

**The Potential for the Development of Innovative
Affordable Housing Types in the Tucson Area**

by

Hal Bergsma
Livable Communities Volunteer
AARP Arizona

This paper explores the potential for development of affordable housing types not commonly found in the Tucson area including manufactured housing, tiny houses, accessory dwelling units and middle-type housing (duplexes, triplexes, fourplexes and cottage/casita complexes), impediments to their development and how to overcome them.

What Housing Types Does This Paper Address and What it Doesn't Address?

Most of the housing built nationally and in the Tucson area is either single family detached or apartments in large complexes. Ironically, during a time when household sizes are shrinking, the average size of single family houses is increasing. In the Tucson area, single family residences are often built on relatively large lots in large subdivisions. Retail goods and services and employment centers are usually located some distance away, requiring travel by motor vehicle to reach them.

This type of development pattern is the opposite of what many consumers say they want, which is easy, walkable access to commercial services, employment and public transit. Consumers want neighborhoods that are safe and comfortable. And they want housing that is affordable and conducive to interaction with neighbors. For older adults, housing designed to be accessible and usable as they age is also important.

This paper addresses manufactured housing, tiny houses, accessory dwelling units or ADUs (detached or attached) to a single family detached residence, and middle housing (what architect Daniel Parolek has coined “missing middle housing”). These housing types are being touted nationally as partial solutions to the lack of affordable housing, including affordable housing for older adults, whose numbers are increasing quickly in the Tucson area.

Although the focus of this paper is on providing affordable housing for older adults, the need for affordable housing is universal, and the findings of this paper are applicable to everyone in the Tucson area, no matter their age. It should also be noted that this paper does not delve into design and ownership arrangements that encourage better interactions by residents, such as intergenerational housing and pocket neighborhoods. Although these housing characteristics are desirable, they do not necessarily result in affordability. This paper also does not address the need to sustain affordability over the long term, through means such as resident-owned communities, co-housing and land trusts. That will be addressed through a separate white paper.

How Might These Housing Types Address the Need for Affordable Housing for Older Adults in the Tucson Area?

The following reviews the types of housing addressed in this paper and how they might increase affordability in the Tucson area:

Manufactured Housing: Manufactured housing has a long history nationally and in the Tucson area. Manufactured homes are the successor to mobile homes, and are subject to federal standards established by the Department of Housing and Urban Development. Modular homes are also manufactured but are subject to Arizona's version of the International Residential Code. In Tucson, manufactured homes are often located in parks where they occupy rented spaces, although they can also be found on properties owned by the unit owner.

Manufactured homes are more affordable than site-built homes because they are assembled in a controlled, warehouse environment using standardized construction techniques. The designs typical of the past have been updated to an appearance comparable to many moderately priced site-built homes found in subdivisions.

Of particular relevance to this paper, manufactured residences can also be in the form of tiny homes, detached ADUs and even middle-type housing. The combination of more cost-efficient construction techniques through the manufacturing process and reduced unit/site size associated with ADUs and middle-type housing can increase affordability.

Tiny Houses: Tiny houses are generally between 100 and 400 square feet in floor area. They could be located in the backyard of an existing residence and function as an accessory dwelling unit or they could be grouped around a common area and shared facilities such as kitchen and dining area or meeting room. Usually they are placed on wheels for transport but they can also be on a foundation. Their small size makes them affordable relative to larger dwelling units. They are also less expensive to live in due to lower heating and cooling costs. The trade-off for lower costs is the very limited living area they provide. Tiny houses are generally not a recognized, allowed housing type in the Tucson area.

Accessory Dwelling Units (ADUs): ADUs are secondary dwellings to a primary dwelling on single residential lot. They can be attached or detached from the primary dwelling. They can be tiny in scale or larger, usually up to 1000 square feet in area depending on limits set by the jurisdiction they are located in. They usually share utility connections with the primary dwelling. Due to their limited size ADUs are generally more affordable than larger dwellings but associated development costs can reduce their affordability, including government fees that don't distinguish between smaller and larger residences and especially mandates for on-site parking, which can significantly increase costs.

In Tucson, homes in older neighborhoods often have backyard structures that might have functioned as ADUs in the past or could be converted to ADUs. Some may still be used as residences although they lack permits.

Middle (“Missing Middle”) Housing: Missing Middle Housing (MMH), a term coined by architect Daniel Parolek, is generally defined as plexes (duplex, triplex, fourplex) as well as cottage/casita courtyard developments. MMH was common in neighborhoods prior to World War II, including in Tucson, and there are still occupied MMH units in older Tucson neighborhoods remaining from that time. Newer units are almost non-existent due to zoning restrictions. As defined by Parolek, MMH is built at a house scale. As Parolek states in his book *Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis* (2020), “If you are going to take one concept away after reading this book it should be that Missing Middle Housing is about *house-scale* buildings that happen to have more than one unit within them.”

Like tiny homes and ADUs, MMH units are generally more affordable than single family residences because they are smaller in floor area. As with ADUs, the difference in affordability varies depending on construction costs and development fees and requirements, especially parking requirements.

Is there a market for these housing types in Tucson?

Arthur C. (Chris) Nelson, co-author of Parolek's book and a professor of urban planning and real estate development in University of Arizona's College of Architecture, Planning and Landscape Architecture (CAPLA), in Chapter 2 of the book, concludes after looking at data from various national sources, that there is a strong demand for MMH in walkable communities. However, whether that applies to the Tucson area is less certain, given that zoning restrictions limit the degree to which the market might respond to demand for MMH or, for that matter, manufactured houses, tiny houses and ADUs.

Anecdotally, demand for housing in older close-in Tucson neighborhoods indicates that walkable neighborhoods are desirable here. This is especially true in the vicinity of the University of Arizona campus, where students seek out affordable housing within walking distance of school. Further, individuals familiar with development activity in Tucson neighborhoods have indicated they are aware of homeowners in Tucson who have made internal changes to their homes, without permits, to create one or more additional dwelling units. Given that adding a simple kitchen and walling off one part of a home from another part is all it takes, it is not surprising this is happening lacking the ability to do it legally.

Where in the United States are these housing types being built and how is that happening?

Innovative, affordable housing types are being built throughout the country, but especially in areas where housing prices have increased significantly, such as in the Pacific Coast states. In Oregon, a state I resided in for 39 years, much has happened recently. The State adopted legislation in 2019 that requires all cities over 10,000 in population to allow at least two housing units on a residential lot. In cities over 25,000 in population up to four housing units must be allowed per lot. Administrative rules detailing implementation of these mandates are presently being prepared.

In Portland, Oregon's largest city, development regulations have been approved by the City Council allowing for infill development of ADUs and MMH in all single family residential zoned areas, subject to design and siting standards. In Minneapolis a comprehensive plan policy allows for up to three housing units on any lot previously zoned for single family homes. There are many other national and international examples of local and state governments that have moved to allow innovative housing types.

What is happening in the Tucson area?

On November 17, 2020 the Tucson Mayor and Council directed their planning staff to begin work on drafting regulations to allow the construction of ADUs in the city. A proposal developed by staff and their consultant, Opticos Design, is scheduled to be submitted to the Mayor and Council for consideration in June of 2021 after extensive public outreach. Beyond the Tucson initiative, little is happening regarding innovative housing types. As Bill Mackey and Bryanna Chavez of CAPLA, working through the UA's Drachman Institute for AARP Arizona, have found, existing development regulations in Tucson, Pima County, South Tucson and Oro Valley do not allow for the development of innovative housing types except in very limited circumstances. Further, even where it might be possible to place an ADU or a duplex on a lot, excessive on-site parking requirements are likely to increase development costs and reduce affordability.

What needs to be done to open up the Tucson market to these housing types?

A major impediment to allowing the development of innovative housing types in the Tucson area is the fear of "density". Typically, local zoning regulations treat all types of residential units equally. A one-bedroom apartment is one residential unit while a multi-bedroom mansion is also one residential unit. Conceivably, each could house a two-person household, but typically generally the larger the unit the larger the household. And larger households tend to have greater impacts, such as more vehicle trip generation, higher parking demands and an increased number of school children. Yet, most people envision the impacts of a 20 unit apartment project the same as those of a 20 unit single family residence subdivision.

The location of residential development also has an effect on impacts, especially transportation impacts and parking demand. If residential development occurs in a walkable neighborhood where shopping and services are nearby the need to drive is reduced. Areas well-served by public transit are also more likely to generate fewer auto trips and possibly have fewer vehicles per household. Areas with these characteristics are therefore most appropriate for innovative housing types.

Even in areas that are not close to shopping and services, however, innovative housing types may be appropriate if adequate on-street parking is available and there is reasonable public transit service such as on-demand, allowing for reduced parking requirements.

A key to allowing innovative housing types in existing neighborhoods is a good set of design standards. To work as infill development in existing residential neighborhoods, innovative housing types must be built to a scale and with an appearance that fits within that neighborhood. Form-based standards must be adopted to assure that happens.

A second important factor to consider is the approval process. If the potential developer of an innovative housing type does not have a great deal of certainty of approval due to potential

neighborhood opposition, it is less likely an application will be submitted. The approval process must be relatively short and simple, with limited potential for denial. One way of achieving that situation is through pre-approval of a unit designs by the local jurisdiction paired with clear and objective siting standards.

Finally, to reduce construction costs a developer should be allowed to use units manufactured off-site or modular components assembled on-site.

Conclusion

This paper summarizes information from other sources about housing types that are generally not being developed in the Tucson area now but that have the potential to be affordable for more Tucson residents than what is presently available. The greatest impediment to their development in the Tucson area is regulatory. Overcoming regulations that impede development of these housing types in the Tucson area is possible and has been done in other locations. Chapter 7 of Daniel Parolek's recent book, *Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis* (2020), provides detailed guidance for doing this and case studies of jurisdictions where it has been done. Hopefully this paper and the sources it references, as well as information derived from a virtual discussion by a panel of experts on January 25th, 2021, will inform a Housing Summit scheduled for February 5th, 2021 intended to outline an action plan for providing more affordable housing in the Tucson area, especially for older adults.

References

Daniel Parolek with Arthur C. Nelson, *Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis* (Washington DC: Island Press, 2020)

Eli Spevak and Melissa Stanton, *The ABCs of ADUs: A guide to Accessory Dwelling Units and how they expand housing options for people of all ages* (AARP, 2019)

Bill Mackey and Bryanna Chavez, "Identification of Limits to Development of Innovative Affordable Housing Types in the Tucson Area", a study completed by the Drachman Institute, College of Architecture, Planning and Landscape Architecture, University of Arizona, for AARP 2021

Manufactured Housing Industry of Arizona website azhousing.org