

RESEARCH BRIEF | AUGUST 2014

Compact Units: Demand and Challenges

Recent interest in micro-units and accessory dwelling units (referred to together below as “compact units”) across the nation has sparked conversation and debate about their ability to deliver housing that is affordable and well-suited for the surrounding community. In a recent research project, the NYU Furman Center explored the current debate over compact units, the potential demand for these units, and regulatory and other challenges to developing micro-units and accessory dwelling units. The report focused on five cities: New York, Washington, D.C., Austin, Denver, and Seattle.

ⁱ This research brief provides a summary of the paper’s key findings.ⁱⁱ

ⁱ The full report can be found at http://furmancenter.org/files/NYUFurmanCenter_RespondingtoChangingHouseholds_2014.pdf.

ⁱⁱ Please see the full report for citations and further detail about our research and findings.



I. What are Compact Units?

There is no formal definition of a “micro-unit,” but the term is typically used to refer to units that contain their own bathroom and a kitchen or kitchenette, but are significantly smaller than the standard studio apartment in a given city. Accessory dwelling units (ADUs) are self-contained units located on the property of a single-family home. Sometimes ADUs are separate structures, like a cottage on the same lot as a primary dwelling; sometimes they are attached to the primary structure, located in a basement, in an extension, or over a garage.

Proponents of compact units argue that they allow seniors to live independently, respond to changing household sizes and demographics, reduce sprawl through urban infill, mitigate the environmental effects of larger developments by reducing energy consumption, free up larger units for families, and help cities provide housing affordable to a wider range of households.

However, there has been little research examining the actual consequences of compact units. Critics charge that micro-units may increase rents in larger units (by driving up per-square-foot housing prices or land prices), displace existing affordable, single-room-occupancy hotels, shift public focus away from the needs of larger households, and decrease parking availability.

II. Demand for Compact Units

The composition of U.S. households has changed significantly, suggesting that demand for compact units may be growing, especially in urban areas.

Rise in Single Households and Adults Nationwide

Since 1940,¹ there has been a dramatic national rise in the share of households consisting of one person. This trend is consistent across the United States: in every state but Utah, at least 21 percent of households were single adults in 2010.

This growth in one-person households is explained, in part, by the increasing number of unmarried adults. While in 1950 only one in every three adults was single, by 2010 the share of single adults had risen to 48 percent. In 2010, in New York, Austin, and Denver approximately 57 percent of adults were single; 59 percent of all adults in Seattle were single; and 71 percent of adults in Washington, D.C., were single.

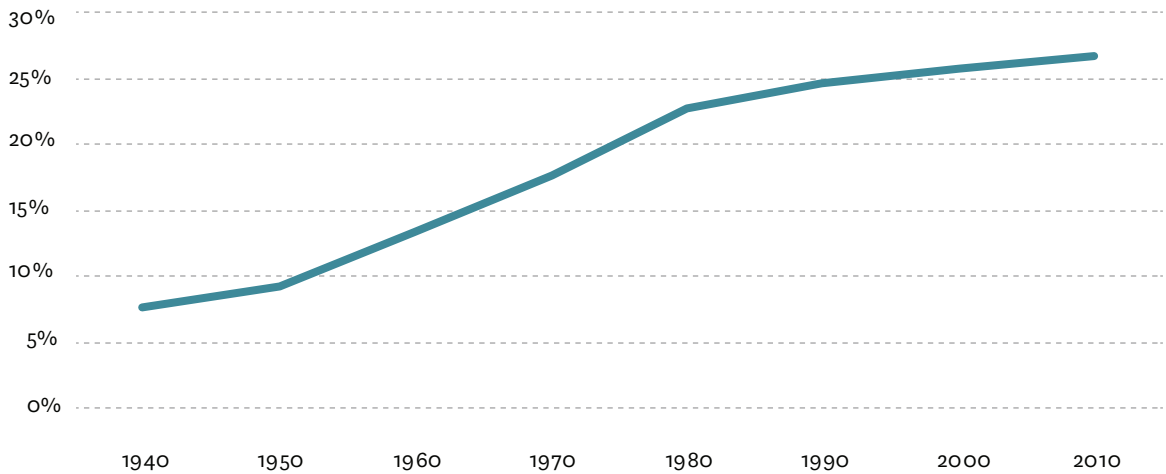
Concentration of Single Individuals in Urban Areas

These related trends—an increasing proportion of single-person households and of unmarried adults—are even more pronounced in urban areas, as reflected in our study cities shown in Figure 2.

Between 1965 and 2000, there was a consistent net migration of single, college-educated individuals between the ages of 25 and 39 into large metropolitan areas. Members of this demographic group, in particular, tend to delay marriage and to spend considerable time outside of their homes.

¹ Unless otherwise specified, the source of all data referred to in the text is the decennial United States Census.

Figure 1: Share of U.S. Households Consisting of One Person Living Alone, 1940-2010



Sources: United States Census Bureau, NYU Furman Center

While it is hard to quantify the demand for compact units, the increase in single-person households and single people in urban areas provides a strong indication that demand for smaller housing units exists; indeed, even some couples might prefer a micro or accessory dwelling unit over a more expensive conventional apartment. Yet, as this report explores, a number of barriers impede or prohibit the development of micro-units and ADUs in many jurisdictions.

III.

Challenges to Compact Unit Development

A number of regulatory, financial, and political challenges prevent widespread development of compact units. While specific barriers vary by municipality, several common issues exist, which are highlighted below. The report delves into these issues in depth, and also presents a summary of key findings and recommendations in its conclusion. The report also contains an appendix that catalogues the relevant regulatory provisions for each study city.

Regulatory Challenges

For almost all of the cities studied, minimum unit size regulations were not a significant barrier to compact unit development. Almost all of the large cities examined followed the International Building Code's

Figure 2: One-Person Households as Share of All Households, 2011

Austin	34.5%
Denver	40.8%
New York City	32.6%
Seattle	40.9%
Washington, D.C.	45.2%

American Community Survey 1-Year Estimates (2011), NYU Furman Center



definition of minimum unit size, and accordingly require a minimum of 220 square feet for an efficiency unit with two occupants. New York City is an outlier—as its zoning resolution requires units to be at least 400 square feet in most areas of the city.

Other regulations, however, did present barriers. Density regulations and parking regulations in our study cities present significant regulatory impediments to the development of compact units. Density regulations, like those that exist in New York City and Austin, limit the number of units allowed on a lot, and can undermine the feasibility of micro-unit and ADU development. Parking requirements, usually tied to the number of units in a building, also significantly drive up the per-unit cost of construction and limit the viability of these types of housing.

A number of other regulations—governing factors such as lot coverage, building height, setbacks, and interior space requirements—can affect the physical and financial feasibility of micro-unit developments. For example, many localities require indoor or outdoor recreation space as a percentage of the total floor area of multifamily buildings. The relevance of these other regulations will depend upon the particular design proposed and particular site on which it will be developed.

In some cities, a homeowner’s attempt to build a reasonably sized ADU, or any ADU at all, may be thwarted by minimum lot-size requirements for eligibility to build an ADU, limits on how much of a lot can be covered by structures, and caps on ADU sizes (either an absolute maximum or a maximum relative to the size of the primary dwelling) if the cap results in a structure too small to be marketable. Regulations requiring the provision of additional parking spaces for an ADU can also create challenges for a homeowner seeking to situate both the ADU and additional parking on a lot, particularly if the jurisdiction prohibits tandem parking.

Impervious surface caps, which limit the percentage of lot that can be covered with impervious material can also limit the size or prevent the construction of an ADU. Parking spaces may be considered impervious surfaces regardless of the paving material used. Regulations in some jurisdictions also require an ADU to have a similar design to the primary home, which can increase construction costs. Finally, homeowners often must navigate challenging procedural requirements in order to add an ADU, including high permit costs, which can prove an obstacle to adding a new ADU or legalizing an existing unit.

Financial Challenges

Although the project focused on regulatory challenges, it became clear over the course of our research that the rules and practices of traditional lenders often pose another hurdle in the development of compact units.

Micro-units face problems obtaining traditional financing because of a lack of comparable properties and clearly established market demand. Apart from government regulations on parking, many lenders impose their own parking requirements, which make it difficult for developers to price units attractively for what is likely to be a significant number of prospective compact-unit residents that do not own cars.

ADUs face a different financial challenge, which is that lenders are often unwilling to consider future rental income to support the provision of a construction loan. A jurisdiction’s owner-occupancy requirements can pose an additional barrier to obtaining financing because lenders fear that, upon foreclosure, they will be prohibited from renting the units out. Resistance among lenders may also stem from unfamiliarity with ADU models, as well as a lack of market data demonstrating increased property values due to the construction of ADUs.



Community Opposition

In localities that have extensive micro-unit development, there has been significant neighborhood opposition to micro-units. The opposition stems, at least in part, from concerns that a significant number of micro-units will create shortages in parking and change the character of a neighborhood and reduce the value of surrounding homes. For example, because Seattle does not have a parking requirement in many districts where significant micro-unit development is occurring, neighbors have voiced concerns that additional higher density development will bring fierce competition for on-street parking spaces.

Some opponents question whether micro-units are actually an affordable housing solution because many of these units rent for prices that are clearly not affordable to lower-income individuals. Questions have also been raised regarding whether the demand for micro-units will persist over time, particularly given that the units lack the flexibility of larger units.

IV. Areas for Future Research

Micro-units and ADUs have the potential to address changing household compositions, reduce energy consumption, and provide a new source of affordable housing. In order to assess these claims, there should be careful study of places that have already permitted the development of these units, with an eye toward providing empirical evidence that can help shape future reforms and address community concerns.

Potential research questions for future evaluation of compact housing include questions about affordability, such as what effects micro-units have on surrounding rents and land prices. Researchers should also explore how ADUs affect mass transit and car-share usage.



Acknowledgements

This research brief is a summary of a What Works Collaborative White Paper completed in January 2014, titled, [Changing Households: Regulatory Challenges for Micro-Units and Accessory Dwelling Units](#) (available at furmancenter.org), by Vicki Been,* Benjamin Gross,** and John Infranca.***

* Vicki Been, now the Commissioner of the New York City Department of Housing Preservation and Development, was the Boxer Family Professor of Law and Director of the NYU Furman Center at New York University School of Law as this white paper was researched and written. Her involvement with this project ceased once her appointment as Commissioner was announced.

** Benjamin Gross, now General Counsel of Genius Media Group, was the Herbert and Lorraine Podell Fellow at the NYU Furman Center for Real Estate and Urban Policy as this white paper was researched and written.

***John Infranca, now an Assistant Professor of Law at Suffolk University Law School, was the Jonathan L. Mechanic/Fried, Frank, Harris, Shriver & Jacobson Fellow at the NYU Furman Center for Real Estate and Urban Policy as this white paper was researched and written. John was the project manager for the research that underlies this white paper.

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