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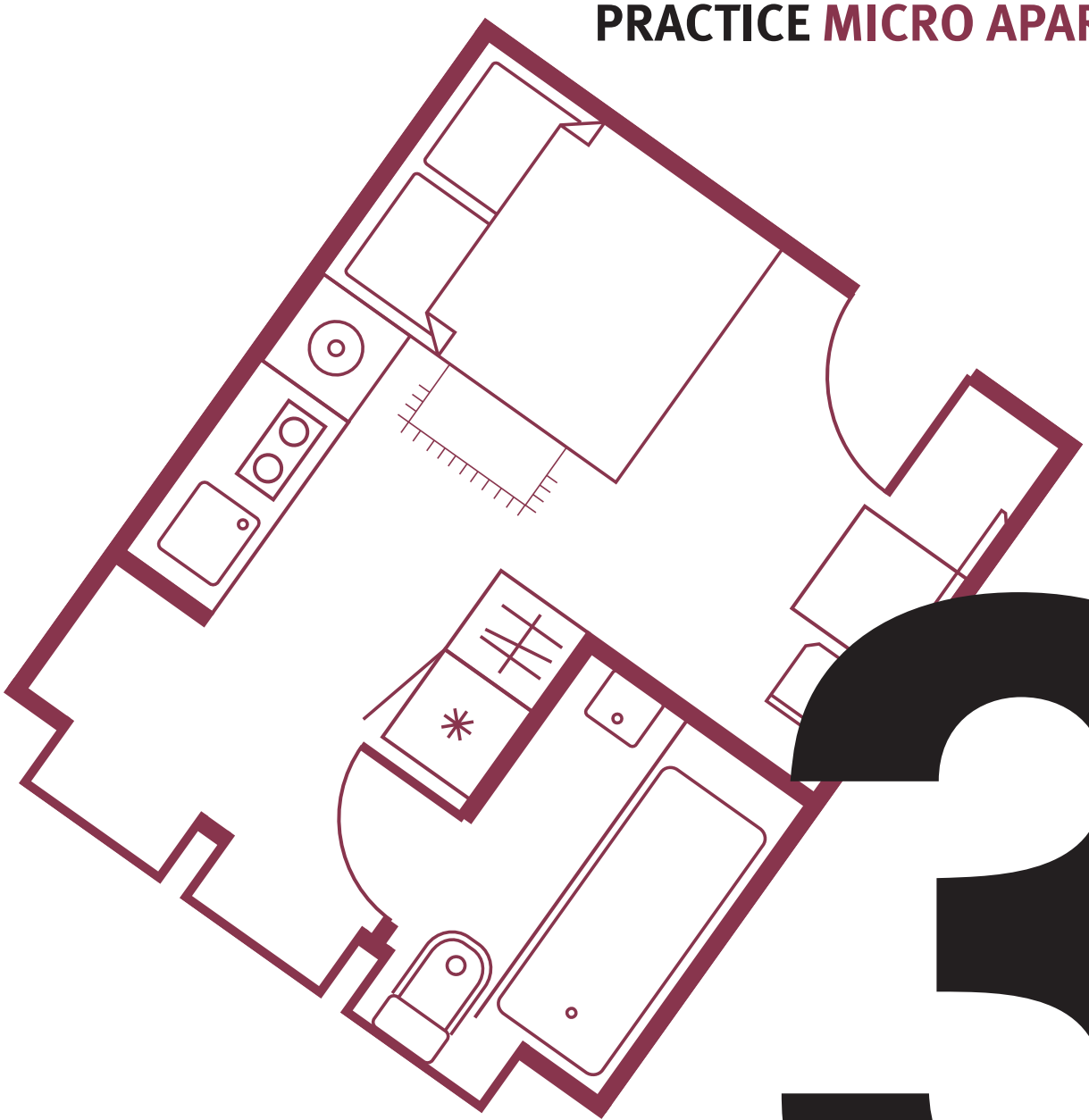
PRACTICE MICRO APARTMENTS



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Zoning for Micro Apartments

By David Morley, AICP

There are few symbols of consumption as conspicuous as a giant new home. But "living large" isn't for everyone. Over the past several years, interest in small living spaces has inspired widespread media coverage of tiny houses (see the November 2015 edition of *Zoning Practice*) and micro apartments.

While there is no authoritative definition of micro apartment, most commentators reserve this label for new multifamily residences with less than 400 square feet of living space. Typically, these are efficiency dwelling units (also known as "studio" apartments) with a single combined living, dining, and sleeping room. Even though 400 square feet is smaller than most two-car garages, this is considered spacious in some markets. Consequently, the more relevant concept is size relative to market norms. The term "micro apartment" is probably saved for efficiency units that are at least 20 percent smaller than the average size in the area (i.e., a specific neighborhood, district, or city).

Few communities address micro apartments (or an analogous term) explicitly in their zoning codes. However, many zoning codes make it physically impossible or financially infeasible to build very small efficiency dwelling units. The purposes of this article are to highlight why rising demand for micro apartments may merit zoning changes, and to summarize how a small number of cities have amended their codes to add definitions, use permissions, and additional standards to sanction smaller dwelling units than would otherwise be permissible.

THE MARKET FOR MICRO APARTMENTS

The primary forces driving demand for very small apartments in cities are demographic changes and real estate market dynamics. The maturation of millennials (those born between about 1982 and 2004) and the retirement of the baby boomers (born between 1946 and 1964) has changed demand for housing in many urban neighborhoods. These large generations are driving population growth in many cities, and so far, housing markets have been slow to respond to pent-up demand.

Demographic Change

In 1957—at the height of the postwar baby boom—the average household size in the U.S. was 3.33 persons. By 2017, this number had fallen to 2.54 persons (U.S. Census Bureau 2017a). The reasons are clear: An increasing percentage of women are choosing to delay or forgo marriage and childbirth in favor of educational attainment and career advancement.

However, smaller families haven't typically led to smaller homes. In fact, the average size of a newly constructed single-family home in the U.S. increased from 1,660 square feet in 1973 to a peak of 2,687 square feet in 2015, a more than 60 percent gain (U.S. Census Bureau 2017b). This doesn't tell the whole story, though.

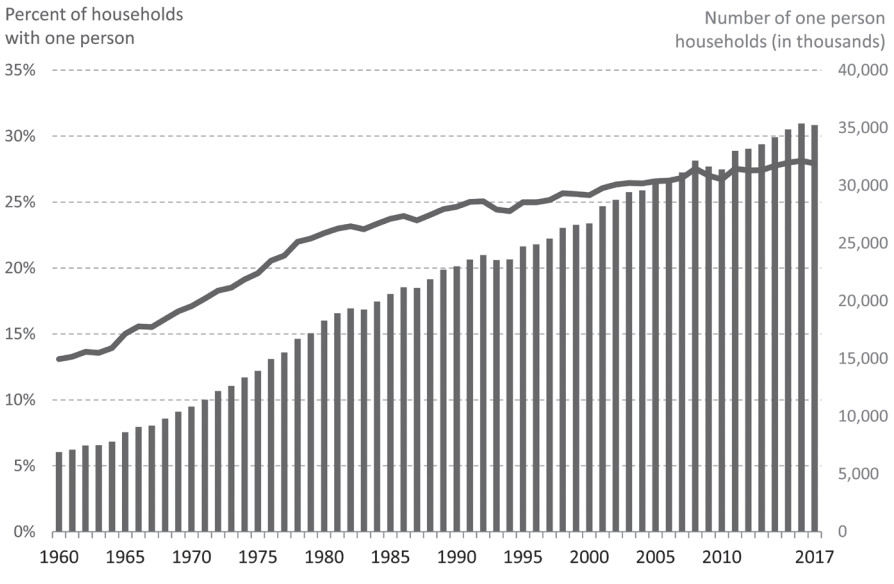
Between 1960 and 2017, the percentage of single-person households increased from 13 to 28 percent (U.S. Census Bureau 2017a). The trend is more dramatic in large cities. According to the most recent estimates, people living alone account for 33 percent of all households in the 25 most populous cities (U.S. Census Bureau 2017c). Generally, these individuals are not the target market for new detached single-family residences. In these cities, 57 percent of single-person householders are renters, and this figure jumps to 87 percent for householders under the age of 35.

Market Dynamics

As the percentage of single-person households increases, we need significantly more dwelling units to house the same number of people. In cities with growing populations, this means more multifamily residences. For built-out cities, the math only works if you can fit more units in the same building footprint. And that's exactly what's happening.

Across the country, the average unit size for large multifamily developments is dropping, and efficiency apartments have shrunk the most (Otet 2016). In 2006, the average size of an efficiency apartment in a building or complex with more than 50 units was 614 square feet. By 2016, this had fallen to 504 square feet, an 18 percent decrease.

According to an Urban Land Institute survey of current micro-apartment residents, 82



Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 1960 to 2017.

Living alone used to be relatively uncommon in the U.S.

Joe Mabel, Wikimedia (CC BY-SA 3.0)

This micro-apartment building in Seattle's Capitol Hill neighborhood has 60 units with private bathrooms and kitchenettes.

percent did not start out looking for a micro apartment (Carey et al. 2015). Rather, they chose their residences as a trade-off for lower rents; proximity to work or school, neighborhood amenities, and transit; the ability to live alone; internet service; and unit finishes.

The target market for micro apartments are single men and women under the age of 34, currently living with roommates, and earning less than $40,000 per year (Carey et al. 2015). Market research indicates that most of these individuals rent micro apartments when they are new to a career or city, and that they graduate to larger units after a year or two. These units seem especially attractive to entry-level technology and new media industry workers (Carey et al. 2015).

Micro apartments versus single-room occupancy units

While there are no formal distinctions among different types of very small multifamily residences, real estate professionals routinely draw distinctions between single-room occupancy (SRO) units geared toward very-low-income residents, and micro apartments aimed at young professionals. SRO units typically rent by the day, week, or month, and do not have kitchens. Meanwhile, contemporary micro apartments generally lease by the year (or school semester) and have in-unit kitchens or kitchenettes (i.e., refrigerator, microwave, and sink). However, in some cases the built form and internal space configuration can be very similar for both.

Individual micro-apartment projects can vary considerably in terms of unit features and communal amenities. Some projects incorporate a range of design solutions to make units seem larger, including built-in furniture and storage areas, high ceilings, large windows, and movable walls and kitchen islands. Others place the emphasis on communal facilities, such as shared kitchens, dining areas, and gathering spaces. At the top of the market, some buildings offer both.

New SRO projects haven't gained as much media attention as market-rate micro-apartment projects; however, in some cities, public housing authorities and nonprofit developers have shown renewed interest in SROs as "housing-first" for individuals experiencing homelessness. Contemporary SROs may provide in-unit kitchenettes, and often incorporate communal spaces for cooking, eating, or socializing. In these cases, the key physical distinction between micro apartments and SRO units are the quality of the finishes.

PLANNING FOR MICRO APARTMENTS

The reasons for supporting micro-apartment projects go beyond satisfying existing market demand. However, careful planning is necessary to assess the likely effects of regulatory changes and to address community concerns.

The Benefits of Micro Apartments

All other factors equal, per-unit housing costs decrease as unit size decreases and project density increases. Consequently, micro-apartment projects can increase housing choice and affordability in tight housing markets. Beyond the benefits to individual residents, micro apartments in pedestrian- and transit-friendly locations make more efficient use of existing infrastructure and public services, consume less energy, and have a lower carbon footprint than larger residences.

Micro apartments can also be part of a local economic development strategy to attract and retain young professionals. Expanding opportunities for people to live near downtown jobs and amenities can be attractive to current and prospective employers who need access to an educated workforce.

Assessing Market Conditions

Not every housing market is ripe for micro-apartment development. Furthermore, what qualifies as a micro apartment in one market may seem roomy in another. Before considering regulatory changes to facilitate micro-apartment development, it makes sense to assess the local housing market, to determine the likely effects of permitting dramatically higher density residential development on housing costs in the community, and to gauge how much smaller apartments would need to be to make a micro-apartment project "pencil out" for developers.

For communities with low housing demand, regulatory changes will likely have little to no effect on development outcomes or housing costs. On the other hand, making micro apartments legal in communities with very high housing demand relative to existing development opportunities may have the unintended consequence of raising housing costs across the board as property owners and developers see the potential of higher rents per square foot.

This same relationship between housing demand and existing development opportunities will also partly determine the

Ted Eytan, Flickr (CC BY-SA 2.0)

The luxury Channel apartment building in Washington, D.C., includes more than 150 micro apartments with sizes ranging from 337 to 358 square feet.

size threshold for micro-apartment development. However, there are other important factors to consider, such as the difference in development costs between wood-frame and concrete- or steel-framed buildings. Many local building codes only permit wood-frame construction for buildings up to 75 feet tall. Taller buildings also typically require additional fire safety features. To finance the leap to concrete- or steel-framed construction, developers may need to squeeze more units per floor.

Addressing Community Concerns

Sometimes existing residents will express concerns about any new project or policy proposal that will increase residential density. The most common concerns are related to traffic, parking, and community character.

Because micro apartments are most attractive to young professionals with lower-than-average rates of car ownership, conventional traffic and parking concerns may be unfounded. However, the popularity of on-demand ride services among young professionals can lead to traffic problems associated with curbside pickups and drop-offs. Here, and in areas where the existing infrastructure is over capacity, it is important to evaluate site design, infrastructure improvement, and transportation demand-management alternatives before encouraging or allowing micro-apartment projects.

Often the most productive strategy for addressing fears about community character is to keep discussions focused on the objective physical characteristics of projects, rather than the demographic characteristics of potential residents. This can help planners and local officials identify site and exterior building design priorities to mitigate aesthetic impacts.

If micro apartments are dramatically smaller than existing multifamily units, some community members may also worry about how they may affect potential occupants. While there is research supporting the idea that overcrowding negatively affects psychological well-being, these studies, generally, focus either on public housing residents or housing-instable families sharing tight quarters. If this research bears any relevance for contemporary micro-apartment projects, it is likely limited to highlighting the importance of ensuring access to adequate natural light and guarding against overoccupancy of individual units.

REGULATORY BARRIERS TO MICRO APARTMENTS

Fundamentally, state and local building codes determine the absolute lower limit on dwelling unit size through minimum habitable space standards. Most state and local building codes in the U.S. are rooted in the International Code Council's International Building Code (IBC). The most recent version of the IBC stipulates that efficiency dwelling units in new multifamily buildings must contain a living room with at least 220 square feet of floor area (which does not include space devoted to closets or bathrooms) (§1208.4). Very few state and local building codes permit dwelling units smaller than this.

One notable exception is California's Health and Safety Code, which explicitly authorizes cities and counties to adopt ordinances permitting efficiency dwelling units as small as 150 square feet (§17958.1). Additionally, the International Property Maintenance Code (IPMC) requires existing single-occupancy efficiency units to have only 120 square feet of clear floor area of habitable space (§404.6). At least one locality, Grand Rapids, Michigan, uses this standard to set an absolute minimum size for new micro apartments (§5.6.08.B.3.f).

Beyond a building code's habitable space requirements, many local zoning codes include provisions that establish an explicit minimum floor area for dwelling units of different types. The minimum dwelling unit size is virtually always more restrictive

Rhododendrites, Wikimedia (CC BY-SA 4.0)

Westminster Arcade in Providence, Rhode Island, is the oldest indoor shopping center in the U.S. In 2013, developers converted the top two floors to 48 residences, most of which are sized between 225 and 450 square feet.

SELECT DEMOGRAPHICS OF CITIES WITH ZONING STANDARDS FOR MICRO APARTMENTS

City	State	2016 Est. Population	2010 Population	2010 Density (pop. / square mile)	2016 Percentage of Single-Person Households	2016 Percentage of Crowded Housing Units[1]	2016 Percentage of Highly Rent-Burdened Households[2]
Grand Rapids	MI	196,445	188,040	4,236	30.3	1.1	47.3
Hartford	CT	123,243	124,775	7,179	38.8	3.7	41.4
Miami	FL	453,579	399,457	11,136	38.1	3.0	54.6
Oakland	CA	420,005	390,724	7,004	32.4	4.7	42.1
Seattle	WA	704,352	608,660	7,251	38.6	2.0	34.5
Springfield	MO	167,319	159,498	1,952	37.6	1.0	39.5
West Palm Beach	FL	108,161	99,919	1,807	39.0	2.5	49.3

1. Housing units with an average of at least 1.51 occupants per room.
2. Households paying 35 percent or more of income for gross rent.

EXAMPLES OF USE DEFINITIONS FOR MICRO APARTMENTS

City	State	Use Definition
Grand Rapids	MI	*Micro-Unit*: A dwelling unit, included as part of a multiunit development and located in a Mixed-Use Commercial zone district, with a total gross floor area of no more than 475 square feet.
Hartford	CT	*Efficiency/Micro-Unit*: A dwelling unit with at least 300 square feet and no more than 500 square feet of usable floor area, and only one combined living and sleeping room. The unit may also have separate rooms containing only kitchen facilities or bathroom facilities.
Miami	FL	*Micro Dwelling Unit*: A small Multifamily Residential Dwelling Unit type that shall include sanitary facilities and kitchen facilities.
Oakland	CA	*Micro Living Quarters*: [O]ne or more rooms located in a multiple-tenant building having an average net floor area of 175 square feet, but a minimum size of 150 square feet of net floor area, and occupied by a permanent residential activity. Bathroom facilities, which include toilet and sink, as well as shower and/or bathtub, are required to be located within each individual Micro Living Quarter. Cooking facilities are not allowed to be located within each individual Micro Living Quarter, and shared kitchen facilities are required within close proximity on the same building floor.
Seattle	WA	*Small Efficiency Dwelling Unit*: [A] dwelling unit with an amount of square footage less than the minimum amounts specified for Efficiency Dwelling Units in the Seattle Building Code, and that meet the standards prescribed in §23.42.048.
Springfield	MO	*Micro-Efficiency Multifamily Dwelling Unit*: A dwelling unit with a total floor area of 400 square feet or less.
West Palm Beach	FL	*Micro-Unit*: [A] small residential unit with a total square footage between 300 square feet and 549 square feet, with a fully functioning kitchen and bathroom.

than what would otherwise be allowed by the local building code (otherwise, the standard would be pointless).

Additionally, many zoning codes require a minimum lot area per dwelling unit for each zoning district. These minimum lot area requirements combine with required setbacks and maximum heights to create a minimum dwelling unit size that may vary lot by lot but is, again, virtually always more restrictive than habitable space requirements in the local building code.

Other zoning standards present indirect barriers to micro-apartment development. Minimum off-street parking requirements increase per-unit development costs and set a practical limit on the amount of space developers can devote to dwelling units, as do minimum open space or common area requirements. And multifamily development standards that stipulate a maximum percentage of efficiency units or a minimum average unit size make micro-apartment-only buildings impossible.

ZONING STANDARDS FOR MICRO APARTMENTS

The author has identified seven cities in the U.S. that define and regulate a use analogous to micro apartments in their zoning codes (see table above). While these jurisdictions are all principal cities of metropolitan statistical areas, they are not similarly populous or dense. Based on the most recent American Community Survey estimates, all seven have a higher percentage of single-person households than the national average (28.1 percent). Five of the cities are growing at a rate faster than the national average (4.7 percent), have a higher percentage of crowded housing units than the national average (1.1 percent), or have a higher percentage of highly rent-burdened households than the national average (40.7 percent).

Use Definitions

Defining micro apartments as a distinct use can be helpful if the community wants to single out these units for special zoning treatment. However, if micro apartments are subject to the same use permissions and development standards as other multifamily dwelling units (or other efficiency units), there is no clear benefit to adding a new definition to the zoning code.

While numerous popular press articles have spotlighted existing or planned micro-apartment projects in New York; Chicago; San Francisco; Seattle; Denver; Boston; Washington, D.C.; Portland, Oregon; Providence, Rhode Island; and Chattanooga, Tennessee, only one currently defines micro apartments as a distinct land use. Seattle added a definition and use-specific standards for "small efficiency dwelling units" in 2014 after developers had already built several small-scale micro-apartment projects with shared kitchens (taking advantage of existing standards for congregate residences) in relatively low-density residential areas. In this case, the city moved to check an existing development trend. For other cities, the motivation seems to be to facilitate a type of development that was previously either explicitly prohibited or extremely impractical due to district-specific development standards.

None of these cities use the term "micro apartment" in their codes, and there is no clear consensus alternative analogous term (see table below). Four define analogous terms—in part—based on a maximum size, and four define them—in part—based on a minimum size. Five require in-unit kitchens, and one prohibits in-unit kitchens. Three define analogous terms—in part—based on their location within specific zoning districts.

Communities that want to define micro apartments as a distinct use should consider adding a simple modifier to an existing defined term in its zoning code (e.g., "dwelling unit, micro") and placing the new definition near the modified term in a section of generally applicable definitions or a section explaining use classification. This will help project applicants find the definition quickly. Clarify the distinguishing characteristics of the new use, but do not incorporate use permissions or use-specific standards into the definition.

Use Permissions

Defining micro apartments as a distinct use makes it easy for the community to single out these units for special treatment in tables or lists of use permissions by zoning district. For some cities, the goal may be to permit micro apartments in zoning districts that do not otherwise allow multifamily development. For others, the goal may be to limit micro apartments to a small number of transit- or pedestrian-oriented districts. There are three basic types of use permissions in zoning: by right (or as-of-right), ministerial, and discretionary.

Permitting micro apartments by right sends a clear signal to potential developers that these units are desirable in a certain zoning district. This approach presents applicants with the fewest hoops to jump through before obtaining zoning approval.

Requiring a ministerial approval for micro apartments communicates that the community is generally supportive of these units in a certain zoning district, but this support is conditional upon compliance with objective standards intended to minimize negative impacts on proximate uses. This approach gives planning staff an opportunity to review an application before the planning director or zoning administrator issues an "over-the-counter" permit. Often, communities use ministerial approval processes to confirm that a particular application conforms to use-specific standards (see additional standards discussion below).

Permitting micro apartments subject to a discretionary use permit (often referred to as a conditional, special, or special exception use permit) indicates that the community is potentially supportive of these units in a certain zoning district, provided the specific spatial and operational characteristics of the use do not pose compatibility problems. Discretionary approval processes typically involve one or more public hearings before the local legislative body, planning commission, or zoning board renders a final decision on an application. Because the longer approval time frame and a greater degree of uncertainty can discourage some applicants, discretionary use permissions work best for locations or circumstances where objective standards are likely to be insufficient to ensure compatibility.

Interestingly, only four of the seven cities noted that define a term analogous to micro apartments in their zoning codes include these terms in their enumerations of use permissions (see table below), although in one of the three remaining examples, the city's use definition specifies permissible zoning districts. Six cities permit micro apartments in at least one district by right or ministerial approval. The other requires all micro-apartment projects to apply for a discretionary use permit. However, if the project is sited on less than one acre and does not require an environmental impact report, the planning director can render a decision, and a public hearing is not mandatory.

Communities that want to include district-based use permissions for micro apartments in their zoning codes should consider permitting these units either by right or with a ministerial approval in all pedestrian-oriented districts that allow multifamily residences. While these projects have significantly higher unit densities than conventional multifamily buildings, the number of residents per acre does not, typically, increase proportionally. Furthermore, based on the demographics discussed above, micro-apartment households are less likely to own cars or enroll students in local schools.

Additional Standards for Micro Apartments

Many contemporary zoning codes limit use permissions with use-specific development or operational standards. By codifying objective additional standards for specific uses, the community can permit a wider range of uses without relying on discretionary use permits to ensure compatibility. In some cases, use-specific standards apply only in certain zoning districts, while in other cases the standards apply community-wide.

The most common use-specific standards in contemporary zoning are off-street parking requirements. Typically, communities require every land use to provide a minimum amount of off-street parking on-site. However, a growing number of communities stipulate the maximum amount of off-street parking for various uses (with or without also specifying a minimum).

All seven cities noted that define a use analogous to micro apartments in their zoning codes have adopted use-specific, off-street parking standards (see table on page 7). Four of the cities require a minimum amount of off-street parking; the other three cap the amount of off-street parking.

Beyond off-street parking standards, there is little consistency from place to place regarding other use-specific zoning standards. Six cities include an explicit minimum unit size. Five require on-site bicycle parking. Three include site-specific locational restrictions, such as transit proximity or inclusion within an overlay district. One stipulates

USE PERMISSIONS FOR MICRO APARTMENTS

			Permitted in One or More Districts	
City	**State**	**Defined Use**	**By Right or Ministerial Approval**	**Subject to Discretionary Use Permit**
Grand Rapids	MI	Micro-Unit	X[1]	
Hartford	CT	Efficiency / Micro-Unit	X	
Miami	FL	Micro Dwelling Unit	X	
Oakland	CA	Micro Living Quarters		X
Seattle	WA	Small Efficiency Dwelling Unit	X[2]	X[2]
Springfield	MO	Micro-Efficiency Multifamily Dwelling Unit	X[1]	X[1]
West Palm Beach	FL	Micro-Unit	X	

1. Use permissions do not distinguish between the defined use and other multifamily dwelling units.
2. Use permissions do not distinguish between the defined use and other dwelling units.

USE-SPECIFIC STANDARDS FOR MICRO APARTMENTS

City	State	Defined Use	Minimum Size	Off-Street Parking Standards	Additional Standards
Grand Rapids	MI	Micro-Unit	120 square feet clear floor area (2015 IPMC)	Min.: 0.5 space/unit	§5.6.08.B.3.f
Hartford	CT	Efficiency/Micro-Unit	300 square feet	Max.: 2 spaces/unit	§3.3.1.A(5)(a)
Miami	FL	Micro Dwelling Unit	275 square feet	Max.: 1.1 spaces/unit	§6 Table 13
Oakland	CA	Micro Living Quarters	150 square feet	Min.: 0.25 space/unit	§17.101C.055
Seattle	WA	Small Efficiency Dwelling Unit	220 square feet	Min.: 0.5 space unit	§23.42.048.B
Springfield	MO	Micro-Efficiency Multifamily Dwelling Unit	220 square feet habitable space (2012 IBC)[1]	Min.: 1 space/unit	None
West Palm Beach	FL	Micro-Unit	300 square feet	Max.: 0.55 space/unit	§94-106(a)(8.a)

1. Not addressed in zoning code.

minimum sleeping area space and kitchen and bathroom facilities requirements. One stipulates common area space and management requirements. And one requires on-site car- and bicycle-sharing stations and a monthly per-unit contribution to the city's trolley fund.

Communities wondering if they should include use-specific standards for micro apartments in their zoning codes should consider whether local building code requirements are sufficient to protect the health, safety, and welfare of occupants. Think about how district- or building-form-specific development standards are likely to affect the physical possibility and financial feasibility of micro-apartment projects. Identify any locations within permissible zoning districts that would be inappropriate for micro-apartment projects. If full in-unit kitchens are not required by definition, specify how much space developers must devote to shared kitchens and the location of those kitchens. Either let the market determine how much parking is needed on-site or base minimum off-street parking requirements on the likely demographics of micro-apartment households. Finally, consider whether increasing usage of on-demand ride services merits dedicated space for pickups and drop-offs.

CONCLUSIONS

Despite widespread media coverage in the past five years, micro-apartment development in the U.S. is rare. Currently, demand for very small units seems to be concentrated in the urban cores of large cities with a shortage of affordable rental housing for young, single professionals. In highly stressed housing markets, zoning reforms targeted at making micro-apartment projects legally permissible, physically possible, and financially feasible may lead to dramatic increases in housing supply. However, these reforms may not require singling out micro-apartment development for special zoning treatment. In some cases, the only necessary reform may be eliminating minimum unit size requirements or off-street parking standards.

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IS YOUR ZONING READY FOR MICRO APARTMENTS?

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