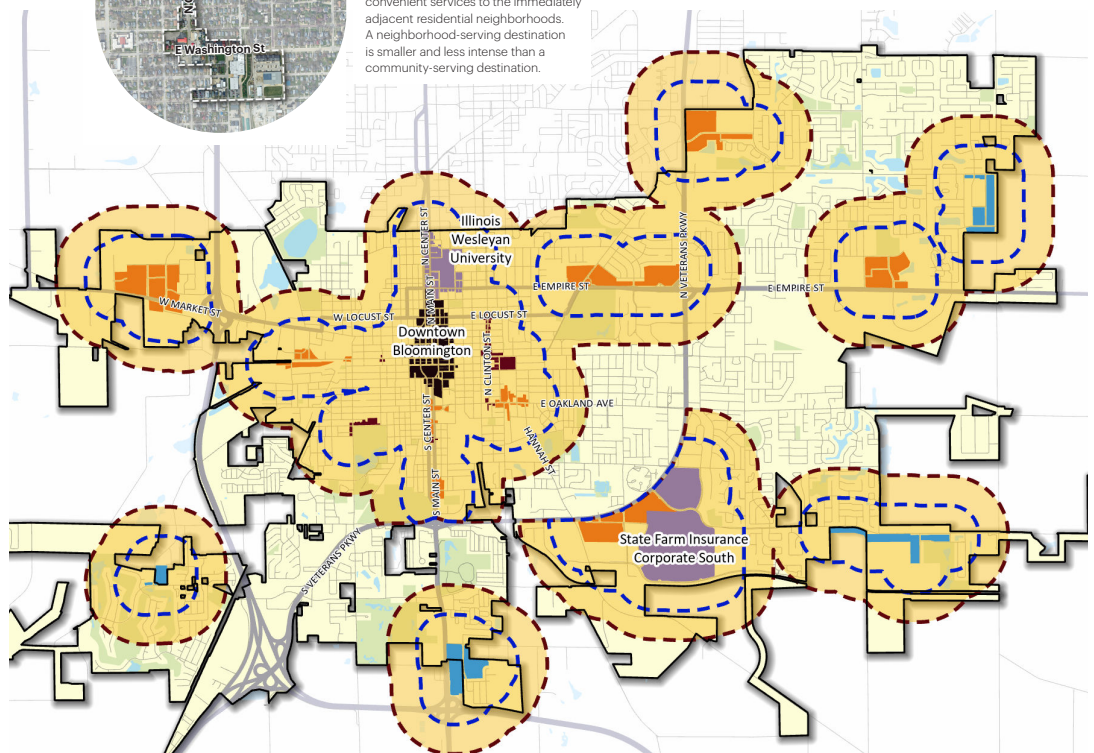
Figure 4.3 Where MMH could be prioritized in Bloomington, IL based on the mapping of existing and potential centers across the city.

Key

- Downtown Core
- Neighborhood Center
- Institutional
- Transformable Mixed-Use
- Prospective Center

Walkable Centers (Existing and Potential)

- 5 min. Walking Distance
- 10 min. Walking Distance, 5 min. Biking Distance



Understanding Different Contexts

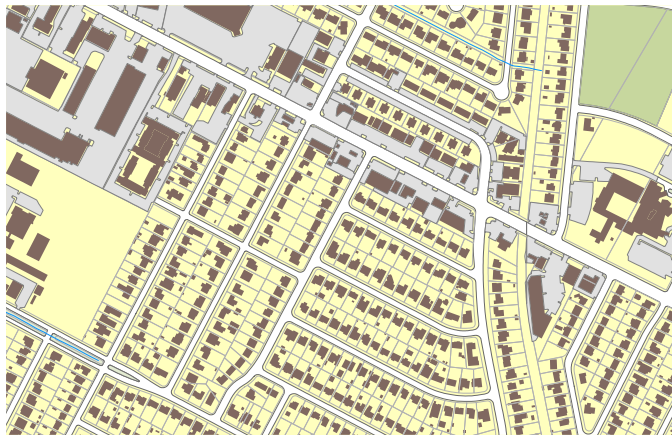
When planning for Missing Middle Housing, it is important to acknowledge the different types of contexts that exist in our cities. MMH types can be built in an auto-oriented context, but it will not attract the same kind of buyer/renter, will not deliver as compact or sustainable patterns of development, and will likely not achieve the same returns.

Walkable Urban: Best for MMH



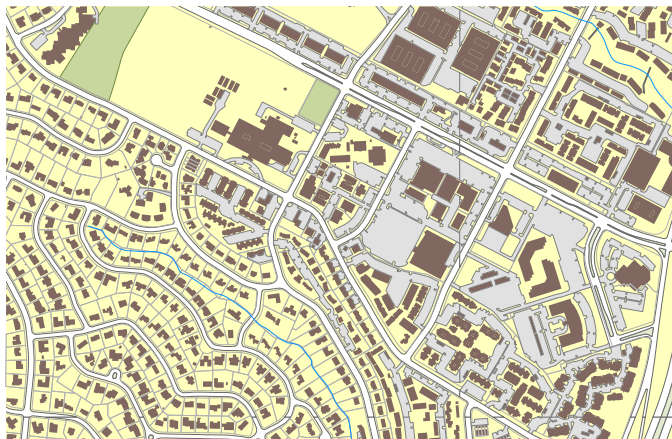
Walkable urban contexts, which are ideal for MMH, commonly feature small and regular block patterns (less than 500 feet in any direction), buildings that face the street with parking behind, and a mix of uses to encourage pedestrian use. Together, these attributes encourage walkability. A place is considered walkable when a person can walk or bike to fulfill some or all their daily needs. MMH types are most successful when located in an existing or newly built walkable context. Those who are interested in buying or renting MMH types are often willing to trade unit size for close access to amenities such as shopping, dining, and recreation.

Transitional: Good for MMH



Transitional contexts are in between Walkable and Auto-oriented. In many Chicago Metropolitan communities, the historic walkable urban core and traditional neighborhood areas are surrounded by newer neighborhoods characterized by a pattern of development that is more oriented towards automobile use. In many instances, these neighborhoods share some of the same walkable characteristics as the core and traditional neighborhoods to which they are adjacent, but certain elements may be missing or may suffer from under-investment. For example, there may be good connectivity but parking and curb-cuts located in front of newer development. In these neighborhoods, incremental changes can improve walkability to make these areas more "Missing Middle Housing-Ready."

Car-Centric Suburban: Less ideal for MMH



Auto-centric suburban contexts often feature winding street patterns with minimal cross streets, parking dominated streetscapes, and buildings that favor parking over the public realm, which discourages walkability. Missing Middle Housing types can be built in an auto-oriented context, but they will not attract the same kind of buyer or renter, will not deliver more compact, sustainable patterns of development, and will not achieve the same returns or rents for developers. The higher the walkability of a project context, the smaller the units can be, and the less off-street parking is needed, which can improve the attractiveness of Missing Middle types for developers.

Planning for Missing Middle Housing in Car-Oriented Contexts

It is not uncommon for a community to have a shortage of walkable context types and instead have a surplus of automobile-oriented areas. Auto-oriented contexts are typically places where the car is prioritized, buildings are pushed back from the street in favor of parking lots, and "big box" stores drive commercial activity. Even many transit centers in the Chicago region currently follow a more auto-oriented pattern. In these locations it will be important to align zoning with the realities of these environments to transition incrementally and/or allow the transformation of these areas into more walkable places.

The approach to increasing walkability in such places could involve transforming existing commercial centers, like an old mall or shopping center, or by developing undeveloped land into a complete neighborhood.

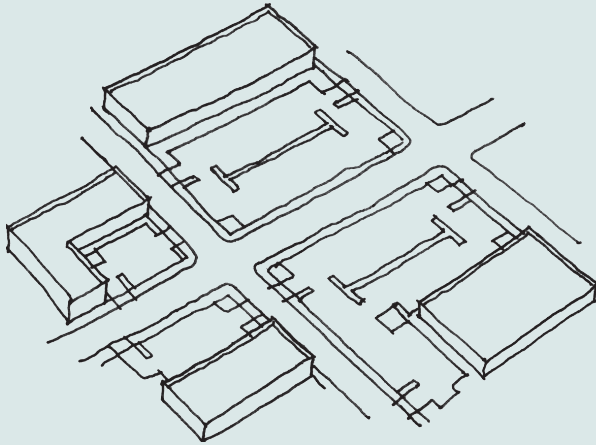
Identifying areas within your community that could become walkable centers and neighborhoods that support middle housing types is a key opportunity for supporting growth of our towns that is more sustainable, both economically and environmentally. Setting this framework for future growth at the policy level offers an important opportunity for public engagement and consensus building.

Figure 4.4 An example from Austin, TX shows the transformation of a declining shopping center including the proposal of (1) Mixed-Use center; (2) pedestrian-oriented character; (3) multi-modal access; and (4) house-scale transitions to adjacent neighborhoods.



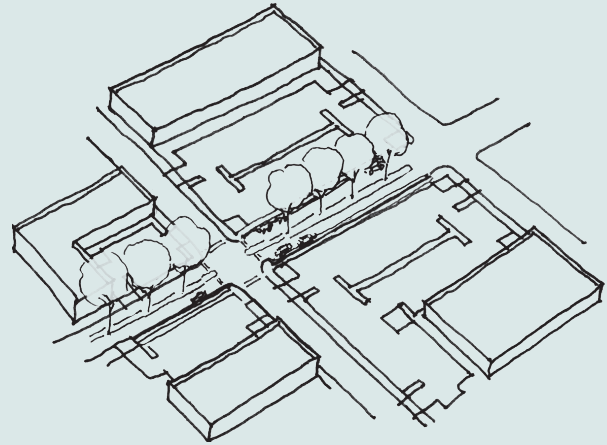
Incremental Change

Small, incremental changes can be just as important in the long run as big, transformative change. The following incremental steps lay the groundwork for a Walkable Center that can transform surrounding neighborhoods into MMH-Ready Neighborhoods and create suitable environments for MMH types.



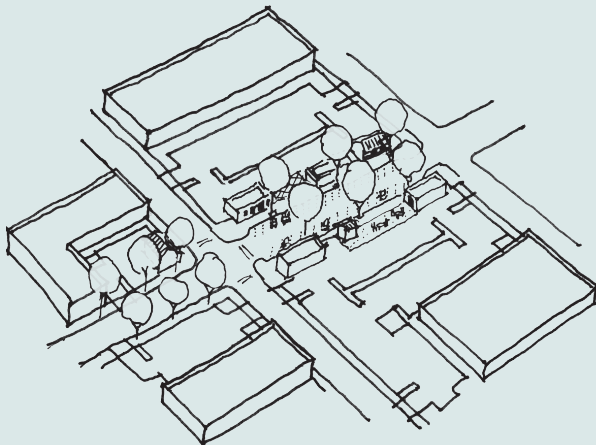
Existing Conditions

An auto-oriented, big box environment. Often underutilized, these buildings and parking lots offer ample opportunities to be repurposed.



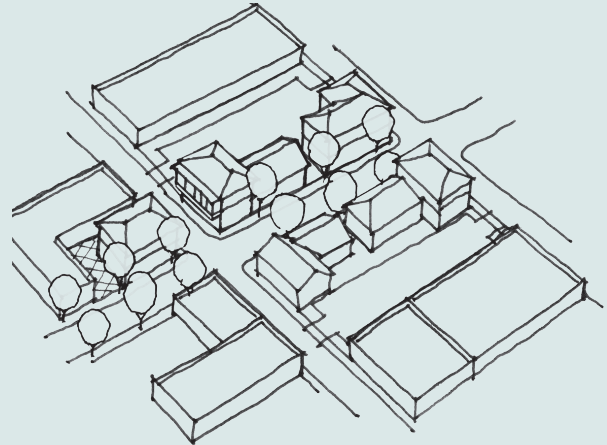
Step 1

Small changes could include landscaping, streetscape improvements and shared roads for bikes and cars.



Step 2

Temporary spaces for businesses at the sidewalk edge can help form a center of activity. These small changes can be made where buildings and lots are privately owned and where major changes in the near term are unlikely.



Step 3

Bigger changes may include new infill development at the sidewalk edge or around public space in areas where there is a desire for development of a more urban character and new buildings.

4.2

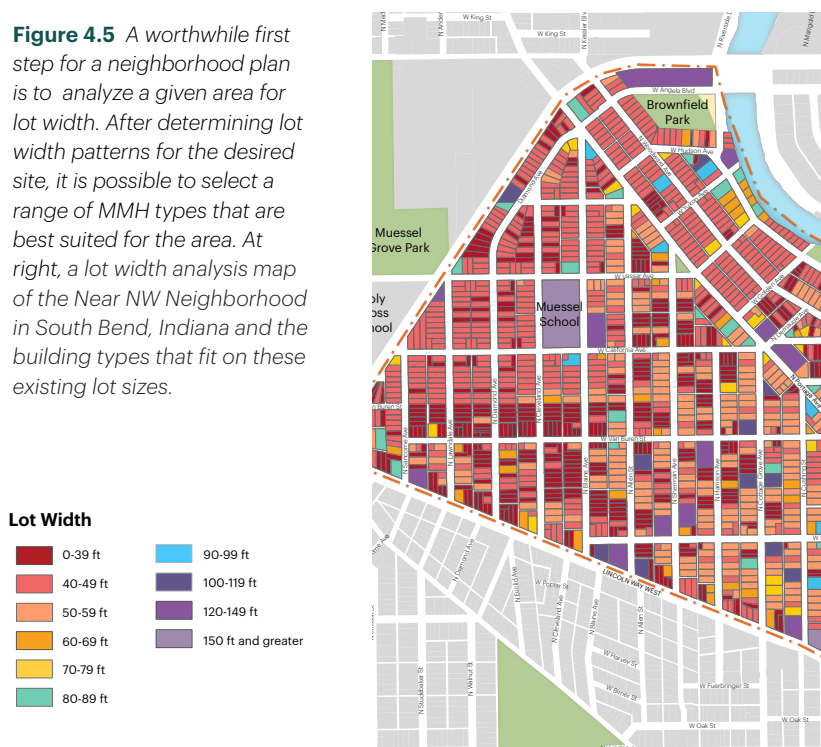
Neighborhood Planning and Small Area Plans

Neighborhood plans offer key opportunities to visualize and understand how middle housing can fit into both new and existing neighborhoods.

Planning at this scale should build on your community's broader housing goals to show how new housing choices can be implemented to fit into the scale and character of your neighborhoods and meet your market's needs. These plans must consider how new investment and development should be coordinated with other infrastructure and capital improvements. A framework plan shows how focused areas of your community can improve connectivity for all mobility choices and improve access to local

amenities. Within that framework, opportunities for new housing can be identified and prioritized appropriately. These vision plans can also help define a neighborhood's unique aspects with continued feedback from the local community. That identified character and scale can provide the basis for a form-based code or other infill development strategies that help translate and implement the vision that is set forth in the neighborhood plan.

Figure 4.5 A worthwhile first step for a neighborhood plan is to analyze a given area for lot width. After determining lot width patterns for the desired site, it is possible to select a range of MMH types that are best suited for the area. At right, a lot width analysis map of the Near NW Neighborhood in South Bend, Indiana and the building types that fit on these existing lot sizes.



See Chapter 2 for more info on the MMH building types and lot sizes.

Case Study: Neighborhood Planning

South Bend, IN

In 2019, a small neighborhood plan was generated for the Near Northwest neighborhood in South Bend, Indiana. Developing a vision and studying key areas or neighborhoods is an opportunity to evaluate the potential for Missing Middle Housing on a small-scale. These plans can be used to help community members understand which housing types are needed, how MMH fits into the scale and context of existing neighborhoods, and creates an opportunity to conduct an economic analysis to determine which development types are most feasible or attainable. Thoughtful and realistic vision plans, whether transformative or incremental, can be used to communicate what MMH implementation efforts may look like in the future on a neighborhood or even city-wide basis. Within a broader framework, smaller opportunity areas can be identified to create focus areas for investment, infrastructure improvements, and synergy between local housing providers.

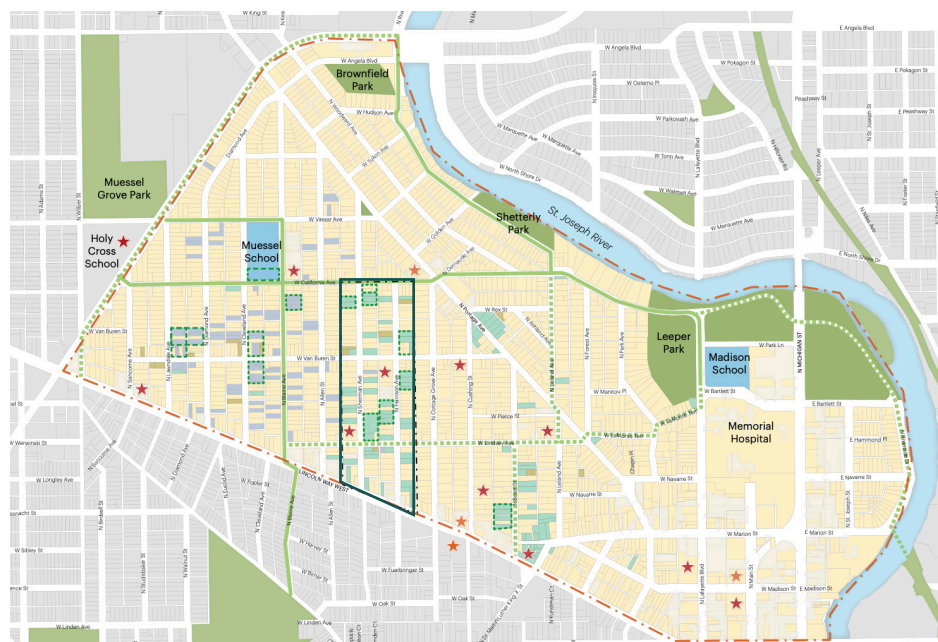
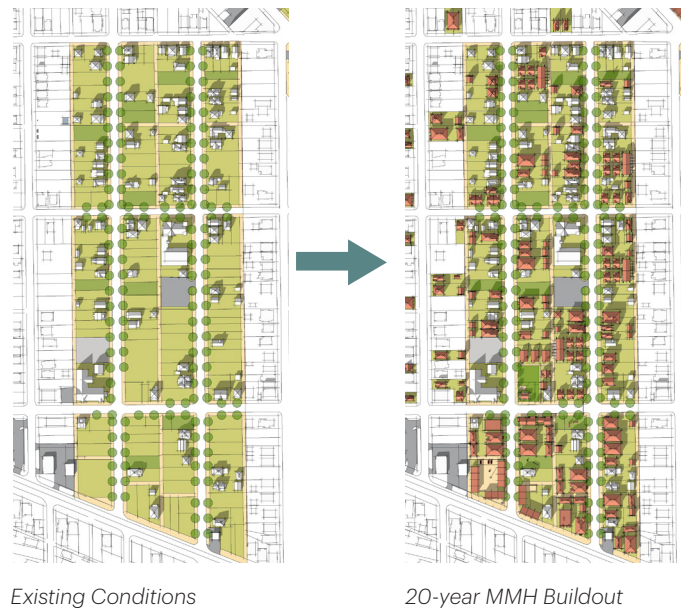


Figure 4.6 Map of the Near Northwest neighborhood highlighting key neighborhood features and housing development opportunities. The darker box represents a focus area where city and local partners focused and coordinated investment efforts while leveraging key city-owned lots.

Key Takeaways

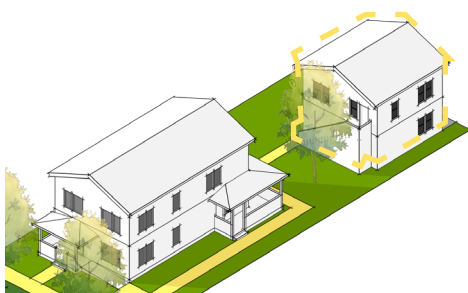
- 1 Neighborhood planning can be a useful tool to identify ideal building types, based on lot width, for a given neighborhood.
- 2 Neighborhood plans can be a useful tool for communicating housing need and zoning reform implications.
- 3 Specific development opportunity sites can be used to focus investment, housing, and infrastructure improvements.

4.3 Effective Zoning for MMH

It is important to consider which approach to zoning reform aligns best with your community's housing needs and staff capacity.

Zoning reform can be achieved in many ways, including incremental text amendments, zoning overlays, the adoption of Missing Middle Housing Zoning Districts, or a full zoning code re-write. It is important to carefully weigh

the cost and political will that is associated with each of these approaches to ensure the effort can be taken across the finish line. The following summarizes the most common ways that middle housing can be brought into a zoning code.



Incremental Text Amendments

This approach to zoning reform is typically low-cost and quick, but may not remove all barriers depending on the complexity of your code. Incremental zoning changes may include adjusting the allowed uses of a few zones to include MMH types, calibrating numerical dimensions based on existing lot and building sizes, or permitting ADUs by-right.



Zoning Overlay

A zoning overlay can be a quick and effective tool that avoids the challenge of changing existing zoning standards. However, this tool can add a layer of complexity to a zoning code. An overlay often works best for neighborhoods that have a community openness to new development, or are identified as MMH priority neighborhoods (see Section 4.1).



Middle Housing Zoning District(s)

MMH zoning districts are mid-cost and easy to incorporate into an existing ordinance because they can be mapped appropriately or allowed through a rezoning process. They are especially good for new growth areas or MMH-ready neighborhoods (see Section 4.1).



Comprehensive Zoning Code Update

A full zoning code update is a high-cost, long-term project that requires strong political will and ample community engagement, but it presents an opportunity to align standards and processes to enable the desired MMH types and create a place-based or form-based approach

Recommended Approach to MMH-Friendly Zoning

Where should it go?

MMH works best in neighborhoods that have pedestrian infrastructure and access to services and amenities. Identify these walkable areas of your community to understand how MMH could fit. If no walkable neighborhoods are present, then consider how underutilized areas of your community could transform into more walkable, mixed use environments that support a broader range of housing choices. It is helpful to analyze the opportunities and typical dimensions of these areas.

What housing types?

Different people have different housing needs and zoning has the ability to open up more of our community's land to accommodate a broader range of development types. Some people are willing to sacrifice private yards for smaller dwelling units within walking distance to public transportation and amenities, while

others want to maintain their private space but still have affordable costs. Care should be taken to understand local housing needs and ensure a spectrum of housing types are allowed within various contexts of each community.

What is the scale?

Multi-unit housing often gets a bad reputation for being too large and bulky compared to single-unit homes, but this can be solved with standards that ensure a compatible form and scale. When mapping new zoning districts, or determining where to make zoning text amendments, consider the scale of the existing context. Consider whether you are trying to enable house-scale or block-scale development, and identify which MMH types would be most appropriate for different locations.

The following spreads take a closer look at zoning best practices to enable MMH.

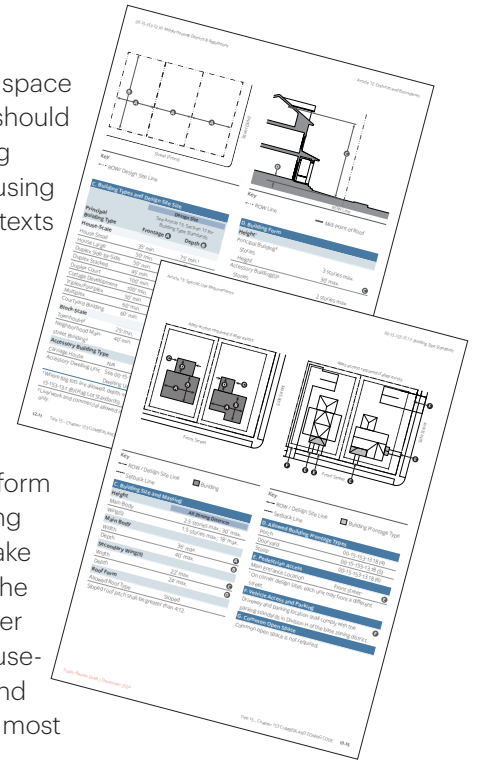


Figure 4.7 Example of form-based standards from Cumberland, IN that regulate building type and footprint.

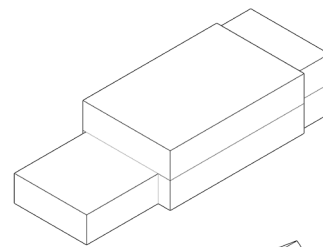
CLOSER LOOK

Form-Based Zoning

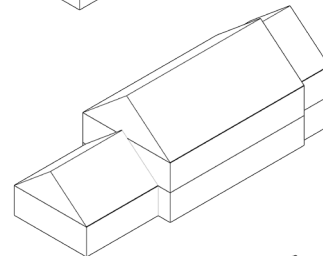
The conventional approach to zoning controls development by use, density, some bulk-standards, and FAR. In contrast, form-based zoning uses more design standards related to form to accurately control the scale of new developments. Some form-based zoning practices include the following:

- Regulating by lot width instead of lot area to avoid unintended density standards.
- Building form standards for select housing types that control the width, depth, and height of each building type.
- Building frontage standards that encourage walkable neighborhoods and pedestrian-oriented environments.
- Parking placement standards that ensure parking is located behind a building's primary facade.

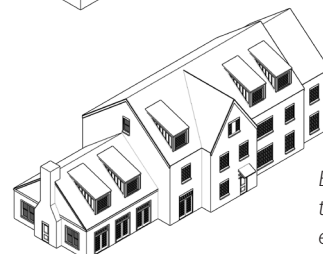
For examples of form-based zoning, see case studies on page 61 (Champaign) and 79 (Warrenville)



Building massing and form standards to control scale



Building height standards to keep neighborhood character



Building frontage and transparency standards engage the public realm

Assess Barriers in your Code using this Quick Zoning Audit:

Identify Missing Middle Housing Zoning District(s)

The first step to MMH zoning reform is to identify which zoning districts are intended to allow multi-unit buildings. Here, it is important to ensure that MMH types are allowed by-right and not with special condition. In order to effectively create a Middle Housing zoning district, the residential land uses may need to be adjusted to better define Middle Housing types. Consider the following residential land-use categories to better express Missing Middle Housing zoning districts:

- One-and Two-Family dwellings
- Middle Housing Dwellings (up to 5 units)
- Multi-Family Dwellings (5+ units)

Remove or Increase Allowed Densities

Density is typically a poor metric for understanding built outcomes. There is a misconception that higher densities have to equate to bigger buildings. If a community chooses to regulate density, it should be tied to the desired building types and based on thoughtful testing of existing lots sizes. One tool to incentivize middle housing is to actually adjust allowed density based on average unit size. *Why does this work?*

- Density based systems often discourage smaller units. Adjusting or removing density standards can enable Missing Middle types that typically have higher densities than are typically perceived.

Setbacks

Setbacks are another common zoning standard that may constrict Middle Housing types. Front, side, and rear setbacks need to be designed to allow the necessary building footprints for the intended MMH types. Some best practices include:

- Front setbacks (or facade zone) of 10-20 feet, depending on the context.
- Side setbacks of no more than seven feet.
- Rear setbacks of 10 feet for principal buildings and five feet for accessory buildings (such as ADUs).

Check your code:

Do you have any zoning districts that allow MMH types by-right?

- ☐ Yes!
- ☐ Some allowed by special exception.
- ☐ No, no MMH types are allowed.
- ☐ It is unclear.

Check your code:

Is density limited to less than 20 du/ac?

- ☐ Yes.
- ☐ No, it is greater than 20.
- ☐ There are no density regulations.
- ☐ It is unclear.

Check your code:

Are side setbacks greater than seven feet?

- ☐ Yes.
- ☐ No, they are less.
- ☐ It is unclear.

Use one of your Residential Zoning Districts to check your results!

Clarify the Intended Scale of Multi-Unit Housing

Often, zoning treats multi-unit buildings the same regardless of whether it is 4 units or 40 even though the impact on the surrounding neighborhood is very different. Regulating building width and depth (footprint) can help ensure that new development fits within a “house-scale” context. *Why?*

- This maintains a house-scale building size which helps build neighborhood buy-in and ensures buildings fit on typical size lots.
- This prevents large, attached building masses that extend across a wide property or block. If lots get wider (or aggregated), buildings cannot become out of scale. Instead, multiple buildings of a compatible neighborhood scale would be required.

Lot Area

As discussed in Chapter 3, lot area standards function essentially as a hidden density regulation, but are often times more restrictive than the stated density requirements. Regulating by lot width instead of lot area creates repeatable development patterns. Typical widths that correspond with the different middle housing types are referenced in Chapter 2, however, it is important to understand the existing lot sizes for various contexts of your community.

Parking Standards

Much can be said for how parking requirements impact housing development. These requirements often reduce the number of units that can be built on a lot. Parking can also drive building form and character, creating building ground-floor levels that are parking-centric. For Missing Middle Housing types, which rely on the efficient use of available land, consider the following standards:

- Reduce parking requirements to one space per dwelling unit but allow more parking to be built as needed.
- Adopt parking placement standards that require parking lots and stalls to be located behind the building's primary facade.

Check your code:

Does the multi-family use category differentiate buildings with less than five units?

- ☐ Yes.
- ☐ No, it does not.
- ☐ It is not clear.

Check your code:

Do you have minimum lot areas greater than 5,000 square feet?

- ☐ Yes.
- ☐ No, they are less than.
- ☐ It is unclear.

Check your code:

Is more than one parking space per unit required?

- ☐ Yes.
- ☐ No, 1 or less is required.
- ☐ Parking is regulated by unit size or number of bedrooms.

Case Study: Addressing Parking Minimums

Buffalo, NY



Learn more by
clicking the icon!

Population



278,349 people

Annual Median Income



Median Home Value

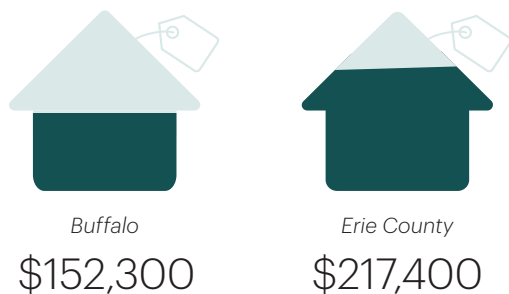


Figure 4.8 The effects of the advancement of vehicles on Buffalo's downtown, before and after.

Key takeaways

- 1 Eliminating parking minimums does not mean parking will not be constructed.
- 2 Reducing parking minimums is particularly helpful for mixed-use development in urban areas.

Summary

In 2017, the City of Buffalo eliminated required parking minimums for future developments as part of a zoning ordinance updated called "The Green Code" that shifted from traditional Euclidean zoning practices to a more form-based code. Minimum parking requirements are a significant barrier to development in terms of cost and space. Removing this requirement simplified the development process for infill and adaptive reuse projects, freed up valuable land for creative development, entrepreneurship, affordable housing, urban regeneration, and increased demand for public transportation. Scholars from the University of Buffalo studied 36 developments approved within the first two years of the reform and found that the reduction resulted in about 21% less parking spaces than would have previously been mandated, suggesting that removing parking minimums is only a modest policy change. However, developers of sites that mixed retail space and residential units incorporated 53% fewer parking spaces than required under previous zoning with four adding no parking, opting instead to share parking with other properties. The wide range of responses shows that removing minimum parking mandates gives the necessary flexibility to enable creative solutions that better respond to the needs of different projects and contexts.¹

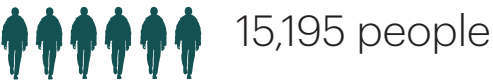
¹Source: "Ending Parking Mandates and Subsidies." www.strongtowns.org

Case Study: House-Scale Zoning Overlay

Warrenville, IL



Population



Annual Median Income



Median Home Value

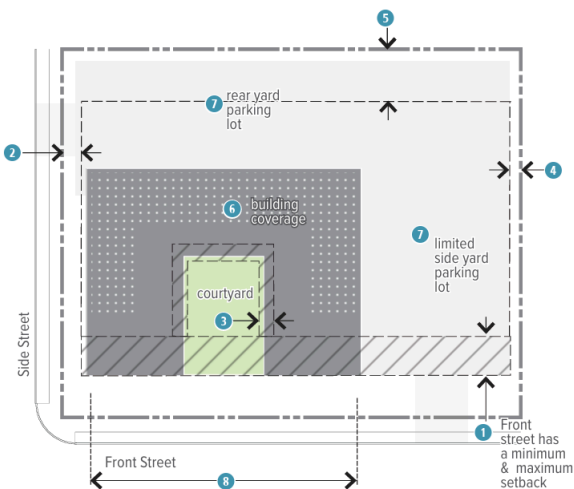
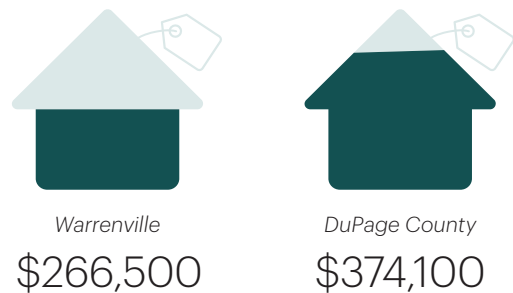


Figure 4.9 Example of the courtyard building type standards from the Warrenville house-scale zoning overlay.

Key takeaways

- 1 Design overlays can allow middle housing by-right, streamlining the process for housing providers.
- 2 An overlay can serve as a pilot approach for broader middle housing initiatives in future.

Summary

In August 2024, the City of Warrenville adopted Warrenville by Design, a Mixed-Use and Middle Housing Overlay District that provides a by-right path for diverse housing types, including cottage courts, duplexes, fourplexes, townhomes, rowhomes, and second-story residential above commercial spaces. Unlike other areas of the city, properties within the overlay can develop these housing options without requiring special approvals, streamlining the process for developers.

While the overlay district allows middle housing by-right, new developments must meet specific design guidelines that ensure high-quality materials, appropriate landscaping, roof and balcony standards, and compatibility with the surrounding area. The regulations balance growth with Warrenville’s small-town character, preserving green space and integrating new housing seamlessly into the community.

Centered around Warrenville’s historic Old Town and Civic Center, Warrenville by Design serves as a model for future middle housing initiatives across the city. The district is the result of a yearlong planning effort that engaged the community through listening sessions, a preference survey, open houses, and public hearings. More information, including adopted regulations, is available on the City’s website.

Source: City of Warrenville

4.4

Additional Policy Updates

Beyond zoning, it is important to consider additional regulations that can have a major impact on different development outcomes.

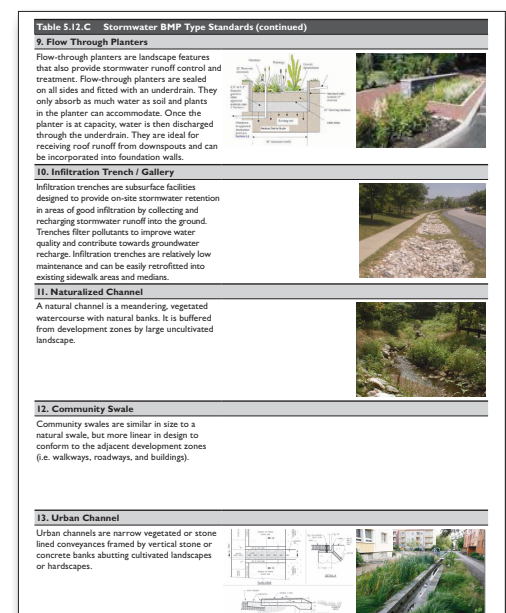
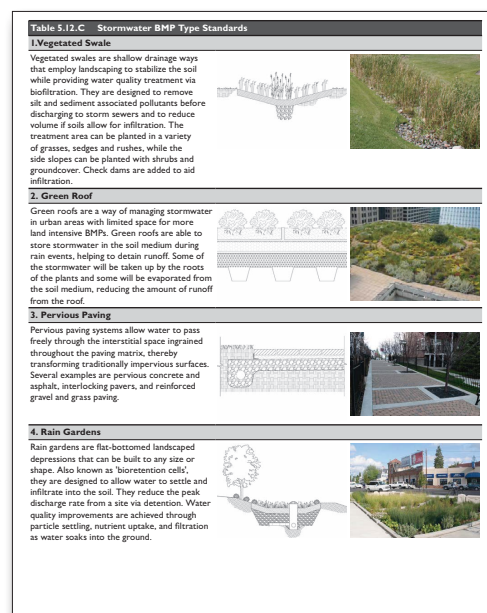
Subdivision Standards

Subdivision standards should be streamlined alongside zoning to allow the creation of compact, walkable neighborhoods and support small lot and middle housing opportunities. It is critical to ensure that your subdivision process is not requiring the consolidation of multiple existing properties to develop these types of middle housing. Subdivision standards should be further tested to check that fee-simple middle housing types, like cottage courts or side-by-side duplexes are encouraged.

Stormwater Regulations

Stormwater regulations should be tested to ensure that a wide range of mitigation and conveyance strategies are available to best fit the capacity of different scales of infill development. Development standards for new infill should thoughtfully integrate Stormwater Best Management Practices that are appropriate to different environments and locations, with practices that contribute to the overall character of the site. In most cases, cities should seek integrate stormwater controls into civic and open space networks rather than on a site-by-site basis which can often be difficult for small sites.

Figure 4.10 Example of stormwater standards from Beaufort County, SC that incorporate a broad menu of BMPs that fit a variety of contexts.



IRC and Fire Code Considerations

Amending state or local building code

The International Residential Code (IRC), as discussed in Chapter 3, governs the construction of detached single-family and two-unit structures. Because it is easier to use and more flexible than the International Building Code (IBC), it can be advantageous to amend the adopted IRC to include more Missing Middle Housing types (up to four units) under its jurisdiction. This update will help simplify the building design requirements for smaller multi-unit projects, which greatly increases the feasibility for some MMH types. In addition to allowing small multi-units to use the IRC, additional reform to IBC is also helpful.

Single egress stair reform

Single-stair access can boost housing development, reduce construction costs, and improve housing diversity. A new analysis by The Pew Charitable Trusts finds that single-stairway apartment buildings up to six stories can be as safe as other residential buildings, challenging outdated building codes that require two staircases. Current codes often make smaller four-to-six-story apartment buildings difficult and costly to construct, especially on urban lots, which often incentivizes the continued development of larger (50+ unit) buildings. Historically, concerns over fire safety have supported two-stairway requirements. However, modern safety features—such as sprinklers, self-closing doors, and fire-rated walls—have significantly reduced fire risks.

From 2012 to 2024, fire-related fatalities in New York City and Seattle's single-stairway buildings were extremely rare, and in no cases did the lack of a second exit impact outcomes.

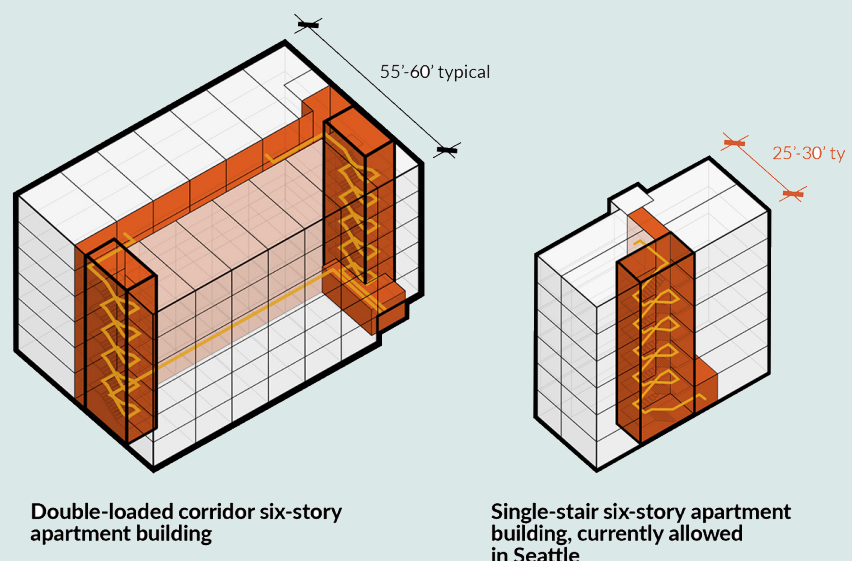
Single-stair buildings encourage opportunities for a broader range of unit sizes and design, supporting diverse households, including singles, young families with children, and multi-generational households.¹

Cities that currently have made building code reforms, or are considering it, include:

- Shelby County (Memphis), Tennessee allows upper-floor residences in buildings containing 3-6 dwelling units to share a common stair (passed in 2021).
- Nashville, Tennessee is considering allowing 3-4 unit structures under the jurisdiction of the IRC (ongoing consideration).
- The State of North Carolina amended the IRC to include 3-4 unit structures (passed in 2023).
- Seattle, Washington is considering allowing up to six units under the jurisdiction of the IRC (status unknown).
- The State of Michigan is considering allowing up to four units under the IRC (ongoing consideration).

¹From: "Small Single Stair Apartment Buildings Have Strong Safety Record," Pew Research Center, February 2025, <https://www.pewtrusts.org/en/research-and-analysis/reports/2025/02/small-single-stairway-apartment-buildings-have-strong-safety-record>

Figure 4.11 Diagrams at right from Pew Research Center highlight the differences in scale between a six-story two-stair and single-stair building. The latter of which is more suitable for urban lots.



4.5 Implementation Tools

Additional tools may be necessary to help implement zoning changes and further spark the development of Missing Middle Housing beyond zoning and policy reform.

Given the number of variables that affect development outcomes, it is safe to say that zoning and policy reform are no "silver bullet." Even the most thoughtfully crafted zoning codes and policies cannot guarantee the production of abundant housing. Therefore, municipalities of all kinds should consider what else they can do to build up local housing diversity.

The following tools have been used by other communities across the region and country to further encourage the development of Missing Middle Housing by reducing barriers to entry for small developers and lowering the cost (or red tape) to deliver small, multi-unit or small lot housing types.

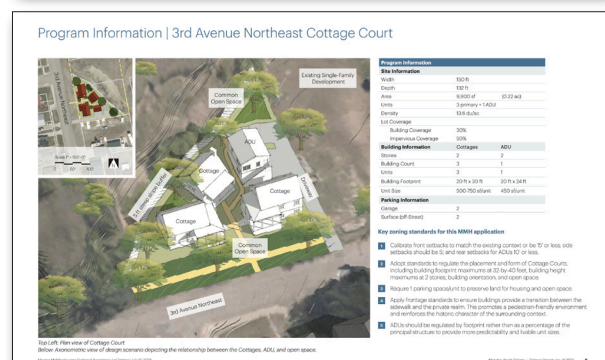
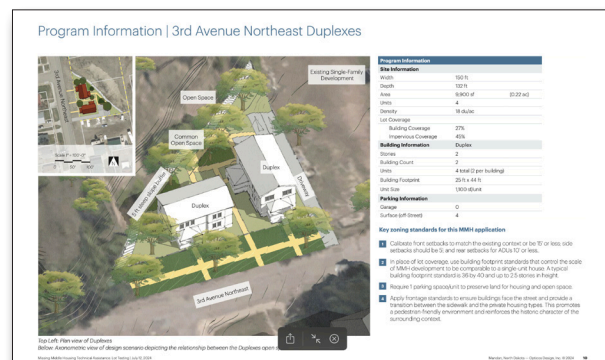
CLOSER LOOK

Testing to Understand Desired Outcomes

"Test fits" are visualizations of different development scenarios on typical lots or real world sites. Examples like those shown on the right, can be a helpful tool for communicating about the scale and character intended by MMH as well as attracting small-scale developers for a specific site. These documents can help communicate the intended housing types, scale, building placement, lot coverage, and other important site metrics. Additionally, they can be used to test if your existing zoning standards are allowing different development outcomes and understand which regulations may be creating a barrier.

As stated in Chapter 3, many communities are unable to develop MMH because of community pushback or developers are unfamiliar with these housing types. Graphic illustrations help de-mystify the intended outcomes of zoning changes and MMH. In conjunction with financial feasibility analysis, test fits can be a low-cost but impactful tool for communities looking to enable and develop MMH.

For more test fit examples, see Chapter 5.



Potential Strategies

Developer Guide. A developer guide, such as the resources provided through Build South Bend or Kingston Forward websites, can be a valuable tool to help make MMH more accessible and practical for local developers. These sites provide a one-stop shop for all things related to the design, development, and entitlement processes of a jurisdiction. Helpful resources may include how-to guides on navigating local regulations and processes, pro-forma templates, available land inventory, potential trainings, or community workshop tools.

Municipality-owned Land. Leveraging underutilized municipality-owned or institutional land to create MMH housing opportunities can be a key strategy in spearheading initial development of new types in a community. Conducting an audit of municipally owned land in your community can help focus these efforts. Consider arranging Community Land Trusts with local or regional nonprofits for these properties to help keep prices attainable over time. Identify ideal housing types for these sites with regards to the surrounding neighborhood context and levels of walkability, develop an RFP process to promote the development of these types, or consider using this land for a pilot project.

Developer RFPs. A Request for Proposal, or RFP, for key opportunity sites can be used to clarify desired housing types and capacity of a site while also attracting small-scale developers interested in building MMH. This approach works well in conjunction with municipality or land bank owned parcels, as mentioned above. When the municipality sets out clear and predictable expectation for a site, and does some of its own due diligence on what local regulations allow, it can greatly streamline the process for developers. Taking the lead to engage the neighborhood about potential opportunities can also help build community support before a developer even takes on the risk of purchasing a lot.

Pilot Projects. There is a need for built examples that showcase new development of MMH in our region, both to build community understanding and present a model for future projects. With this aspect in mind, communities have had success with pilot projects that test the environment for MMH before embarking on code changes or pre-approved plans. Consider working with a local partner to develop MMH types to show what it would look like in a neighborhood, demonstrate feasibility, and understand local challenges particular to these small, multi-unit projects. As part of this approach, municipalities have provided streamlined standards and approval, mortgage guarantees, and/or free or discounted land to help these initial pilot projects.

Pre-Approved or Permit-Ready Plans. If your community has laid ground work for zoning reform and begun to build support for small-scale development, then pre-approved housing plans are a good next step to expedite MMH development. Municipalities can adopt a catalogue of plans for narrow lot and small MMH building types available to be used on infill sites. These plans can help promote good design, reduce design fees, and lower permit time. Pre-approved plans can provide predictability to neighbors and an important tool for small builders or non-profit housing providers that may be new to these types. However, it is important to understand local licensing requirements and feasibility of the selected designs. Lessons can be learned from established programs in South Bend, IN; Spokane, WA; and Kalamazoo, MI.

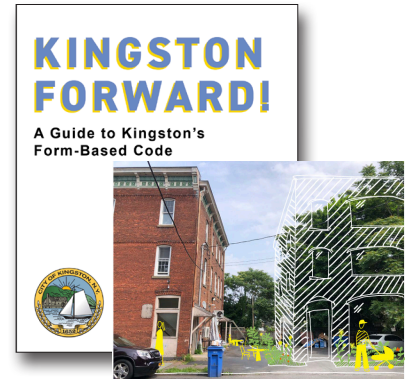


Figure 4.12 Developer and User Guide for FBC in Kingston, NY



Figure 4.13 Pilot Project of a Side-by-side Duplex in Kalamazoo, MI



Figure 4.14 Community Land Trust with existing MMH in Asheville, NC



Figure 4.15 Designs and built examples of pre-Approved plans in South Bend, IN

4.6 Community Engagement

No matter which approach your municipality takes, it is critical to build support and partnerships within the broader community.

Fostering local opportunities for education and feedback is important throughout any process but is particularly critical, and challenging, when it comes to housing. Leaders and staff should look at a wide range of strategies to engage a diverse set of stakeholders on the topic of housing choice or zoning reform. The following recommendations help guide productive conversations on these topics.

First, Talk About Why

Every conversation should begin with why providing housing choice is being considered, including the local goals or policies that support this endeavor. Further, it is important to recognize that middle housing is just one tool in the toolbox needed to meet goals for housing diversity and supply.

At the highest level, these goals are at the core of why MMH is needed in our region:

- To respond to changing housing needs
- To increase housing attainability and home-ownership
- To strengthen local economies
- To promote compact and sustainable development

Building support means understanding local demand. It is important to ask the following questions in your engagement:

- What are the housing needs in your community or region?
- Who is this housing serving?
- Where does middle housing make sense to prioritize?
- What housing types are most needed?

Public
Engagement
Toolkit



Listen First

In any engagement, it is helpful to address community concerns. Any new construction or development may be perceived as bad, or too much change. Further, it is often difficult for the general public to understand what zoning actually limits or controls which can be a source of uncertainty or fear.

A people-first narrative

Understanding community concerns and mitigating fear is important, and creating a people-first narrative will go a long way. Starting a conversation with *“we need more density”* is a scary proposition compared to a proposition of *“we need more housing for our seniors or single-person households.”* Both may be true, but density is much more unpredictable for community members. Efforts to listen to local concerns, ask about preferences, and gather feedback can go a long way in reducing fear and push back.

Avoid trigger terms and name calling

Terms like *upzoning* and *density* can cause immediate negative reactions that are hard to overcome. Stereotyping renters compared to owners in a negative way is unfair. Even classifying

people as “NIMBY” or “YIMBY” is unproductive. It is best to move past these terms and instead focus on the needs of your community.

Provide many ways of participating

The following ideas provide a range of opportunities to educate and engage community members on their own terms in a variety of locations:

- Create a campaign using education materials about Middle Housing
- Provide resources from a variety of trusted groups like AARP and NAHB
- Conduct a visual preference survey and mapping exercises to understand where different types may be desired
- Walking Tours of neighborhoods that have existing or new Missing Middle
- Meetings, round tables, and presentations with local community groups and neighborhood stakeholders
- Hands-on site planning exercises to understand how zoning impacts what can be built
- Open houses and community events
- Visualizations or models of real sites in your community



Figure 4.21 Open-house workshops can be hosted to address community needs and concern and identify priority neighborhoods.



Figure 4.22 Walking tours are a helpful tool to educate about MMH, point out local examples, and help the public understand how these types fit in a residential neighborhoods.



Figure 4.20 Visual preference surveys can help identify community priorities for housing choice.

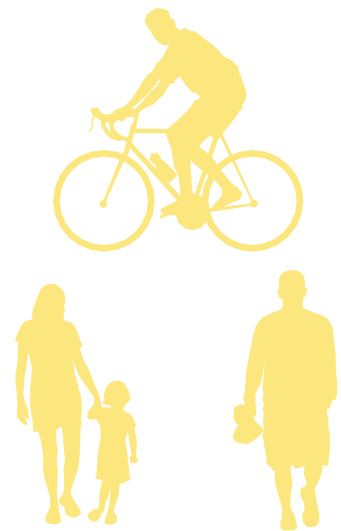
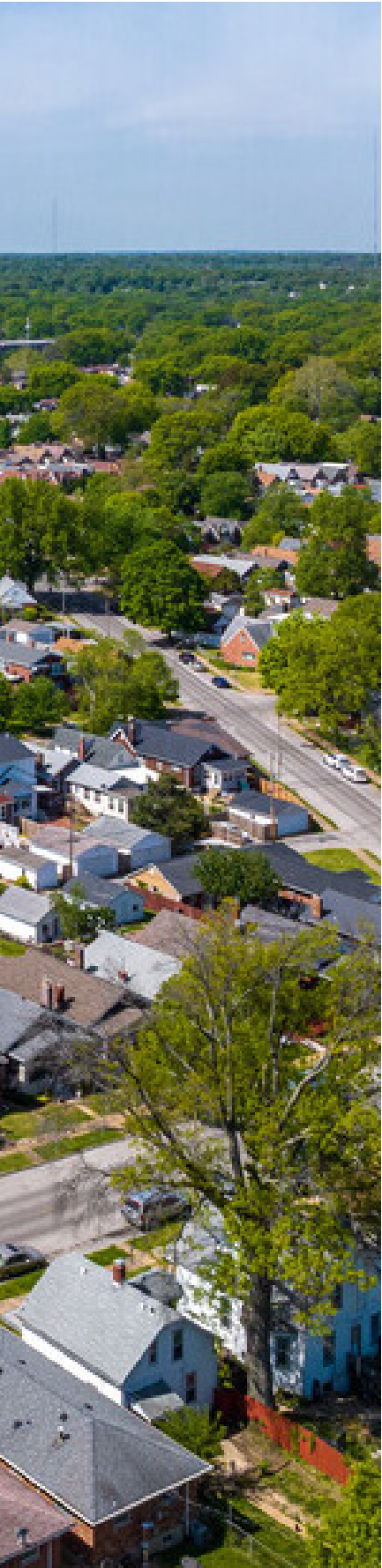


Figure 4.23 Physical models may be used to help effectively communicate the scale of MMH as compared to typical residential neighborhoods.





Where MMH Fits in our Communities

CHAPTER 5

This chapter explores how Missing Middle Housing can be thoughtfully integrated into a variety of neighborhood contexts. It also outlines context-specific zoning standards to help guide appropriate and effective implementation across different community types.

In this chapter

Applying Best Practices	88
Development Opportunities	90
Neighborhood Infill Test Fit	92
Corridor Infill Test Fit	96
Large Site Test Fit	100
Insights Applicable to Other Communities	104
Local Developer Insights on Test Fits	106

5.1 Applying Best Practices

Middle housing types should be developed thoughtfully within a neighborhood based on the appropriate location and scale.

Visualizing MMH

In addition to enhancing housing choice across a neighborhood, supporting walkability, and providing additional units, MMH can fit into a variety of conditions that typically exist across a community. Most notably, it can serve as a transitions between higher-and lower-intensity areas, as a way to provide infill within a neighborhood block, or offer creative solutions for more challenging sites.

Successfully siting MMH types is key to ensuring community needs and preferences are met and the chosen housing types complement the existing neighborhood character and scale. In order to do so, it is important to understand where in a block MMH might be developed. See the next page for the various applications.

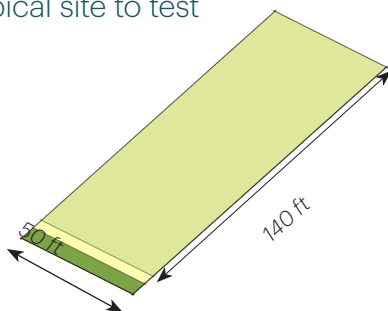
This chapter explores local examples and opportunities using "test fits" to examine different possible applications of MMH.

Test Fit Overview

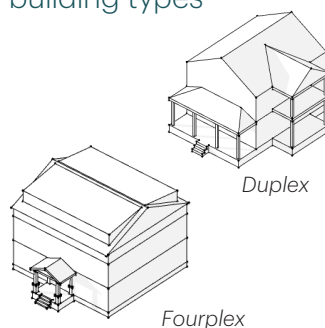
The test fits found in the following sections were carefully selected to represent common scenarios and opportunity sites found across the 7-county region, with the goal of visually representing a range of MMH solutions.

Test fits are the process of examining a range of potential design scenarios that are possible on a specific site, with consideration of zoning standards and physical parameters. Each test fit represents one possible way that a developer could lay out buildings, circulation, parking, and open space. While alternate schemes are possible, the test fits shown here generally reflect a balance of standards that protect neighborhood compatibility, maximize yield in terms of units, and reflect the best practices for design and constructibility. The visualizations shown here are intended to inspire discussion and understand how MMH fits on common sites.

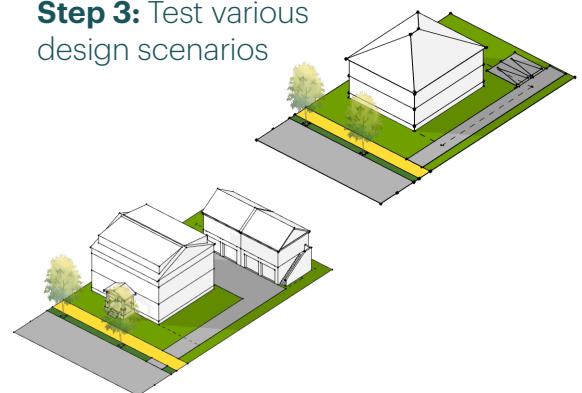
Step 1: Select a typical site to test



Step 2: Determine building types



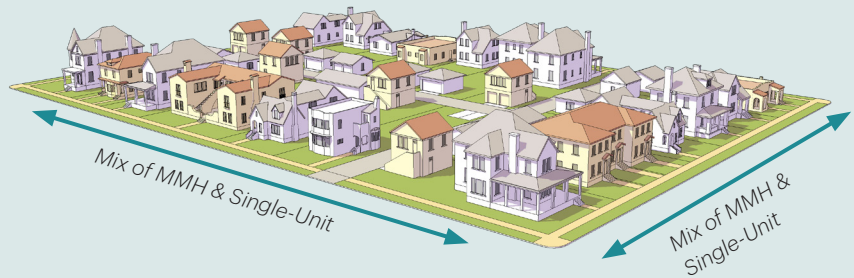
Step 3: Test various design scenarios



Middle Housing Applications Within a Neighborhood Block: One size does not fit all!

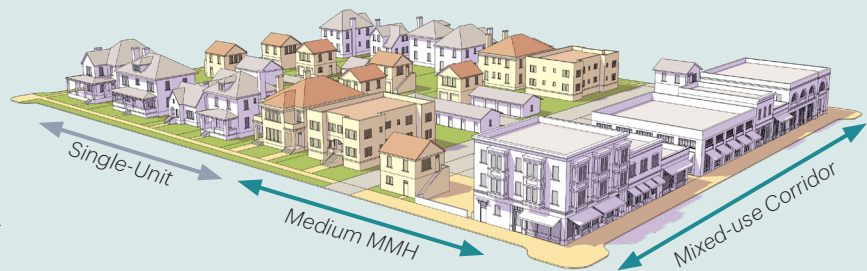
Small & Medium MMH: Distributed throughout a single-unit neighborhood as infill.

Small and Medium Middle Housing types such as duplexes, cottage housing, triplexes/fourplexes and small courtyard buildings provide “gentle density” by infilling into a neighborhood of primarily detached houses. These small to medium housing types blend in well due to their house-scale size and form.



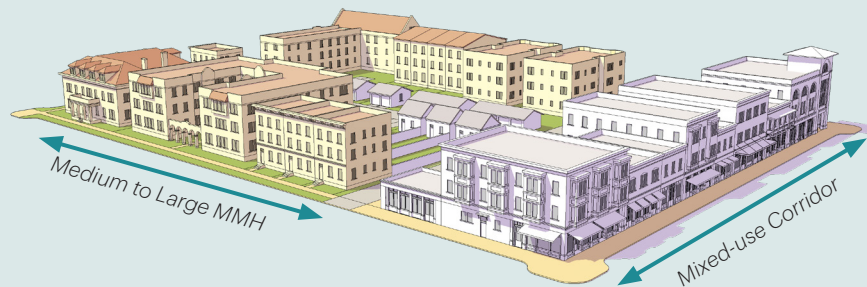
Medium MMH: Acts as a transition from a mixed-use corridor to a single-unit neighborhood.

Small and Medium Middle Housing types can create great transitions in scale and massing between busier mixed-use corridors and quieter primarily single-unit detached residential neighborhoods.



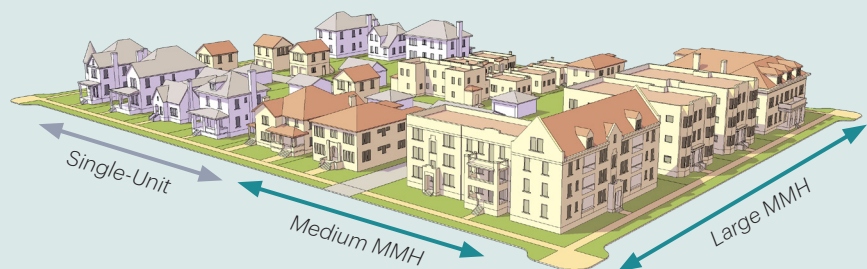
Medium to Large MMH: Transitions from a mixed-use corridor to multi-unit neighborhood.

Medium and Large Middle Housing types can create transitions in use and massing between busier mixed-use corridors to primarily residential neighborhoods. Additional housing units provide more ridership opportunities for transit.



Medium to Large MMH: Provides additional housing units along the corridor.

Medium and Large Middle Housing types can provide additional housing units along the corridor in areas where mixed-use, commercial, and/or larger-scale apartment buildings (4+ stories) is not appropriate for the context or feasible. Additional housing units provide more ridership opportunities for transit.



5.2 Development Opportunities

Peer network applicants submitted potential sites in their respective communities that would be appropriate for MMH. All of the sites (37 total) were categorized based on the type of development opportunity.

Priority was given to sites that are currently municipally owned with hopes that the applicable village or city can use the visualizations to engage the local community about potential scale and form, and to help understand how zoning shapes the built outcomes that are possible within these environments.

The types of development opportunities below were identified as common amongst all peer network communities; therefore the design lessons taken away from each test fit can theoretically be carried forward and applied to similar sites found across the peer network communities and our region.

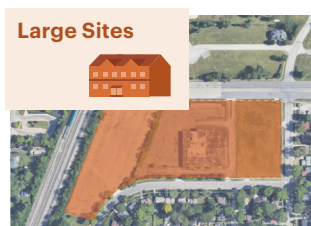
Development Opportunities for Missing Middle Housing



If the surrounding properties are predominantly within a house-scale building form, the smaller end of the MMH palette of types is most appropriate. Because these types feature building footprints similar to a typical house, they fit on standard residential lots and therefore will fit into the scale of the surrounding context. In residential neighborhoods with typical lots anywhere from 30' wide to 70' wide, the design considerations outlined in the **Neighborhood Infill Test Fit on pg. 92** can help guide development of MMH in this context.

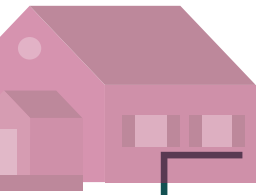


When buildings begin to exceed the house-scale form and occupy more of an urban block, then medium to larger types of MMH may be appropriate. Major corridors regularly feature these building types which have different design considerations than residential infill contexts such as the need for activated ground floors to bring liveliness to the public realm. When working in this context, the form and scale of Upper MMH types (see Ch.2) are often compatible with the nearby commercial or mixed-use buildings, and the additional units help feasibility. For more detailed design considerations for Underutilized Corridors, **see the Corridor Infill Test Fit on pg. 96.**



Many sites a municipality may consider for development may be larger than a typical lot, often greater than two acres. These sites may be adjacent to both corridors and residential neighborhoods, or located at the edge of a town. These scenarios present the opportunity to create new neighborhoods that support new housing and amenities, but require special planning to incorporate a mix of uses, a range of building types, and public space. If larger than five acres, “human-scaled” blocks are needed to offer connectivity and walkability. **See the Large Site Test Fit on pg. 100.**

Building Type		Development Opportunity		
		Neighborhoods	Corridors	Large Sites
		 Lot width: 30'-70' Bldg. height: 1-2.5 stories	 Lot width: 50'-200' Bldg. height: 3-4 stories	 Lot width & building height vary by context
Small	Detached Single-Unit House			
	Plex House (2-6 units)			
				
				
Medium	Attached Single-Unit Townhouse			
				
				
Large	Med. Multiplex and Courtyard Buildings (4-12 units)			
				
	Lg. Multiplex and Courtyard buildings (8-20 units; See Upper MMH on Pg. XX)			
	Block-Scale Buildings (20+ units)			
		KEY  Ideal Type  Not Ideal		



5.3

Neighborhood Infill Test Fit

The neighborhood infill test fit features house-scale buildings, small to medium lot widths, building frontages, and parking at the rear of a lot.

When repeated throughout an entire neighborhood, the design features demonstrated in the following test fit will support a walkable house-scale neighborhood that maintains the feel of single-family living.

Developer perspective

In a round-table discussion, local developers and design professionals gave feedback on the neighborhood infill test fit. Their feedback was used to ensure the illustrated test fit matches best practices and real-world practice. Feedback received includes the following:

- Construction of a single firewall, as seen in a side-by-side duplex (or townhouse), is easy and attractive to developers.
- On-slab foundations, discrete and private entrances, and quick construction time are developer priorities for these types of sites.
- Many duplex types, especially the stacked duplex, have the appearance of a single family home which helps with community buy-in.
- Stacked units are ideal for rental products, whereas side-by-side units can work for fee-simple ownership.
- Efficiency and parking is important but porches and stoops help with curb appeal and neighborhood feel.

Neighborhood Infill Characteristics Illustrated

- House-scale building form with pitched roof
- Public facing residential frontage types
- Parking at rear of lot

Figure 5.1 An illustration highlighting the features of a residential neighborhood infill project from the pedestrian experience.



Nearhood Infill Design and Zoning

The neighborhood infill test fit in Aurora features design characteristics that are typical to neighborhoods of single-unit homes, including a building height under 2.5 stories, building form and scale that feels like a house, parking access and placement that is behind the front facade, and setbacks typical of the surrounding neighborhood. These characteristics are easily translatable to zoning standards that are conducive to MMH development by calibrating regulations to fit typical lot widths and matching the same design standards that are applied to single-unit development.

Address	574 E. Galena Blvd. Aurora, IL
Site Size	9,750 sf
Context	Walkable residential neighborhood
Building form	House-Scale buildings (detached single-unit, small multiplexes)

BUILDING CHARACTERISTICS

Building Height: 2.5 stories (22')
ADU Height: 2 stories (20')

- A Duplex: 2 units
- B ADU: 1 unit

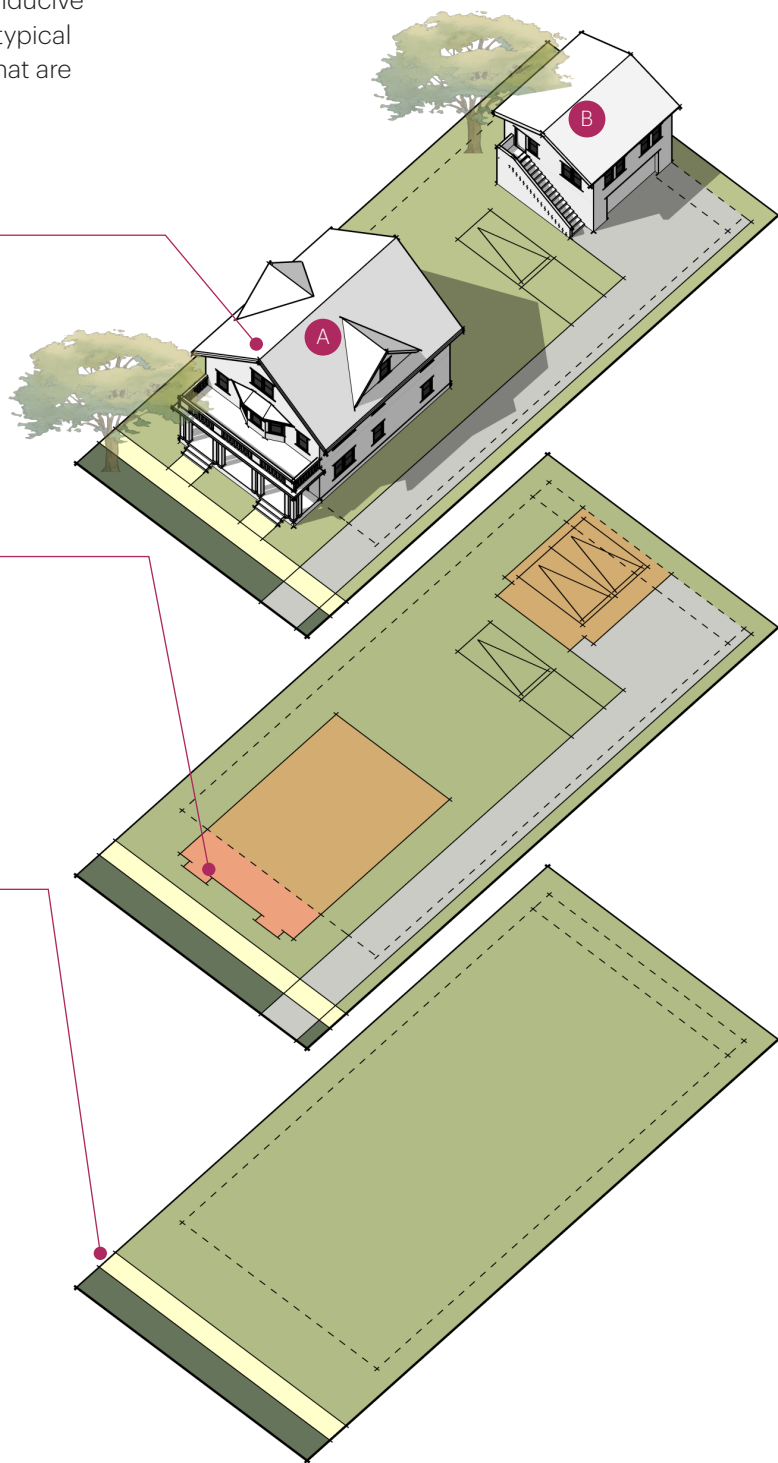
BUILDING & PARKING PLACEMENT

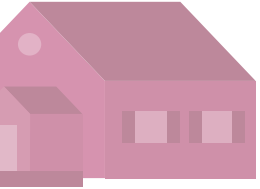
Building Footprint: 32' x 40'
Porch Frontage: Porch or stoop
Parking: 1 space per du

- Building frontage
- Building footprint

LOT CHARACTERISTICS

Lot Size: 65' x 150'
Front Setback: 15' min.
Side Setback: 5' min.
Rear Setback: 10' min. principal building; 5' min. accessory building
--- Setbacks





Neighborhood Infill Alternative Considerations

A range of Missing Middle Housing types may be suitable for neighborhood infill opportunities, but it is important to determine which work best in your market and community.

In order to effectively communicate the flexibility of MMH types as a residential neighborhood infill tool, the following buildings types were tested on the Aurora site. Zoning practices for residential neighborhoods often prioritize just a single-unit houses, so in order to expand our residential neighborhoods to include a range of housing types, it is necessary to calibrate zoning standards to facilitate the desired range of housing types. In addition

to a stacked duplex, ADUs, side-by-side duplexes, triplexes, and fourplexes are valid neighborhood infill building types because they can all fit on a lot with typical dimensions and utilize a building size that is similar to a single house.

How well do each of the following test fits match residential zoning standards in your neighborhoods?

CLOSER LOOK

The Unintended Consequences of Parking Requirements

Current zoning standards in Aurora require two enclosed parking spaces per dwelling unit. This encourages what is often called a "snout house" where the garage sticks out beyond the front facade. A large driveway and curb-cut cause conflicts with the pedestrian sidewalk. **Parking is often the limiting factor with respect to the number of units that may be built on a lot but can also dictate building form, ultimately leading to the creation of bulky, garage-dominated buildings along a street.** While this may be quick to build and quicker to sell, this building design has the potential to deteriorate a neighborhood's character and streetscape if used repeatedly.

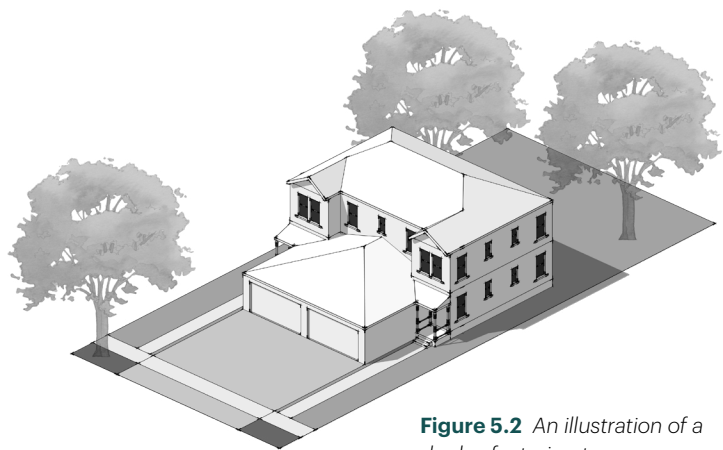
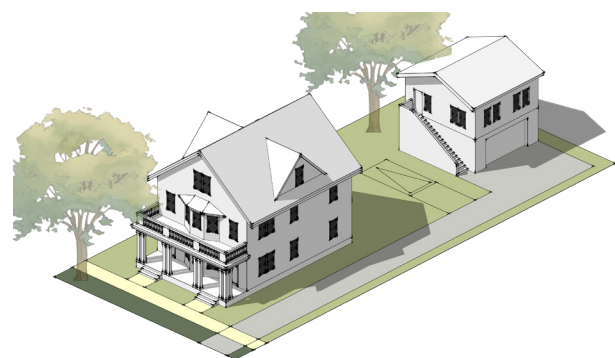


Figure 5.2 An illustration of a duplex featuring two garages on the front instead of a pedestrian oriented frontage type.



Stacked Duplex

Lot size	9,750 sf
Lot coverage	40%
Height	30 ft
Front setback	15 ft
Side setback	5 ft
Off-street parking	1 sp/du



Triplex

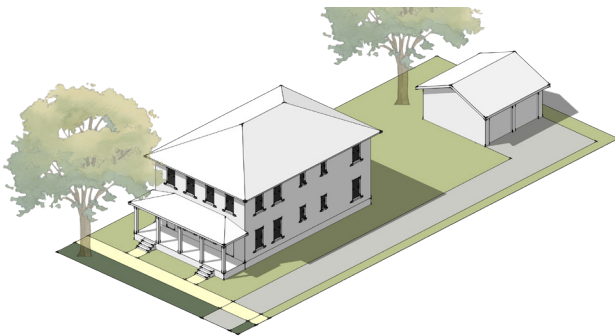
Lot size	9,750 sf
Lot coverage	44%
Height	24 ft
Front setback	15 ft
Side setback	5 ft
Off-street parking	1 sp/du



Side-by-side Duplex

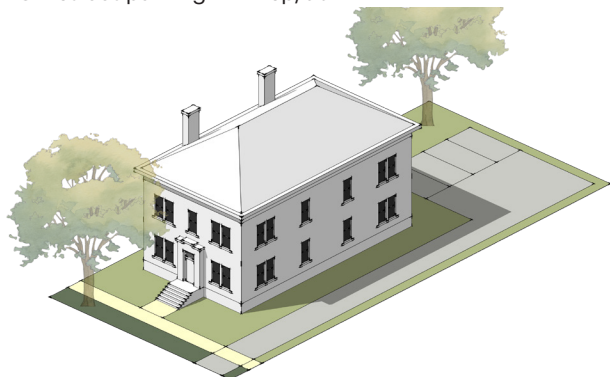


Stacked Duplex



Side-by-Side Duplex

Lot size	9,750 sf
Lot coverage	38%
Height	26.5 ft
Front setback	15 ft
Side setback	5 ft
Off-street parking	1 sp/du



Fourplex

Lot size	9,750 sf
Lot coverage	51%
Height	35 ft
Front setback	15 ft
Side setback	5 ft
Off-street parking	1 sp/du



Fourplex

5.4

Corridor Infill Test Fit

Upper Missing Middle Housing Types are often well suited for corridor infill. Buildings with additional height and larger footprints counterbalance the busy corridor streetscape.

Unlike residential neighborhoods, commercial corridors begin to push into the larger scale of MMH. Buildings that are three to four stories tall, have footprints greater than a house-scale, and are set closer to the street are often best for underutilized corridors. Upper MMH types are also able to accommodate commercial ground floors, if desired and the market allows for a mix of uses.

Developer perspective

Local developers and design professionals convened to give their feedback on the Broadview corridor test fit. Their feedback was used to ensure the design considerations are matched with development realities.

- This type of development either requires a commercial developer or a residential developer. It is more complicated and risky to provide a mix of uses within the same building.
- Additional exterior walls created by multiple buildings create additional costs. Rents will have to be adjusted to cover these costs.
- Residential outdoor green space is a valuable opportunity.
- Opportunities for home ownership are hard to create when commercial uses are introduced.
- Parking can be shared between nearby uses and take advantage of on-street parking availability.

Corridor Infill Characteristics Illustrated

- Medium to large building form, 3-4 stories
- Residential frontage types engaging the street and sidewalk
- Shopfronts or activated ground floors, if desired

Figure 5.3 An illustration highlighting the features of corridor infill development from the pedestrian perspective.



Corridor Infill Design and Zoning

The below corridor infill test fit is reflective of design practices recommended for developments on a corridor. Smaller setbacks than residential neighborhoods, larger building footprints, additional stories, and building frontages suited for corridor development are easily translatable into corridor zoning standards.

Address	1301-1331 Roosevelt Rd., Broadview, IL
Site Size	32,160 sf
Context	Walkable commercial corridor
Building form	House-scale to block-scale forms with some commercial use

BUILDING CHARACTERISTICS

Building Height: 3-4 stories (45')

Total Dwelling Units: 52

A Live work: 7 units
(1,500 sf ground floor commercial space)

B Courtyard building: 25 units

C Multiplex medium: 20 units

BUILDING & PARKING PLACEMENT

Building Width/Depth: 50'+ x 50'+

Frontage Type *shopfront, forecourt, stoop*

Parking: 35 parking spaces

Parking Ratio: 0.7

Building frontage

Building footprint

LOT CHARACTERISTICS

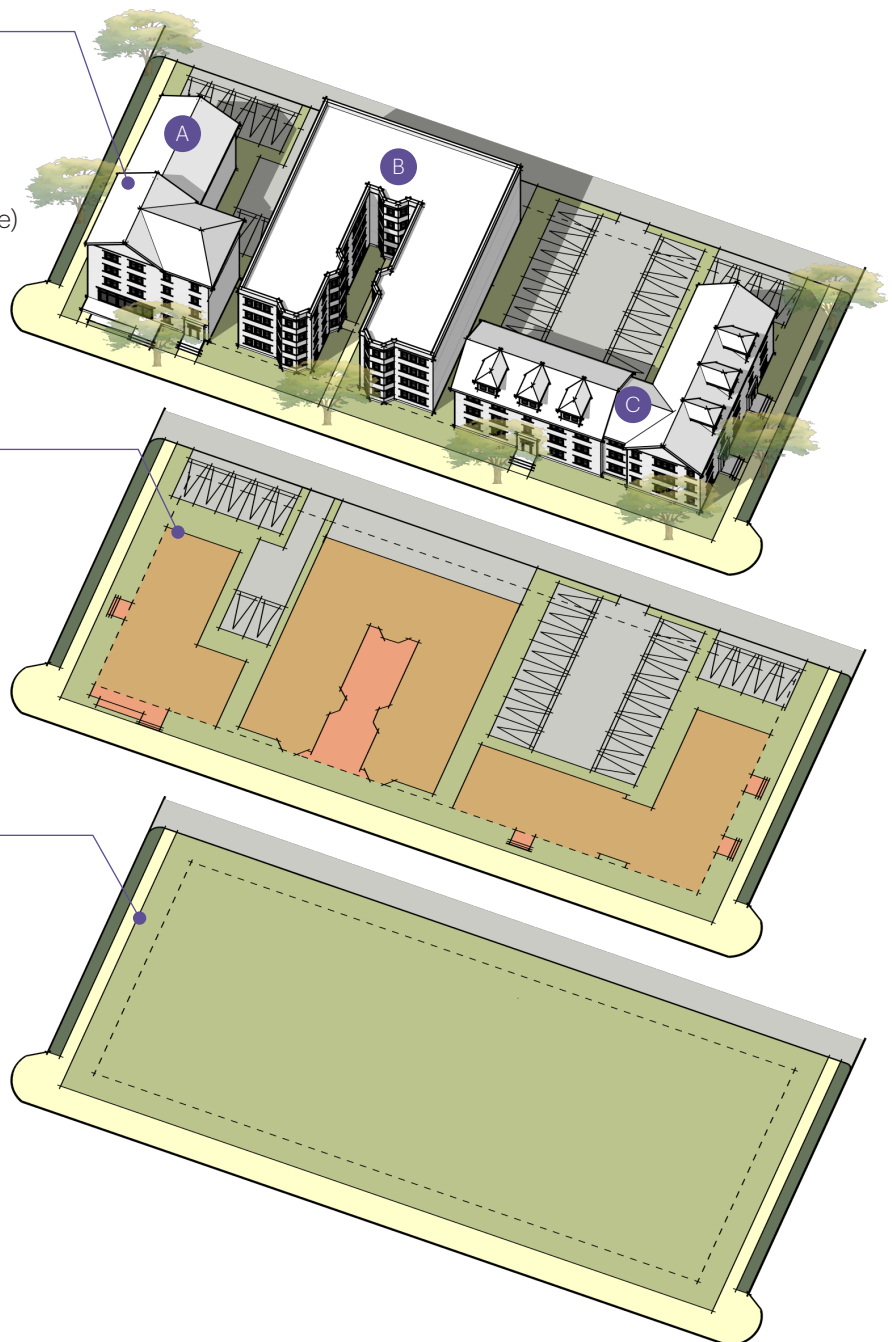
Site Size: 268' x 120'

Front Setback: 5'-15' min.

Side Setback: 5' min.

Rear Setback: 10' principal building; 5' accessory building

--- Setbacks





Corridor Infill Alternative Considerations

Determining the best housing options for corridor development requires a balance between building form and parking to reach an economy of scale.

The two iterations for the corridor site in Broadview are designed to spark a conversation regarding building scale, building frontage, open space, and parking requirements. The first scheme shown uses repeating, simple three-story house-scale structures that maximize efficiency. The second scenario begins to push into the Upper MMH category with 3.5 to 4 stories and larger footprint buildings. Both scenarios show a live/work type on the southwest corner to introduce commercial opportunities that mirror

adjacent blocks. Each scheme includes surface parking, as the most economical option, as well as open space that helps create a welcoming feel for residents and more privacy for ground floor units. These sites can provide a lot of housing capacity, even within relatively modest but well-designed buildings.

How well do each of the following test fits match zoning standards applied to your corridors?

CLOSER LOOK

Getting it Right: the Single "Bar" Building

In some occasions, a simple rectangular multi-unit apartment building with a single or double-loaded corridor is the most viable solution for corridor development sites. However, these buildings warrant a few key design considerations:

- **Active ground floors and frontage types:** *ground floors are an important feature of walkable neighborhoods. Long bar buildings commonly struggle to have "active" ground floors. In order to do so, consider requiring a select amount of frontage types on a building facades of this scale.*
- **Massing and articulation:** *in order to ensure a bar building does not default to a long, monotonous building facade, implement massing and articulation standards to ensure a characteristic streetscape. Massing and articulation can be achieved with building modulations, bay windows, or pilasters.*



Figure 5.4 A long building facade can be broken into smaller modules and include slight shifts in the wall plane. Standards for an active ground floor help achieve a livelier, more welcoming streetscape and prevent a long and monotonous building facade with no entrances.



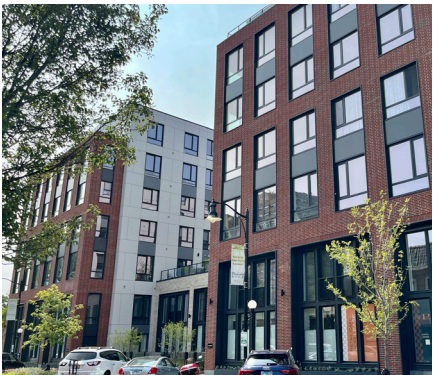
House-Scale MMH	36 units
Density	49 du/ac
Building coverage	39%
Height	35 ft
Front setback	10 ft
Side setback	5 ft
Off-street parking	1 sp/du

- A Live work:** 6 units (1,500 sf ground floor commercial space)
- B Multiplex medium:** 9 units
- C Multiplex small:** 6 units



Upper MMH	52 units
Density	70 du/ac
Building coverage	42%
Height	45 ft
Front setback	10 ft
Side setback	5 ft
Off-street parking	0.7 sp/du

- A Live work:** 7 units (1,500 sf ground floor commercial space)
- B Courtyard building:** 25 units
- C Multiplex large:** 20 units



Mixed-use courtyard



Multiplex medium



Live/work

5.5

Large Site Test Fit

Many communities in the peer network submitted sites greater than 2 acres to be considered for MMH development, which have unique design considerations necessary to create walkable neighborhoods.

Large vacant and underdeveloped sites offer exciting opportunities to deliver a variety of housing types alongside neighborhood-serving amenities and new infrastructure. The large transit-oriented development (TOD) site in Park Forest presents a mix of commercial and residential opportunities. North/south-oriented pedestrian connections create human-scaled blocks while eliminating the need for unsafe curb cuts off Lincoln Highway, a concern highlighted by local engineers and planning staff.

Developer perspective

Local developers and design professionals convened to give their feedback on the Park Forest test fit. Their feedback was used to ensure the design

considerations shown here match with development realities.

- Large site developments, often using PUDs, require strong and consistent visionary leadership in order to succeed. The duration of the projects can easily halt development if market or priorities shift.
- Opening up the development to multiple developers can help achieve economy of scale and diversity of buildings.
- Proximity to public transit provides an opportunity for shared parking agreements that can help with community buy-in and reduce large lots.

Characteristics a Large Site Development

- Human-scale blocks
- Upper MMH
- House-scale MMH
- Public open space

Figure 5.5 An aerial view highlights the distribution of uses that transition in scale from bigger buildings along the corridor and smaller footprint types near the adjacent residential neighborhood.



Large Site Design and Zoning

Large sites offer an ability to support a mix of uses that can change over time. Regulations should establish walkable neighborhood patterns of slow streets and well-connected blocks that include public open space, pedestrian paths, and frequent building frontages. Zoning should calibrate building scale to match the adjacent context. These key design considerations are important to implement in a regulating plan, design framework, and/or a neighborhood area plan.

Address	211th Street Metra TOD Site
Site size	11 acres
Context	Greenfield development adjacent to a corridor and residential neighborhood
Building form	House-scale to block-scale forms with some commercial use

BUILDING CHARACTERISTICS

Commercial, mixed-use, podium buildings: best suited for placement along corridors with building heights calibrated to the existing context.

Upper MMH: useful for transitioning from corridor context into a house-scale neighborhood, with building height typically set at 3 stories.

Small to Medium MMH: easily embedded into or adjacent to existing house-scale neighborhoods, with building heights set at 2.5 stories max.



LOT SIZE

Commercial lot width: 50'+

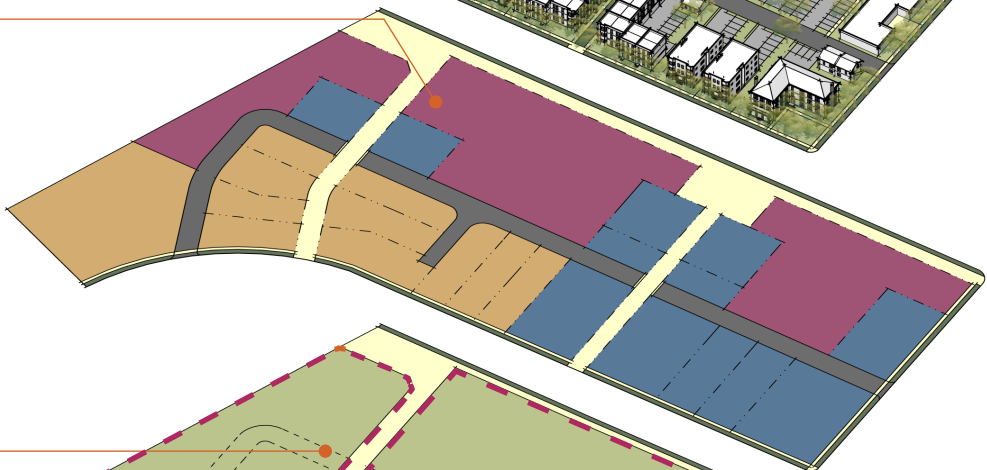
Upper MMH lot width: 50'-100'

House scale lot width: 30'-100'

Commercial

Upper MMH

House-scale MMH



SITE CHARACTERISTICS

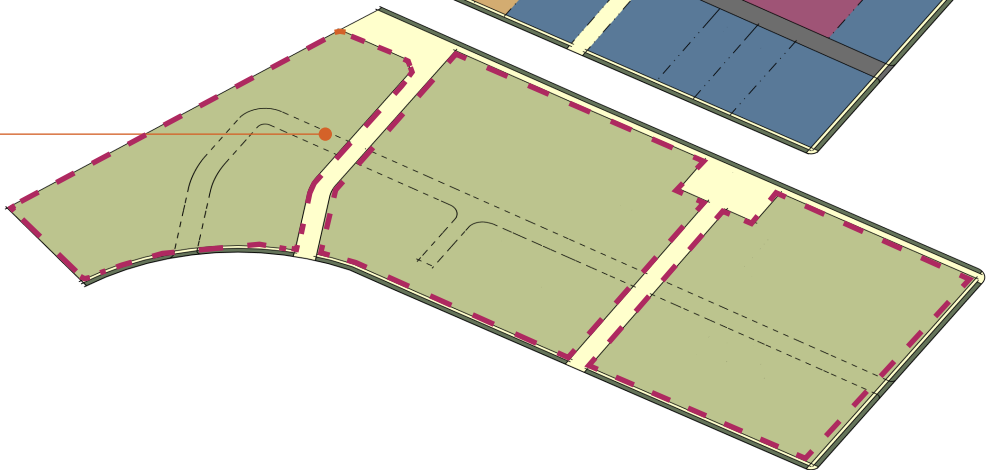
New block size: 450' x 450'

Public space: 12%

Access: Alleys provide access to parking while pedestrian paths connect to the nearby neighborhood.

Public open space

[] New block division





Large Site Alternative Considerations

Large site frameworks contain the flexibility to meet community needs in regards to housing capacity, commercial demand, stormwater requirements, and the creation of public open space.

The two design iterations for the large site in Park Forest both use the same framework of streets and blocks, but one showcases large podium buildings near the Metra station and opts for a one acre stormwater management site in lieu of the alternative cottage court. The first scenario utilizes one-story commercial buildings to reduce risk and complexity for commercial developers. The key to making any scheme successful is to ensure the desired building types correctly transition in scale from one context to the next; in this case, from a busy corridor (Lincoln

Highway) to a house-scale residential neighborhood.

Once a framework plan and vision is set, land use and zoning standards can be crafted to implement the desired outcome while allowing for flexibility.

In areas where mixed-use or Upper MMH types are desired, refer back to the corridor infill test fit for zoning considerations. In areas where house-scale MMH is desired, refer back to the residential neighborhood infill test fit for additional zoning considerations.

CLOSER LOOK

Utilizing Open Space as a Design Tool

Incorporating a mixture of open space types throughout a large site development can serve two objectives: to serve as a place-making tool and increase walkability, as well as dispersing stormwater management opportunities intermittently throughout a site, which reduces the burden on individual properties.

Open space types can include public parks and plazas, green-ways, pocket parks, and specific stormwater sites.

A framework plan that incorporates more organic shaped open spaces may be appropriate when topography requires less linear block structures.

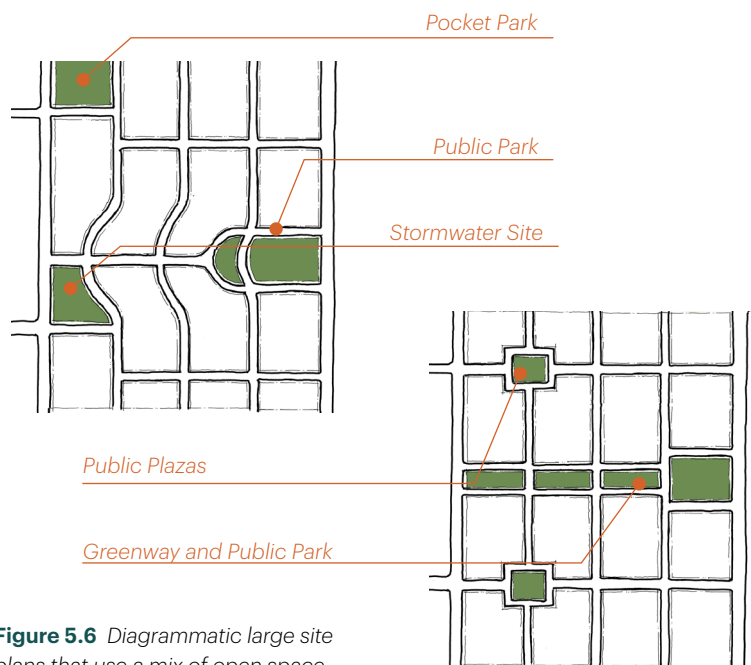


Figure 5.6 Diagrammatic large site plans that use a mix of open space types to enhance walkability.



MMH Infill	122 units
Off-street parking	193 spaces
Commercial use	35% (4 ac.)
MMH use	53% (6 ac.)
Public open space	12% (1 ac.)

- A Commercial building**
- B Multiplex medium:** 7 units
- C Duplex + ADU:** 2 units + 1 accessory unit
- D Townhouse:** 1 unit
- E Cottage court:** 9 units



Podium + MMH	187-200 units
Off-street parking	200+ spaces
Commercial use	35% (4 ac.)
MMH use	53% (6 ac.)
Public open space	12% (1 ac.)
Stormwater	1 ac., if desired

- A Podium building:** 35-50 units per building
- B Commercial building**
- C Multiplex medium:** 7 units
- D Duplex + ADU:** 1 unit + 1 accessory unit
- E Townhouse:** 1 unit



Podium building



Multiplex medium



Cottage court

5.6 Insights Applicable to Other Communities

Communities can take lessons learned from the three test fits and apply them to similar sites in their communities.

Neighborhood Infill. Communities with sites similar to the infill test fit can calibrate zoning to ensure that allowable MMH is compatible - in both building footprint and height - to the surrounding neighborhood, utilizing ADUs, duplexes, and small multiplex. Communities with a large number of vacant lots may consider a broader range of types to provide more development feasibility, while limiting the potential for consolidation of lots that may lead to larger buildings that are out of scale.

Corridor Sites. Many communities across the region are faced with vacant

properties along their often struggling commercial corridors. While communities often zone these sites for commercial use only, zoning can start to incrementally introduce more housing to these corridors, adding residents to support nearby businesses and services.

Large Sites. To apply lessons learned from the Large Site test fit, communities can consider how the location, shape, and natural features of their site should guide such the location of streets, open space, and placement of MMH types.



Takeaways for sites similar to Aurora, IL

- A variety of house-scale MMH types can be accommodated on a typical residential lot.
- Many MMH types can be achieved with less than 40% building coverage.
- 2 off-street parking spaces can be provided for, but parking placement must be regulated.
- Many small MMH types are allowed under 35' in height (measured from mid-point of sloped roof).

Neighborhood Infill



Chicago Heights, IL: multiple opportunity sites within an existing urban context.



Park Forest, IL: infill lots within a blight-remediation priority area.



Warrenville, IL: opportunity sites in a suburban neighborhood where small MMH types apply.

Corridor Infill



Chicago Heights, IL: corridor infill sites adjacent to neighborhood infill sites.



Aurora, IL: several corridor infill opportunities at various scales of redevelopment.



Takeaways for sites similar to Broadview, IL

- A mix of building types and forms creates a varied streetscape and attractive public realm.
- Parking drives the unit capacity on a site of this scale. A smaller setback along the corridor allows more parking in the rear but requires a raised ground floor for privacy.
- 3- 4 story buildings hold the edge of the wider corridors better than 2 stories.
- Stoops, forecourts, shopfronts, and terrace frontage types are ideal for these sites.

Large Site



Takeaways for sites similar to Park Forest, IL

- Pedestrian connections and open space can create human-scaled blocks even when streets and curb cuts are unrealistic.
- Upper MMH can be used to transition from commercial development into house-scale neighborhoods.
- Commercial parking limits development potential.
- Allow for flexibility of horizontal or vertical mixed use. Even a one-story can maintain street frontage.

Oswego, IL: former school site with potential for MMH.



Harvard, IL: local church with extra available land that may be used for housing.



Oswego, IL: shopping center with abundant parking that could become a walkable neighborhood.

5.7 Local Developer Insights on Test Fits

Two focus groups were hosted with regional developers and design professionals to understand challenges and opportunities associated with the selected building types.

Financial Feasibility

- Feasibility for developers begins with anticipating the sale price or rent to either meet or exceed the cost of construction per unit.
- One developer shared that labor currently costs more than materials, noting the importance of time saved during the development process.
- A primary challenge in mixed-use development is finding end-users for first-floor commercial spaces, especially when they are relatively small in terms of square footage.
- In many communities, it costs more to build commercial space in a mixed-use building than the space can bring in commercial rents.
- Developers noted an 'appraisal gap' issue, where appraisal values are lower than the cost to build a home, most often occurring in disinvested communities.

- Noting the benefits of a productive tax base compared to holding onto vacant lots, developers discussed the role that local incentives can play in helping pilot middle housing types.

Economies of Scale

- Developers stated that, from experience, construction of multiple middle housing buildings at the same time is more complex but easier to accomplish in terms of improving overall cost per square foot and offering an economy of scale.
- Because a single vacant unit in a fourplex has more impact than in a large multifamily building, developers may also want or need to deliver middle housing types at scale to improve economies of scale in management.
- Most developers either do IRC buildings (2 or less units) or bigger IBC buildings, which require more licensed trades and increased fire standards.

“It’s all about timing: applying for the permit, getting feedback from the city, and time spent with an architect.”

-Developer Quote

“If I can get the numbers to work to build it, the next question becomes how many of these do I need to build to make the economies of scale work for managing it?”

- Developer Quote

Site Considerations

- If building in an older infill neighborhood, rear garages are typically better able to match the existing neighborhood's aesthetic.
- Developers saw value in both the stacked and side-by-side duplex of the neighborhood infill test fit but noted it is easier to create the look and feel of a single-family home through a stacked duplex.
- A strong rental market can help offset the costs of added exterior walls of the courtyard buildings shown in the Corridor Site.
- If built for sale, the added cost of a courtyard building can be justified by providing a different experience for residents, who enter their home through the front door of a smaller building rather than through a corridor hallway in a larger building.
- The Large Site would likely require a partnership between developers, as very few developers on their own could build the variety of housing types shown.

- On a site like the Large Site, coordination is needed in every aspect of phasing, starting with responsibilities of site preparation.
- The Large Site provides opportunities for creativity such as shared parking and increases potential for economies of scale to reduce construction cost per square foot.

"The more integrated the partnership between developers, the better."

- Developer Quote

"The more successful missing middle housing buildings look and feel like single-family homes."

- Developer Quote



Figure 5.7 East Bluff Homes, new construction of twenty single-family homes and five two-flat buildings in Peoria, Illinois, by WJW Architects. Image source: "East Bluff Homes," www.wjwarchitects.com

Case Study: Larkin Place

Elgin, IL



Learn more by
clicking the icon!

Population

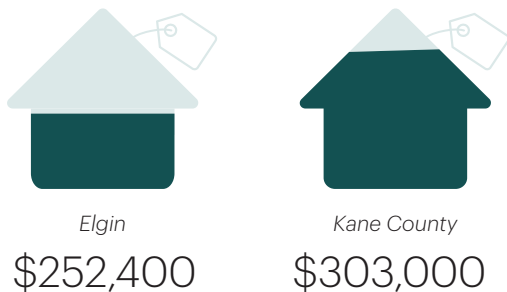


114,106 people

Annual Median Income



Median Home Value



Pedestrian view of the Larkin Place development, which shows an engaging streetscape with animated building frontages.

Key takeaways

- 1 New middle housing development can reflect and enhance its surrounding neighborhood.
- 2 Porches and other design features help build sense of community and create real benefits for residents and the surrounding neighborhood.

Summary

Larkin Place in Elgin, Illinois, is an award-winning development consisting of new middle housing buildings and the reuse of a historic building into apartments and community space. Each of Larkin Place's 48 homes are affordable, supportive housing. The entire development is physically accessible, incorporating features such as wider doorways and accessible bathrooms. The 3.5-acre site is served by bus transit, across the street from a school, and near retail and services.

Larkin Place's twelve new buildings resemble the scale and style of the surrounding neighborhood. As described by Elgin Mayor David Kaptain, "the new townhouses and fourplexes look like single-family homes that have been in Elgin for a century or more, and they bring the best characteristics of our historic neighborhoods to new construction."

Larkin Place's porches offer a subtle transition between public and private space that benefits both residents and their neighborhood. As Joshua Wilmoth of Full Circle Communities explains, "When I walked the block shortly after residents moved in, people sitting on their porches asked how I was doing and what I was up to. We started talking, and they shared how much they liked their new homes. One mother mentioned how much she appreciated being able to watch her children walk to the school across the street. I was especially encouraged by their questions—they showed a sense of ownership over the block."

Case Study: MMH in Transition Zones

Geneva, IL



Population



21,299 people

Annual Median Income



Median Home Value



Geneva

\$415,800



Kane County

\$303,000



Image above showcases a newly constructed side-by-side duplex built in Geneva, IL.

Key takeaways

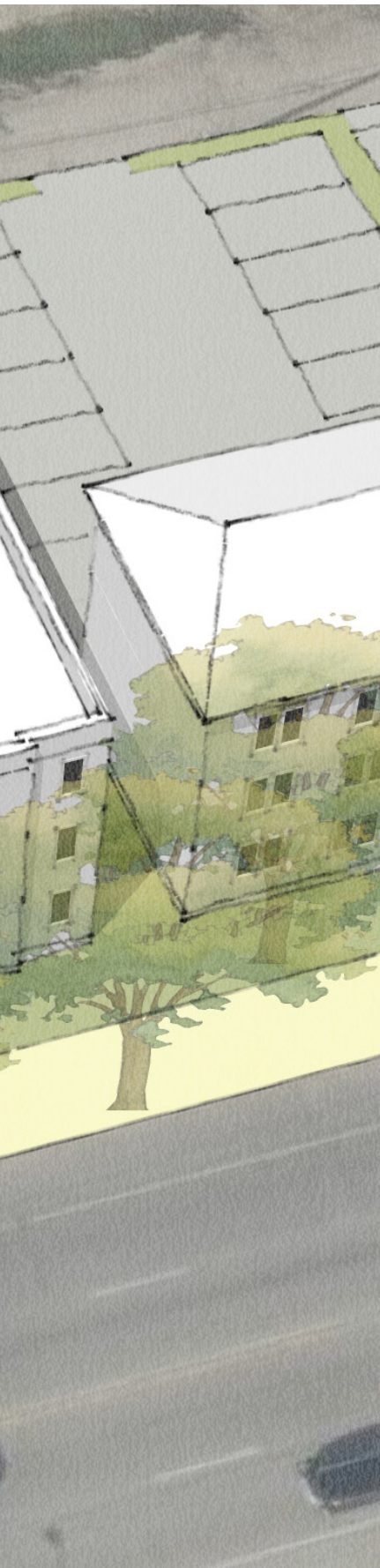
- 1 Site-by-site lot testing is important for calibrating zoning changes that reflect neighborhood scale and character.
- 2 Missing Middle Housing can be implemented in a targeted area such as transition zones.

Summary

To address housing needs identified in its Downtown Station-Area Master Plan, the City of Geneva launched a zoning update for its historic downtown in 2017. City staff and a consultant worked together with the Historic Preservation and Planning & Zoning Commissions and held multiple community meetings to gather input. City staff analyzed every parcel for existing conditions, current zoning, and proposed zoning, later finding this to be crucial for both calibrating zoning and helping residents – who were mailed a one-page fact sheet with this information specific to their property - access clear information ahead of meetings.

The previous downtown zoning framework – which was complex and restrictive, with 18 districts and prohibitive floor area ratios (FAR) - was replaced in 2019 with a simplified code of seven districts. FAR was removed and new standards are mostly form-based, using building height, setbacks, and lot width to regulate scale. In the Residentially-Scaled Commercial Mixed-Use District - applied in transition areas between the State Street commercial corridor and single-family neighborhoods – duplexes, triplexes, and townhomes are allowed if they match the neighborhood scale. In these areas, one duplex has been built and another is under construction. Zoning changes also enabled the reconversion of single-family homes from office to residential use in response to pandemic-driven market shifts, as well as the development of a three-story mixed-use building with 14 apartments along State Street, now under construction.





Incentivizing MMH Development

CHAPTER 6

A range of tools and incentives can help municipalities encourage the development of MMH. From financial incentives to regulatory flexibility, these strategies aim to support better outcomes for communities and builders.

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6.1

Balancing Attainability and Feasibility

Understanding the feasibility and attainability of different housing and development types in your market is an important part of determining which zoning changes should be prioritized in your community.

It is important to reduce the barriers that limit the production of affordable housing and streamline the creation of Missing Middle Housing. Because MMH uses simple, low-cost construction methods and disperse land costs across multiple dwelling units, it is naturally more attainable. Zoning policies, however, often have surprising effects on attainability and feasibility. If your goal is to create more attainable outcomes, consider how zoning may impact the following aspects.

Costs

As discussed in Chapter 3, costs associated with housing development are divided into two broad categories: hard costs (including physical development, or the price of materials, labor, and land) and soft costs (which relate to the administration, financing, and execution of a project). Burdensome design standards and processes imparted onto a development by the public sector can impact both of these categories and lengthen the permitting process which delays the generation of revenue.

Revenues

Revenues are what a developer expects to recoup upon completion of their project. These revenues can occur up-front (in the case of fee-simple of condo development) or over the course of many years (in the case of rental housing). Design standards can decrease revenues by reducing the

amount of units and other leasable space within a building. This loss of revenue is sometimes referred to as opportunity cost.

Financial Return

Generally speaking, a project's net financial return is what remains after costs have been subtracted from revenues. For-profit developers will judge financial feasibility of a project by comparing expected returns to other investments with similar risk. Nonprofit developers will base their decisions on the returns required by their sources of capital. In either case, if complying with design standards causes a project's financial return to fall below a developer's requirements, they are unlikely to move forward with a project.

Displacement Mitigation

In addition to financial cost, it is important to also consider the social cost of how zoning impacts neighborhoods differently depending on the housing market's ability to withstand change. In order to mitigate concerns of displacement, zoning updates must also weigh the financial and social changes that it could accelerate for existing residents. It is imperative to consider strategies alongside zoning that protect these neighborhoods and support the upkeep of existing homes.

Test Drive Missing Middle Housing Reforms with a Regional Pro Forma Tool

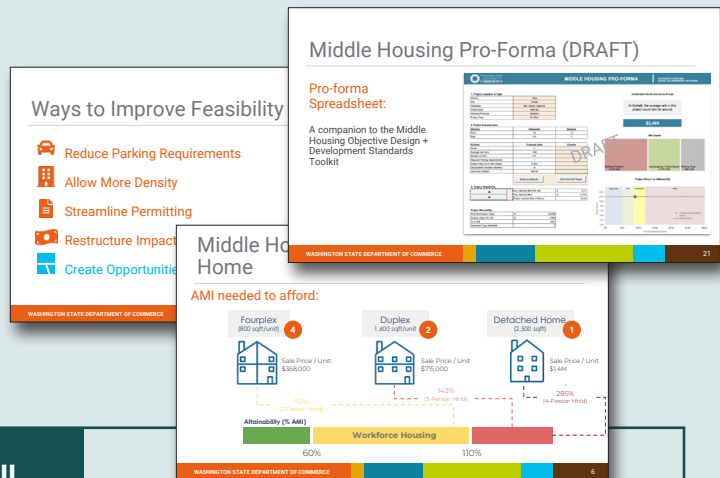
Any housing development project - whether affordable or market rate - relies on a real estate pro forma, or a project's balance sheet. It includes an estimate of up-front and on-going costs, expected future revenues, and a projection of financial return. Before moving a single shovel of dirt, developers look at three factors - costs, revenues, and financial return - to decide whether or not to move forward with a project.

A Missing Middle Housing Pro Forma would give local planners and city leaders the chance to test the financial feasibility and attainability of middle housing-oriented policies and effectively communicate how these reforms will impact the local housing supply.

Even without a pro forma tool it is important to understand which factors impact both soft and hard costs of doing development.

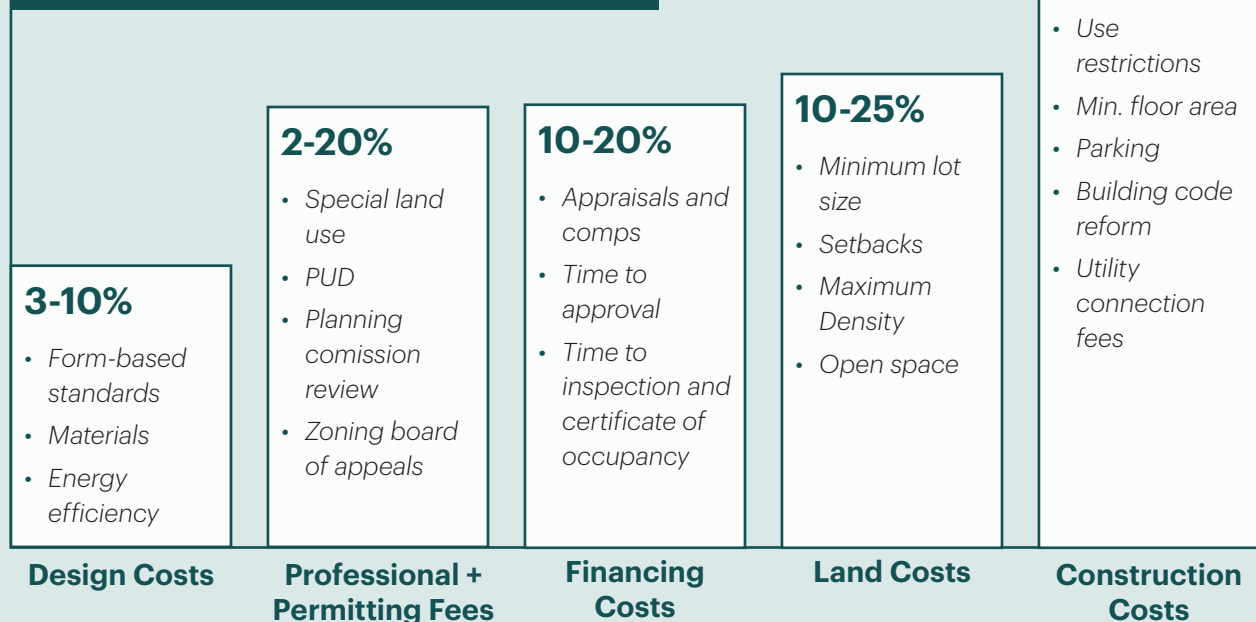
How does it work?

By adjusting common zoning standards such as minimum lot sizes, number of available units, and provided parking spaces, a Missing Middle Housing Pro Forma tool can show the impacts of these metrics on housing feasibility and attainability in real-time. Consequentially, the pro forma highlights how zoning reform can help make MMH types more attractive to developers and at what price points they will be hitting the market.



Zoning and permit processes impact all five factors of development costs

Data provided by Ryan Kilpatrick, Flywheel Co.



6.2 Zoning Reform as an Economic Development Tool

Municipalities can consider the economic benefits of MMH as they select strategies to encourage these housing options.

MMH development can lead to several economic benefits. Adding population to walkable neighborhoods generates more patrons for nearby businesses. Since MMH serves households that generally have fewer school-age children (singles, empty-nesters, couples, and young families), it increases property tax revenue while mitigating school enrollment impacts. In some areas, MMH can also bring new investment that reduces blight and encourages further improvements. Because it is often used as an infill tool, MMH also maximizes

existing infrastructure investments such as sidewalks, roadways, and utilities.

Municipalities have many options to increase the feasibility of MMH development. Regulatory tools, which place little or no cost on a municipality, include zoning predictability, parking reductions, building code reform, and length of time to approval. Tools with financial costs range from fee deferrals or waivers to pre-approved housing designs. As municipalities weigh their options, they can consider their costs against the expected economic benefits of MMH.

CLOSER LOOK

Making Missing Middle Housing the Best Option

Single-unit homes and Missing Middle Housing are not on a level regulatory playing field in most American cities. To truly enable MMH, create incentives and regulations that stack the deck in favor of multi-unit development

Sliding Scale FAR, or allowing more FAR in exchange for more units on a lot, can tip the development balance in favor of MMH types over single-unit homes.

MMH land division expedites lot divisions for middle housing types, which enables units to be sold or owned individually.

Fee deferrals and waivers, or deferring on fees until a building is occupiable and therefore reducing financing costs, or waiving fees if a developer sells to an income-qualified buyer below a city-controlled price cap.

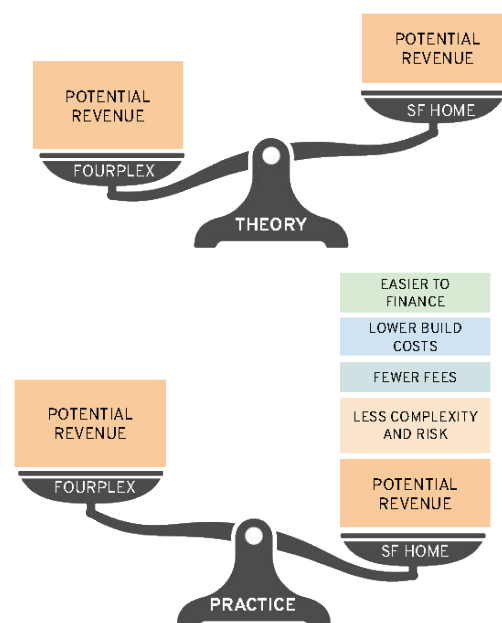


Figure 6.1 Diagram highlighting how regulations tip feasibility in favor of single-family development.

Case Study: Attainable Outcomes

Portland, OR



Learn more by
clicking the icon!

Population



642,715 people

Annual Median Income



Median Home Value

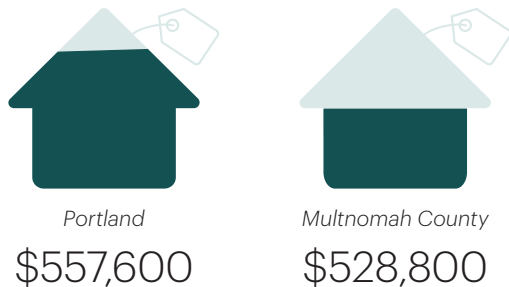


Figure 6.2 Example of a housing development built under Portland's RIP program.

¹From: "New Study Shows Promising Housing Production..." www.portland.gov.

Key takeaways

- 1 Middle housing creates 2- or 3-bedroom homeowner and rental options that are in high demand.
- 2 Middle housing development, even in a hot housing market, is incremental.

Summary

In 2021, Portland, Oregon, modified its zoning regulations to allow duplexes, triplexes, and fourplexes on all residential lots. The city also carefully set building size maximums for each housing type, helping make middle housing a strong option while ensuring it fit the neighborhood character. While Portland is very different than suburban communities in the Chicago region, this early example offers insight into actual outcomes of such a policy change.¹ One year after the policies were implemented:

- Homes built after the zoning change were on average \$117,000 less expensive than homes built before.
- Of the 271 middle housing permits, 76% were fourplexes, 13% were duplexes, and 10% were triplexes.
- Middle housing focused on walkable areas; 80% of middle housing was built within ¼ mile of a transit stop and 86% was built within ¼ mile of a commercial center or corridor.
- 75% of the multi-family units had two bedrooms, and 24% had three or more bedrooms, increasing opportunities for younger families, couples, and multi-generational households.
- Redevelopment often focused on vacant lots; of the 81 middle housing developments, 35 were on vacant lots.
- Redevelopment was incremental; middle housing development replaced 46 single dwelling houses, or approximately 0.03% of the city's 150,000+ single-dwelling houses.

6.3 Encouraging Attainability

Overcoming zoning barriers is just one part of the picture. Creating a community culture that prioritizes the development of attainable housing is another. It may be necessary to go beyond the barrier reforms mentioned in this report to start building more housing at attainable price points.

Tools for Increasing Affordability

Community Land Trusts

In a Community Land Trust (CLT), a nonprofit organization owns the land on which a house sits and retains its ownership when the home is sold to a buyer. CLTs set income limits for new buyers to ensure the home is purchased by low- or moderate-income households. To maintain the home's long-term affordability, the amount of appreciation a homeowner can capture upon sale is capped by a resale formula. However, CLT homeowners still build wealth through equity accumulated through mortgage payments as well as a portion of the property's appreciation when the homeowner sells.

There are nearly a dozen CLTs in the City of Chicago. Community Partners for Affordable Housing has over CLT 100 homes in Highland Park, Evanston, Lake Forest, and Wilmette. In May of 2023, the Illinois General Assembly passed the Community Land Trust Act, which assembled a group of experts to evaluate how CLTs could be supported to meet housing challenges. If you want to learn more about Community Land Trusts, you can read the full report from the Illinois General Assembly [here](#). While CLTs have mostly been applied to single-unit homes, they could work well for MMH types like fourplexes and cottage courts.

Building support for housing solutions at the state and federal levels

This will, in turn, create new housing opportunities and flexibility at the local level. Housing affordability is not just a local issue, and much can be done at the state and federal levels. Many federal financing options only apply to single-family home buyers or large developments. Tools and financing that is applicable to smaller, multi-unit development and small-scale developers is needed.

Invest in MMH housing solutions that already are built

Municipalities can partner with ongoing efforts to protect existing middle housing stock through preservation and maintenance programs. Taking inventory of all subsidized rental units and tracking how short-term rentals affect the affordable housing stock can also be helpful tools.

Potential Partnerships

No one entity can solve our housing crisis alone. It is imperative to build relationships across disciplines to remove barriers at every level related to delivering housing. The following are some key partnerships that should be developed to support MMH and help build community awareness across industries.

Local and regional developers

Developers and builders who have experience with local regulations, processes, and construction trends can help advise planners and elected officials on barriers to development and the entitlement process. These trades can also provide key insights into housing models that exist, or are needed, in your market. These experts can help with understanding the cost and challenges of delivering different housing types.

National and local realtors

Realtors who are familiar with local market conditions and housing preferences within the community can help to demonstrate the types of Missing Middle Housing that will be best positioned to deliver housing that people want and need. The Illinois and National Association of REALTORS® can also be a valuable partner in leading policy change as well as supporting local initiatives to broaden housing choice. Reach out to your Government Affairs Director and follow along with the many advocacy efforts that Illinois REALTORS® leads.

Local housing financiers

Bankers and mortgage brokers throughout the region could help to identify financial barriers to building and purchasing Missing Middle Housing types and are important to help develop financing strategies that are well suited to the unique scale of Missing Middle development projects. Smaller lenders, such as a Community Development Financial Institution (CDFI) or

local credit union, may also be interested in supporting construction of Missing Middle Housing as part of their efforts to comply with Community Investment Act requirements.

Nonprofits and institutions with developable land

Removing or significantly reducing land acquisition costs can improve the feasibility of development projects and increase the competitiveness of affordable housing projects seeking grant funding. Municipalities could partner with local nonprofits and institutions to streamline development of Missing Middle Housing types on unused or underutilized portions of their properties.

Major employers

Access to quality housing can impact public and private sector employers' ability to maintain and attract workers. Municipalities could partner with major employers to facilitate and streamline development of Missing Middle Housing types to house workers, utilizing employers' broader access to financing options for housing development. Major employers should be encouraged to survey their employees to identify housing needs of the local workforce.

Land banks

Land banks can be a resource to obtain land for a reasonable price. Land banks can also assist with identifying vacant lots and buildings as sites with potential for Missing Middle Housing development.



Figure 6.3 *Hyacinth Place, an affordable, sustainable development of ten owner-occupied townhomes and four rental apartment units in Highland Park. The City of Highland Park acquired and donated the property. Hyacinth Place is part of a community land trust, ensuring permanent affordability.*

Image source: "Hyacinth Place." www.hodc.org

Case Study: Pre-Approved Housing Plans

Kalamazoo, MI



Learn more by
clicking the icon!

Population



261,437 people

Annual Median Income



Median Home Value



Kalamazoo

\$164,500



Kalamazoo County

\$227,500

Summary

Kalamazoo, Michigan – a medium-sized city in southwest Michigan with a population of 261,437 – is projecting a steady population growth through the year 2030. Like many Midwestern cities, lower housing costs and less crowded living conditions are attracting new residents from across the country. However, this population boom poses a challenge to the city, as a growing population means an increased demand for housing.

The City of Kalamazoo seeks to add 7,750 new homes to the area by the year 2030, of which 700 homes are to be made available at or below 80% of the Area Median Income, and 175 units available for households earning at or below \$35,000 annually. Infill is intended to build up core neighborhoods around the city, especially those

without as much development as higher-priced markets.

Kalamazoo recognizes that many barriers limit the feasibility of housing initiatives, and projects of this kind often flounder early in the review process. To address this issue, the city has partnered with the Kalamazoo Neighborhood Housing Services (a non-profit homebuilder) and the Kalamazoo County Land Bank to create pre-selected and pre-approved housing plans that small developers can acquire for a faster, more efficient, and less expensive route for development.

The available plans include four single-family homes, a stacked duplex, a side-by-side duplex, a fourplex, and a carriage house, all of which can fit on a lot as narrow

as 30 feet wide. A pilot stacked duplex was constructed in 2022, featuring a two-bedroom, two-bathroom ground floor unit, and a two-bedroom, one bathroom second floor unit.¹ As of 2024, 48 homes had been built using the plans.² The Housing Development Project Coordinator for the City of Kalamazoo says this program will yield predictable infill outcomes and create new opportunities for future partnerships.

¹From: (2022, October 26). "City of Kalamazoo has Pre-Approved Plan..." secondwavemedia.com

²From: Abramson, Ben. (2024, February 5). "Pre-Permitted Plans Help Kalamazoo Bring Housing Back." www.strongtowns.org

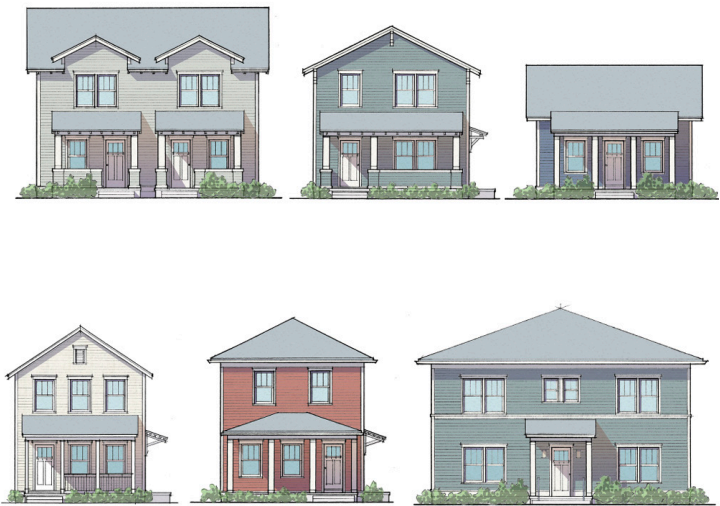
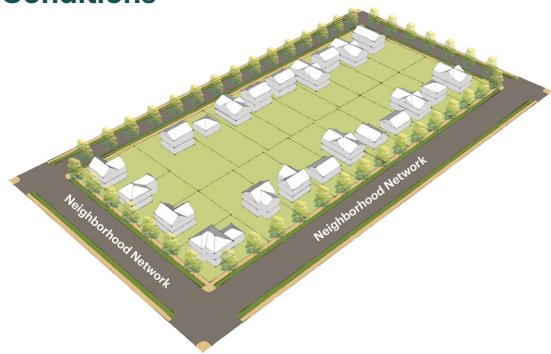


Figure 6.4 Elevation drawings of Kalamazoo's pre-approved housing types.

Key takeaways

- 1 Pre-approved housing plans can demystify MMH types for small developers without experience in multi-unit housing.
- 2 Pre-approved housing plans can help reduce valuable time spent during the design process of multi-unit housing types and encourage faster development.
- 3 Pre-approved housing plans can be designed to fit on a range of typical lots within your community and match the existing neighborhood character.

Existing Neighborhood Conditions



With Pre-Approved Infill

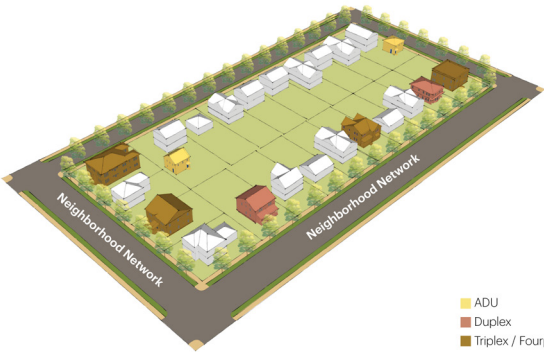


Figure 6.5 Diagrammatic city block highlighting how pre-approved building types may be used as residential infill.

ADU
Duplex
Triplex / Fourplex

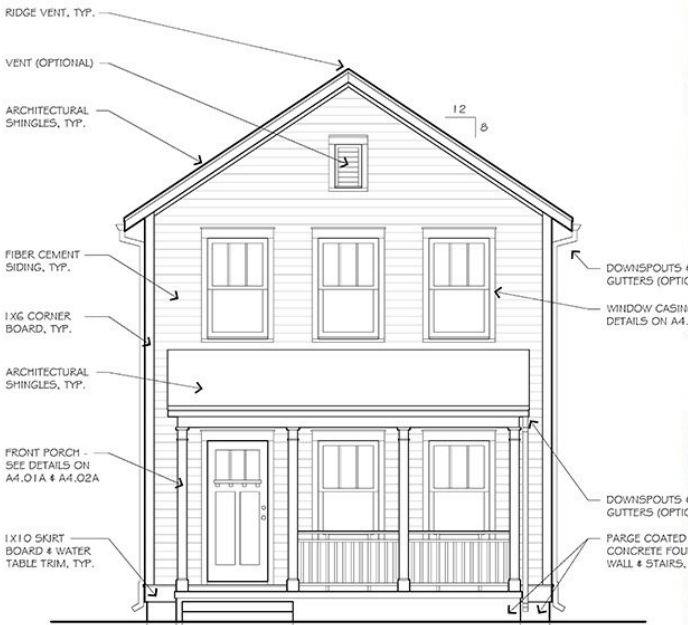


Figure 6.6 Elevation drawing (left) of a pre-approved housing types and a built example of a duplex (right).

6.4 Creative Financing Solutions

Below is an overview of funding programs that can assist new construction of MMH. New programs or incentives tailored to Illinois may be introduced in time, including those outlined in the 2024 Report of the Governor's Ad-Hoc MMH Solutions Advisory Committee.

State and Federal Tools

Low-Income Housing Tax Credit (LIHTC)

The LIHTC incentivizes the private development of affordable housing by offering a federal tax credit for affordable housing investments. The maximum rent that can be charged is based upon the Area Median Income ("AMI") and is capped at 80% of AMI. *Learn more at [IHDA.org](https://www.ihda.org).*

HOME Investment Partnerships

HOME is the largest federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. Often in partnership with local nonprofits, HOME funds a wide range of activities including building, buying, and/or rehabilitating affordable housing for rent or homeownership. *Learn more at [HUD.gov](https://www.hud.gov).*

Affordable Housing Program (AHP General Fund)

Federal Home Loan Bank of Chicago member institutions can partner with for- and not-for-profit developers, community organizations, and units of government to apply for annual grants to subsidize

the acquisition, new construction, and/or rehabilitation of affordable rental or owner-occupied housing. For homeownership developments, homes must be affordable to households with incomes below 80% of the AMI. For rental developments, at least 20% of homes must be affordable to households with incomes below 50% AMI. *Learn more at [FHLBC.com](https://www.fhlbc.com).*

Illinois Affordable Housing Tax Credit (IAHTC)

The IAHTC encourages private investment in affordable housing by providing donors of qualified land donations with a one time tax credit on their Illinois state income tax equal to 50 percent of the value of the donation. Municipalities may donate municipal-owned land and transfer the credits to the development. For most developments, 25% of the units for rental and 100% of units for ownership projects must serve persons with incomes at or below 60% of the AMI. *Learn more at [IHDA.org](https://www.ihda.org).*

Figure 6.7 LIHTC administered by the Illinois Housing Authority (IHA), supported MMH developments such as 1212 Larkin in Elgin, Illinois.

Image source: "1212 Larkin." www.fcmmunities.org



Local Financing Solutions

Housing trust funds

Housing Trust Funds can be created to provide grants or loans to address local housing priorities, whether through preservation of existing affordable housing or the development of new affordable housing. Regional communities with Housing Trust Funds include Highland Park, Oak Park, Evanston, St. Charles, Northbrook, and Arlington Heights. Housing Trust Funds can be highly impactful when used strategically. Highland Park’s Housing Trust Fund has been utilized to help the city add over 80 Community Land Trust homes. Oak Park’s Housing Trust Fund has assisted in the development or preservation of over 140 affordable housing units .

Build dedicated revenue sources for affordable housing

Designated sources of revenue help maintain predictable funding levels for a Housing Trust Fund. Several communities with Housing Trust Funds collect taxes or fees on home demolitions. Municipalities across country have implemented other revenue sources such as a tax on short-term rentals and hotels or a fee on properties sold over a certain threshold such as \$1,000,000.

Create a catalyst fund

A catalyst fund can be used to provide fast and flexible capital to mission-driven developers that are interested in developing affordable housing, or pursue investments that prioritize the preservation of expiring subsidized and Naturally Occurring Affordable Housing (NOAH). In 2024, the Community Foundation of Middle Tennessee, First Horizon (a private charitable foundation), and the Metro

Nashville Housing Division worked with other funding partners to launch a catalyst fund with an initial \$75 million in funding for affordable housing. Vanderbilt University joined these efforts and provided \$5 million in funds. [Learn more here.](#)

Payment in Lieu of Taxes (PILOT) program

A PILOT program allows nonprofit or tax-exempt property owners—such as affordable housing developers—to make voluntary payments to local governments instead of traditional property taxes. When used to support low-income households, these agreements often reduce property taxes to help maintain lower housing costs. In return, the property owner commits to providing affordable rents, preserving long-term affordability, or offering supportive services.

Tax abatement programs

A tax abatement program for new construction infill offers temporary reductions or exemptions from property taxes to encourage development on vacant or underutilized lots within existing neighborhoods. These programs aim to stimulate private investment, increase housing supply, and promote smart growth by making infill projects more financially feasible.

Property tax incentive for municipality-built homes

In 2024, the State of Illinois created a 10-year property tax exemption for certain newly constructed owner-occupied single-family homes built by a municipality. The incentive is meant to encourage development on vacant parcels in underinvested communities and can be explored as a potential tool for the development of cottage court or other single-family homes.

Metropolitan Chicago Area Median Income Limits (2024) ¹								
Household Size	30%	40%	50%	60%	80%	100%	120%	140%
1 person	\$23,550	\$31,400	\$39,250	\$47,100	\$62,800	\$78,500	\$94,200	\$109,900
2 persons	\$26,910	\$35,880	\$44,850	\$53,820	\$71,800	\$89,700	\$107,650	\$125,580
3 persons	\$30,270	\$40,360	\$50,450	\$60,540	\$80,750	\$100,900	\$121,080	\$141,260
4 persons	\$33,630	\$44,840	\$56,050	\$67,260	\$89,700	\$112,100	\$134,520	\$156,940
5 persons	\$36,330	\$48,440	\$60,550	\$72,660	\$96,900	\$121,100	\$145,320	\$169,540
6 persons	\$41,730	\$52,040	\$65,050	\$78,060	\$104,100	\$130,100	\$156,120	\$182,140
7 persons	\$41,730	\$55,640	\$69,550	\$83,460	\$111,250	\$139,100	\$166,920	\$194,740
8 persons	\$44,400	\$59,200	\$74,000	\$88,800	\$118,450	\$148,000	\$177,600	\$207,200

¹AMI data source: "Area Median Income Chart (AMI)," www.chicago.gov.





Call to Action⁷

CHAPTER

Meaningful change requires persistence, creativity, and collaboration. Progress can only happen when communities, practitioners, and policymakers come together to champion solutions that reflect shared values.

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7.1

Next Steps

What is the next step your community can take?**Ask "What is the Need, and Who is it Serving?"**

It is important to understand and define what your current and future housing needs are, including which demographics (single-person households, seniors, etc.) and income levels are able to find housing in your community and which are not - or worse, who is being pushed out. Labour bureau statistics and census data can be helpful if your community hasn't embarked on a bigger residential market analysis. Identify which building types best match the need in your community and engage local residents about the benefits of Missing Middle Housing.

Determine Where to Prioritize Missing Middle Housing Development

While pro-housing advocates encourage wide-spread change, it is important to understand where MMH will work best in your community and prioritize changes in those areas first to ensure that new types of housing will be successful before implementing broader initiatives. Focusing new investment where there is existing or planned access to amenities, as well as existing infrastructure, can support a synergy between local housing providers and capital improvement projects that more easily overcome some of the financial barriers that are present for small scale development.

I'm a single person.

I need a studio apartment that's close to where I work and affordable.

We are roommates.

We need a three-bedroom unit with space to host. We're not into yard work, and don't need a backyard.

We are retirees.

We need a home where we are surrounded by community. We don't drive and prefer to be very close to what we need.

We are a couple.

We need a small place where we know our neighbors. We want to afford to own a place and be able to walk to shops and restaurants.



Test the Local Market

Once you identify which housing types are desired and where to focus your initial efforts, it is key to test potential regulatory changes using existing lots and opportunity sites. This testing can help visualize the scale and form of new housing as well as understand if the outcomes are feasible and attainable in your market. Before embarking on regulatory change or widespread implementation, it is critical to communicate and understand the impact these changes could have on different neighborhoods and market conditions.

Build a Coalition of Local Developers and Partners

Bring together a wide network of stakeholders to lead your local housing initiatives including for-profit and non-profit housing providers, builders and local trades, realtor and neighborhood groups, planning staff and council members, banks and community investors, and other institutions both local (colleges, businesses, hospitals) and national (AARP,

Realtors Associations, NAHB). Building support and understanding is needed at every level and across all sectors. It is important to have a champion that shepherds new initiatives forward while also engaging the public broadly.

Don't Stop

Whether your community is just starting to talk about Missing Middle Housing, is in the middle of a zoning overhaul, or is already starting to build new development - it is important to keep going. Build upon each success and recognize that changes in policy, planning, implementation all take a long time. Incremental change can be just as effective as bigger efforts. If your municipality isn't ready to tackle one initiative yet, shift to another effort or path. There is no one size fits all approach. Improvements, big and small, are needed across sectors to remove barriers and build support for housing choices that meet the needs of the people living and working in our communities today.

We are a multi-generational family.

We need room for three generations to live together. Grandma and grandpa need their own space to retreat, it could be an ADU, but still want to be steps away from their kids and grandkids and to be present in the family's daily life.

We are a family.

We need space for our kids to live and play, and we'd like a backyard. We need an affordable house from which we can walk to school.







Learn More

CHAPTER 8

This appendix offers a look into the site planning workshop, highlighting its goals, structure, and key takeaways. It also includes supplemental demographic tables and charts that provide context for housing needs and development patterns in the region.

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Lessons Learned

The workshop provided a valuable opportunity for participants to gain practical insights into housing design and site planning. Several specific lessons emerged that can inform local planning efforts and policy decisions:

- “We are surprised that most middle housing fits with existing lot coverage regulations, taking up 40% of lot coverage or below. That’s an important piece to test in our communities’ lots and zoning.”
- “We have a great opportunity because we have a new generation of potential homebuyers, and many are looking for something other than the traditional option.”
- “I placed a multiplex at the corner and a duplex towards the center of the block, thinking that the duplex would serve as a transition to single-family homes nearby.”

- “Allowing off-street parking can be especially helpful for specific situations, like a cottage court for seniors, when it means they have a shorter walk from the street to their door.”
- “From a developer’s point of view, there are always costs and trade-offs to supplying more parking.”

“I put the driveways in a new alley in the back since I pictured this on a commercial corridor that has a lot of fast traffic, and it would be better to drive in and out of a side street.”

Peer Network Participant



Figure 8.2 Left: two photos of peer network participants testing various housing types on the designated lot sizes.

Figure 8.3 Above: group photos of the peer network as they converse and explore the housing types.

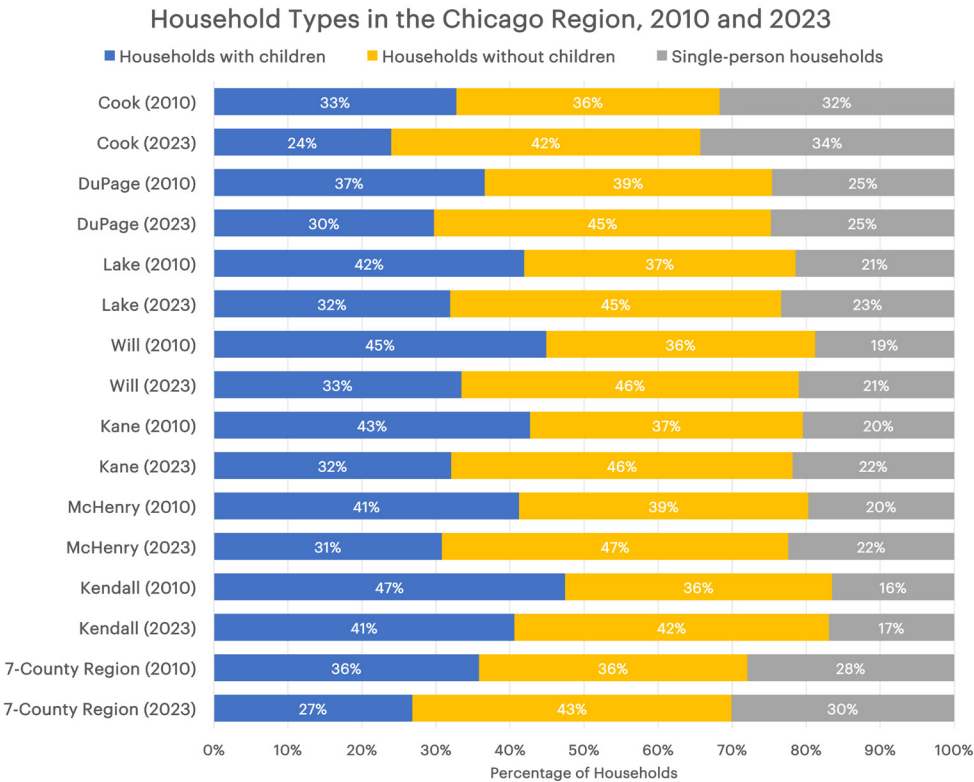
8.2 Additional Demographic Data

The following series of tables, charts, and graphs provide a more detailed look at the various demographic and housing conditions represented across the peer network communities.

Overview of the Peer Network ¹							
Municipality	County	Population (2010)	Population (2020)	% Change in Population	Median Household Income (2023)	Median Home Value (2023)	Median Gross Rent (2023)
Arlington Heights	Cook	75,101	77,676	+3.4%	\$118,532	\$403,200	\$1,727
Aurora	Kane	197,889	180,542	-8.8%	\$90,109	\$260,400	\$1,535
Bensenville	DuPage	18,352	18,813	+2.5%	\$78,298	\$259,300	\$1,374
Broadview	Cook	7,932	7,998	+0.8%	\$60,139	\$240,600	\$1,092
Chicago Heights	Cook	30,276	27,480	-9.2%	\$57,479	\$149,900	\$1,035
Geneva	Kane	21,495	21,393	-0.5%	\$136,621	\$415,800	\$1,805
Glencoe	Cook	8,723	8,849	+1.4%	\$250,000+	\$1,354,900	\$2,907
Harvard	McHenry	9,447	9,469	+0.2%	\$71,418	\$174,000	\$1,184
Northbrook	Cook	33,170	35,222	+6.2%	\$155,321	\$644,100	\$2,334
Oak Park	Cook	51,878	54,583	+5.2%	\$155,321	\$644,100	\$2,334
Oswego	Kendall	30,355	34,585	+13.9%	\$119,881	\$319,000	\$1,823
Park Forest	Cook, Will	21,975	21,687	-1.3%	\$62,305	\$106,200	\$1,341
Richton Park	Cook	13,646	12,775	-6.4%	\$71,724	\$200,400	\$1,313
Round Lake	Lake	18,289	18,721	+2.4%	\$108,965	\$257,400	\$1,494
South Elgin	Kane	21,985	23,865	+8.6%	\$123,744	\$296,100	\$1,619
Warrenville	DuPage	13,140	13,553	+3.1%	\$99,028	\$266,500	\$1,759
West Dundee	Kane	7,331	7,686	+4.8%	\$104,750	\$342,900	\$1,697
Woodstock	McHenry	24,770	25,630	+3.5%	\$83,293	\$231,100	\$1,174
Chicago MSA*		9,461,105	9,618,502	+1.7%	\$88,850	\$301,900	\$1,378

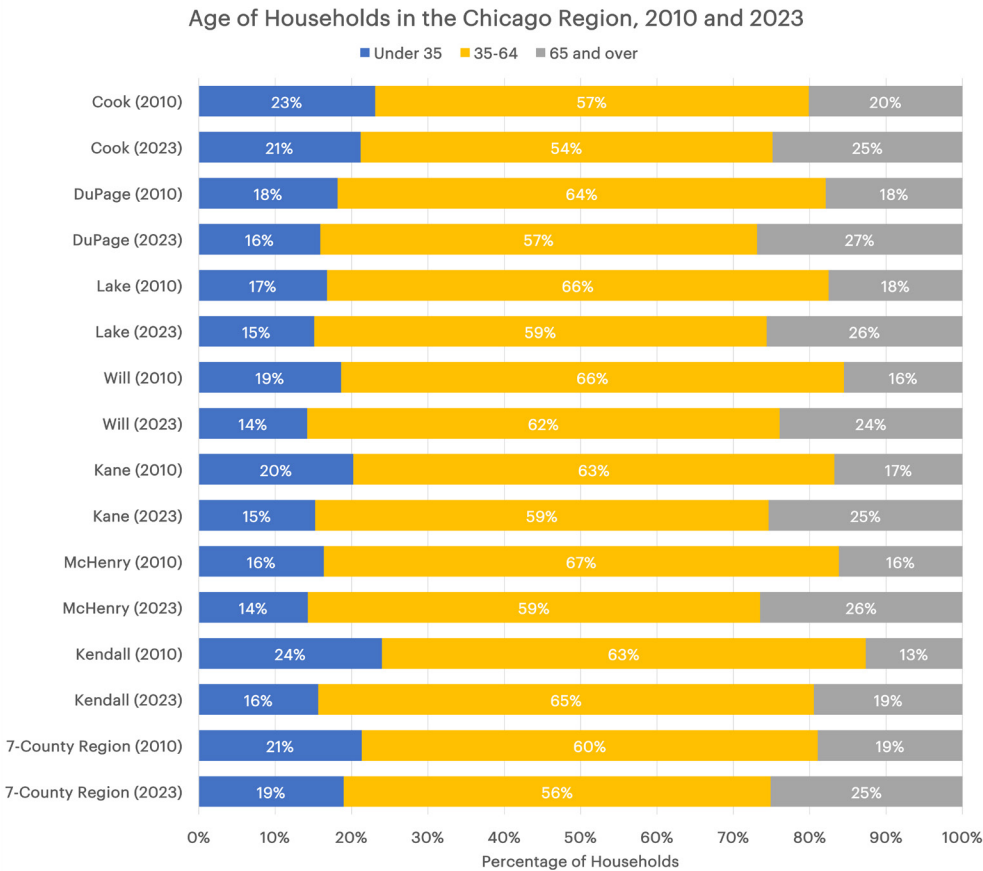
*Chicago MSA = Chicago Metropolitan Statistical Area

¹US Census Bureau Population (2010 and 2020), US Census Bureau American Community Survey 2019-2023 5-Year Estimates.



Household types are changing across the Chicago region as couples, empty-nesters, and individuals make up a growing share of households.

Sources: US Census Bureau American Community Survey 2006-2010 and 2019-2023 5-Year Estimates.

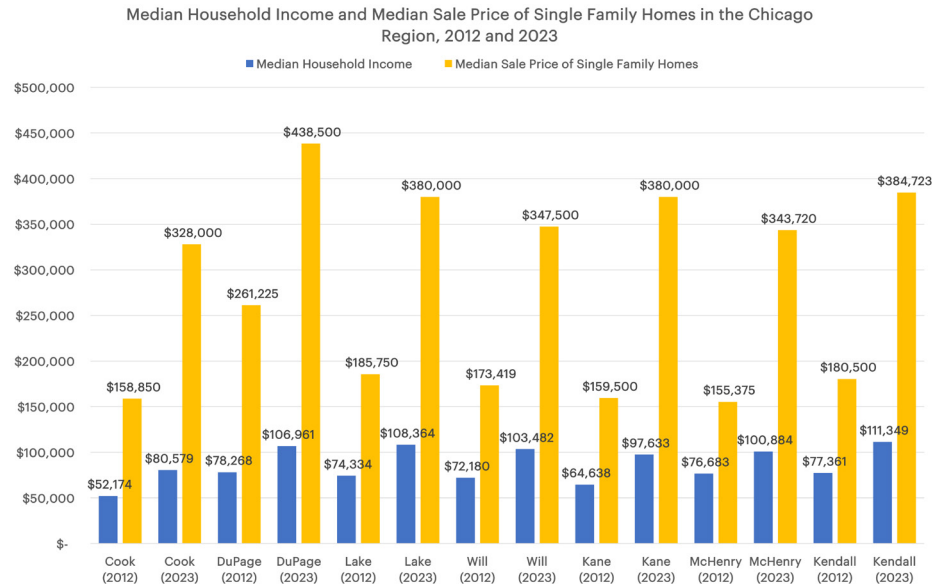


Seniors make up a growing share of the region’s households, increasing demand for smaller homes that require less maintenance.

Sources: US Census Bureau American Community Survey 2006-2010 and 2019-2023 5-Year Estimates.

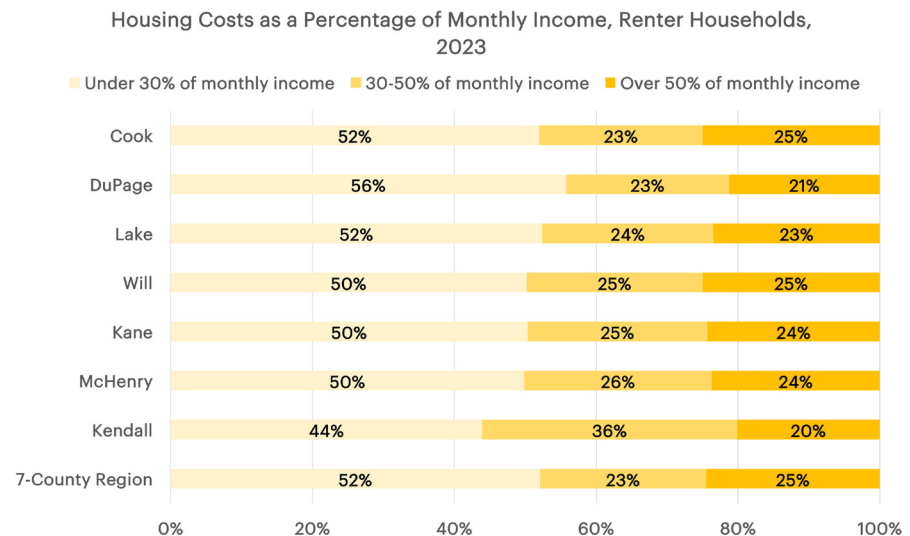
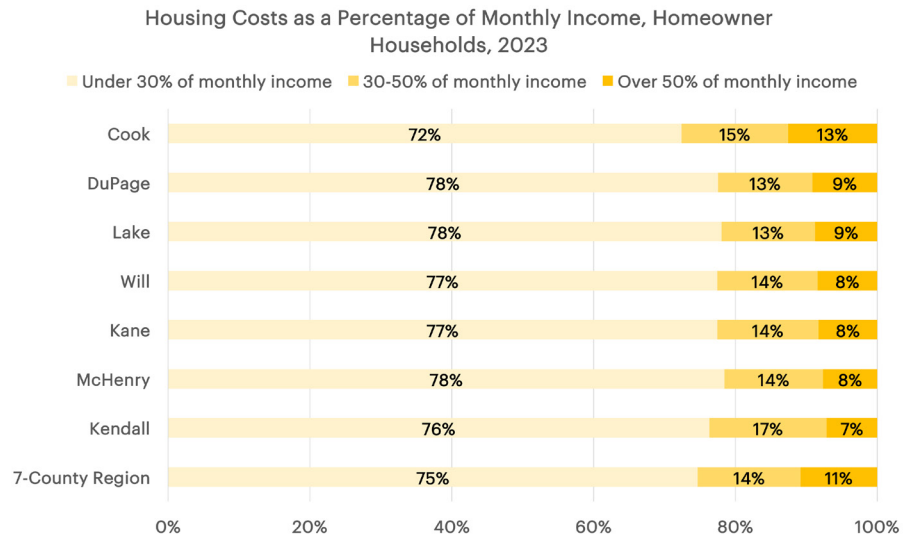
Prices for single-family homes have risen faster than incomes and are out of reach for more middle-income households.

Sources: US Census Bureau American Community Survey 2012 and 2023 1-Year Estimates; Redfin Data Center



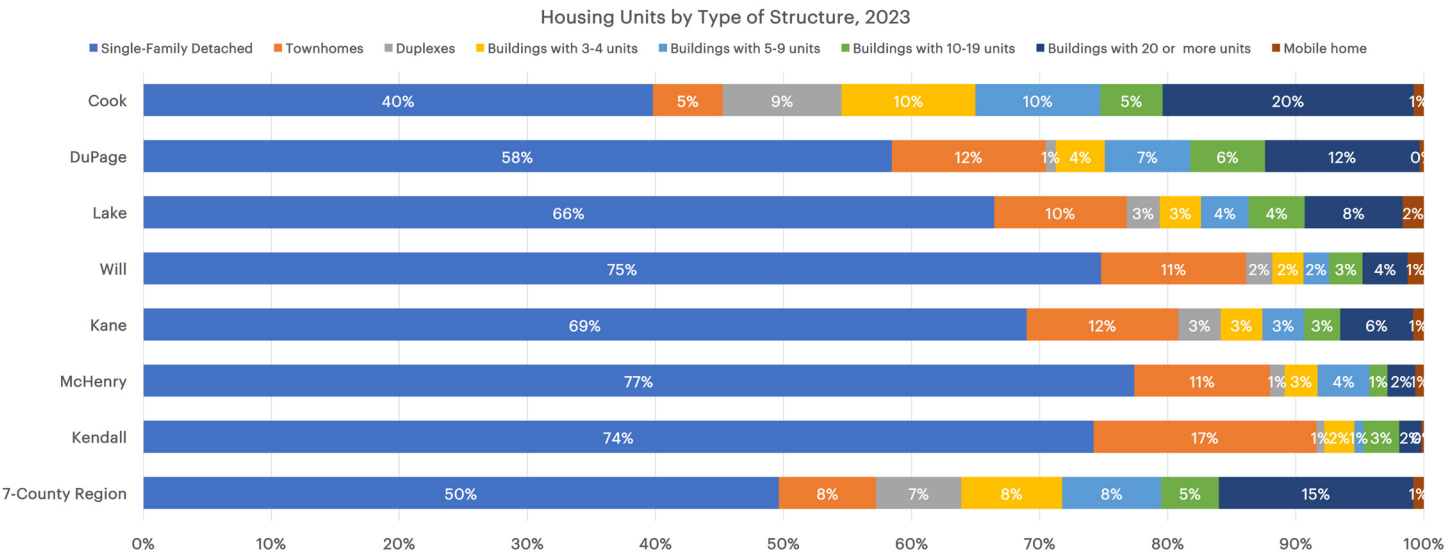
Nearly half of renters and a quarter of homeowners are "housing cost burdened," paying over 30% of their monthly income on housing. Many pay over half of their monthly income on housing.

Sources: US Census Bureau American Community Survey 2019-2023 5-Year Estimate.



Missing Middle Housing makes up a small share of the housing stock in most counties.

Source: US Census Bureau American Community Survey 2019-2023 5-Year Estimate.



Growth in household incomes from 2012 to 2023 was outpaced by price increases of single-family homes.

Source: US Census Bureau American Community Survey 2012 and 2023 1-Year Estimates; Redfin Data Center.

Median Household Income and Median Sale Price Comparison								
County	Med. Income	2012		Med. Income	2023		Percent Increase	
		Med. Sale Price of SF Homes	Income to Sale Price Ratio		Median Sale Price of SF Homes	Income to Sale Price Ratio	Med. Income	Median Sale Price of SF Homes
Cook	\$52,174	\$158,850	3.0	\$80,579	\$328,000	4.1	54.4%	106.5%
DuPage	\$78,268	\$261,225	3.3	\$106,691	\$438,500	4.1	36.7%	67.9%
Kane	\$64,638	\$159,500	2.5	\$97,633	\$380,000	3.9	51.0%	138.2%
Kendall	\$77,361	\$180,500	2.3	\$111,349	\$384,723	3.5	43.9%	113.1%
Lake	\$74,334	\$185,750	2.5	\$108,364	\$380,000	3.5	45.8%	104.6%
McHenry	\$76,683	\$155,375	2.0	\$100,884	\$343,720	3.4	31.6%	121.2%
Will	\$72,180	\$173,419	2.4	\$103,482	\$347,500	3.4	43.4%	100.4%

