

Density, Form-Based Codes, and Missing Middle Housing

Market Demand and Housing Affordability

The baby boomer generation represents almost 20 percent of the population—by 2030, one in five Americans will be 65 or older (Urban Land Institute, *What's Next? Real Estate in the New Economy*, 2011). This growing population of retirees doesn't want to live in traditional retirement communities. A mix of housing types can help meet differing income and generational needs, even allowing seniors to age in place within the same community. Millennials want to live in walkable communities where they can live, work, and play. In order to retain both Boomers and Millennials as residents, and spur economic development, communities need a diverse range of housing types. Millennials are willing to sacrifice less space in favor of more flexible working situations, stimulating mixed-use neighborhoods, and a variety of rental and for-sale housing.

Housing affordability, in both urban and suburban areas, is an increasing concern as markets bounce back after the recession. Emily Badger wrote an article for the Washington Post on why there isn't enough decent affordable housing. It came down to a lack of overall housing supply. Increase the sheer amount of housing, and competition for it will fall, bringing down rents along the way to the benefit of everyone. In tight markets, poor and middle-class households are forced to compete with one another for scarce homes. So new market-rate housing eases that competition, even if the poor are not the ones living in it. Over time, new housing also filters down to the more affordable supply, because housing becomes less desirable as it ages. That means the luxury housing being built today will contribute to the middle-class supply 30 years from now; it means today's middle-class housing was luxury housing 30 years ago.

Missing Middle Housing

Especially in terms of affordability, we tend to think of a dichotomy between single-family detached homes and apartments and townhouses, and people quickly become concerned about increasing density affecting neighborhood character. One way many communities in the United States are increasing density while maintaining a streetscape that is compatible with single-family housing types is to incorporate the concept of Missing Middle housing types. Missing middle housing can assist in both increasing the number of units built and providing units for a wide variety of price points. This involves allowing a broader diversity of housing types than most ordinances allow today, but that used to be built in many communities historically. Opticos Founder Dan Parolek coined the phrase Missing Middle Housing to describe a range of multi-unit or clustered housing types. Much of the information in this memo comes from his websites and writings at <http://opticosdesign.com/> and <http://missingmiddlehousing.com/>. While the land to build and expand missing middle housing types is scarce in the hottest markets around the country, second tier cities are prime examples of a city where this concept could really take hold because of the ability to better utilize the single most expensive element of housing construction, the land.

Because land costs and home size often limit affordability, a classic solution is to aim for greater

density and/or smaller lots and/or smaller homes. Concord at Riverwalk, in Massachusetts, is a good demonstration of the smaller home, smaller lot concept that has been successfully used across the country to build more affordable communities. This project actually features single-family cottages around a common green and includes community gardens as well.



Concord Riverwalk

Duplexes, townhomes, bungalow courts, carriage houses, and other missing middle housing types provide more units on less land than traditional single-family homes. Developers can make more money on the same property even with lower rents because the costs are spread across multiple units. Additional benefits are that they are more affordable, and create the necessary fabric for a walkable neighborhood. Sixteen dwelling units (du)/acre is the minimum threshold for main street type development with neighborhood serving retail.

This approach can also work in master planned communities. Habersham in South Carolina, East Beach in Virginia and Daybreak in Utah are master planned communities where large production developers are successfully mixing a range of housing types with traditional single-family homes.

Illustration of Missing Middle Housing Types

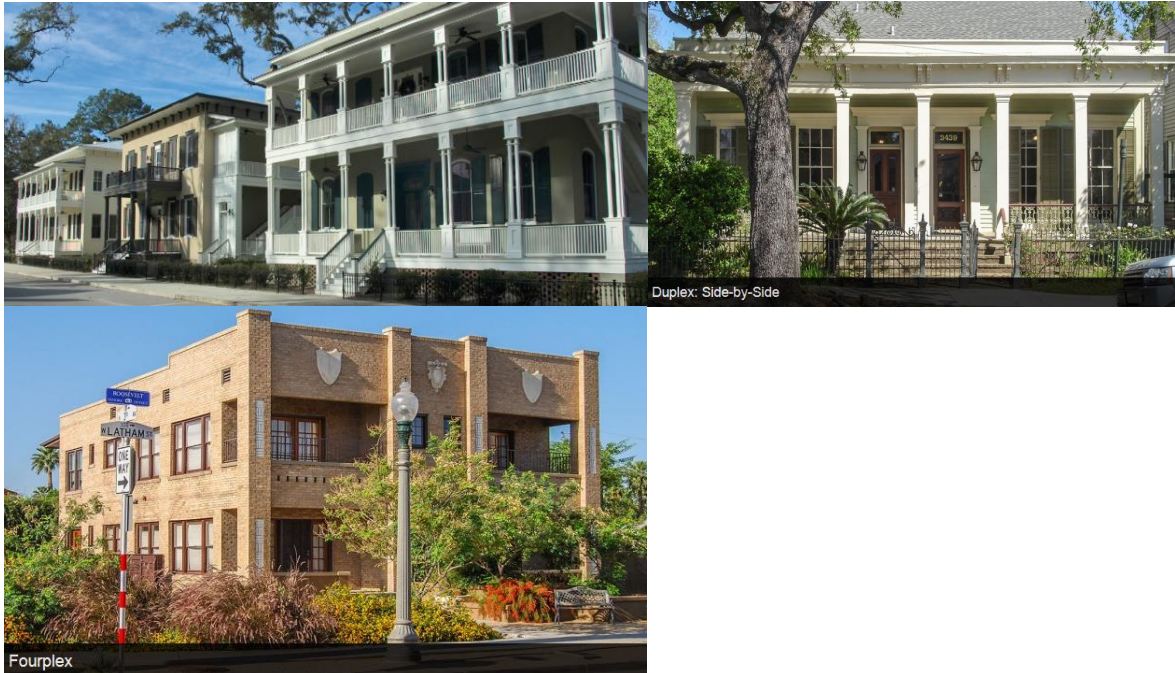


Form Based Code

A key challenge with building missing middle housing types in a conventional zoning environment is that, while the final product does not resemble high density housing types, it requires high density zoning to be in place. These building types typically range in density from 16 to 35 du/acre depending on the building type and lot size. However, it is important not to get caught up in these density numbers because the PERCEIVED density is much lower. The photos below are good examples of this. The actual density vs. the perceived density is quite different. The Urban Land Institute published a [report](#) in 2015 on ways to increase missing middle housing types including:

- Allow missing middle housing in more zones by using form-based codes instead of density-based codes.
- Streamline the review process for select missing middle housing types.
- Work with the community to demonstrate the compatibility of missing middle housing with existing neighborhoods.





Photos from missingmiddlehousing.com

The largest of these types -- mansion apartment and side-by-side duplex -- may have a width of about 40 to 50 feet, which is comparable to a large estate home. These building types require medium to high densities, excluding them from the singly-family use zone, but their small footprints with lower heights don't fit the requirements of multifamily use zones. Hence the need for a form-based code or [hybrid code](#) to achieve the desired result.

For example, a bungalow court can have densities of up to 35 dwelling units per acre, even though the buildings are only one story tall, and the size of each cottage is only 25 feet by 30 feet. If a zoning district sets a maximum density of 20 dwelling units per acre, it would not allow the bungalow court type, but if the zoning district is a maximum density of 35 dwelling units per acre with few or no additional form standards, every builder/developer will max out a lot with a large, out-of-scale apartment building. Hence the need for form based code, which would require multiple smaller buildings once a lot reaches a certain size (frontage width in particular). It should also be noted that form-based code doesn't need to be implemented citywide. It can be confined to certain areas where you wish to see this type of development.

Form based code also allows the city to move toward by-right zoning approvals. By-Right Zoning is a tool to help solve the affordable housing crisis many communities are facing. A zoning code is considered "By-Right" if the approvals process is streamlined so that projects that comply with the zoning standards receive their approval without a discretionary review process.

Accessory Dwelling Units

Accessory dwelling units (ADU) can increase density and stock of affordable units, as well as help current residents increase their incomes. ADUs, are a second small dwelling on the same

property as or attached to a single-family home. It is a self-contained living unit that typically has its own kitchen, bedroom(s) and bathroom space. Although a number of communities still restrict development of accessory dwelling units, there is a growing awareness and acceptance of ADUs as an inexpensive way to increase the affordable housing supply

There are multiple economic benefits of ADUs. They generate local jobs during construction, enhance property tax base for the city, and create additional housing near employment centers and public transportation as ADUs are typically built where there is a demand for housing. There are also environmental and societal benefits to building ADUs. Smaller buildings use less energy, do not require additional infrastructure to be built, and are considered infill development. ADUs are an affordable solution for multigenerational households, either to house an aging parent or a college-age child, and they do not change the existing neighborhood character. Examples of ADU ordinances include:

- Barnstable, Massachusetts – [Accessory Affordable Apartment Program](#)
- Lexington, Massachusetts – [Comprehensive Plan](#)
- Wellfleet, Massachusetts – [Accessory Apartment Bylaws](#)
- Santa Cruz, California – [Accessory Dwelling Unit Development Program](#)
- Portland, Oregon – [ADU Information](#)
- Arlington County, Virginia – [ADU Zoning Ordinance Provisions](#)
- Fauquier County, Virginia – [Accessory Dwelling Units Zoning Ordinance](#)
- Montgomery County, Maryland – [News Article on Improved ADU Regs](#)
- [Accessory Dwelling Unit Zoning Codes](#) – West coast examples

Case Study – Cincinnati, Ohio

The city of Cincinnati has lost 40 percent of its population since 1950. What the Millennials and Baby Boomer population wanted was small, simple spaces for living, a sense of community, people, density, access to transit, and proximity to services and amenities. A Form-Based Code is one of the tools they are using to achieve these goals. A Sustainable Communities Challenge Grant from the Department of Housing and Urban Design is funding the project. The photo below is an example of the existing missing middle housing types ripe for redevelopment and the kind of streetscape the city is trying to achieve.



Left: Revitalizing neighborhood main streets are necessary to make Cincinnati's urban neighborhoods viable. This corner in the Over-the-Rhine neighborhood had the highest crime rate of any intersection in the city in 2005, but two years later looked like this. Right: With strategies to revitalize the broader neighborhoods, the diverse collection of Missing Middle housing types (all rich architecturally) provide many different living choices, including live/work units located in former corner stores.

Photo from opticosdesign.com

The city is using the concept of The Transect, which is part of Smart Code, to draft the new zoning code and pay particular attention to appropriate scales. Additional information of Smart Code and The Transect can be found at <https://transect.org/transect.html>.

Case Study: Bellevue, Kentucky Form-Based Code

This is a mandatory Smart Code that aims at shaping public space and preserving Bellevue's historic downtown character. It describes and sets standards for transects, thoroughfares, public frontages, thoroughfare assemblies, public lighting, and civic space. It is clearly labeled and accurate in the presentation of spatial configurations. Regulations and standards are keyed to specific locations on the zoning map and emphasize parameters for form with predictable physical outcomes (build-to lines, frontage type requirements, etc.) rather than rely on numerical parameters (FAR, density, etc.). View the code at <http://bellevueky.org/services-bellevue/zoningcode-enforcement/zoning-ordinance/>

Case Study: St. Petersburg, Florida



The photo above is a community in St. Petersburg, Florida. City leaders in St. Petersburg are considering a unique way to bring more affordable housing to the area. “Skinny” homes are 1,300 to 2,000 sq. ft. homes that would include three bedrooms and two bathrooms and cost between \$150,000 and \$300,000. The city would offer up foreclosed, vacant lots to private, for and non-profit companies to build the homes on. This is another example of using high density, low scale housing to create attractive, affordable neighborhoods.

<http://www.abcactionnews.com/news/region-pinellas/leaders-consider-bringing-skinny-more-affordable-homes-to-st-pete>

NAHB Resources

NAHB has developed a [Smart Codes, Smart Process Checklist](#) to help communities enhance housing affordability with a comprehensive planning and development framework. Some of the items on that list focus on streamlining the land development review and approval process. Additional strategies can be found in the NAHB report, [Development Process Efficiency: Cutting Through the Red Tape](#). In addition to exploring ways to increase market-rate affordability, public-private partnerships are becoming an even more common way of providing additional affordable units. Strategies and case-studies on how developers and communities work together to build these types of projects can be found in [How Did They Do It? Discovering New Opportunities for Affordable Housing](#).

Additional Resources

Webinar on form-based codes <https://courses.planetizen.com/track/form-based-codes-101>

Library of existing codes through the Form Based Codes Institute

<http://formbasedcodes.org/codes/>

Much of the information in this memo was found on the following web pages:

<http://missingmiddlehousing.com/>

<http://missingmiddlehousing.com/category/the-types/>

<http://missingmiddlehousing.com/about/assembly/>



<http://missingmiddlehousing.com/about/how-to-regulate/>
<http://opticosdesign.com/>
<http://opticosdesign.com/projects/form-based-codes/>
<http://opticosdesign.com/news/>

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