

# EXECUTIVE SUMMARY

# THE MISSING MIDDLE



HOUSING OPTIONS  
FOR CENTENNIAL

## Overview

The City of Centennial, Colorado is a suburban community of approximately 110,000 residents that lies to the south of Denver (US Census Bureau, 2019). Centennial is located within Arapahoe County, one of the seven central counties that make up the Denver metro area. The community is ranked nationally as a great place to live, work, and play (City of Centennial, n.d.(a)).

The City's recent investigations into housing have revealed some trends that may impact residents' quality of life in the years to come. In particular, a 2019 housing study found that young households in the community are in decline; home prices have risen faster than incomes in recent years, contributing to declining affordability; and few housing options exist for seniors wanting to downsize (City of Centennial, 2019a).

of housing options that exist, ranging in scale from duplexes to mixed-use buildings (**Figure 1**) (Opticos Design, n.d.). It is frequently referred to as "missing middle housing" because local regulations and federal incentives drove the housing type nearly to the point of extinction in the 20th century (Furth, 2019; Erickson, 2012; Committee on Banking, 1993).

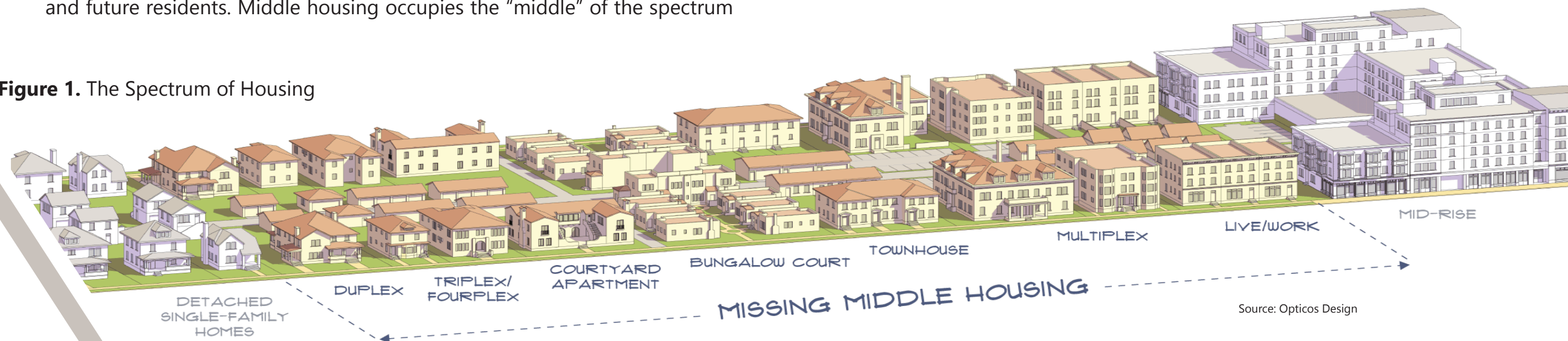
## Housing Needs

Centennial's housing-related concerns can be classified into two broad categories:

1. *Declining Affordability.* Housing costs are taking up a large

Middle Housing offers one approach to meet the housing needs of current and future residents. Middle housing occupies the "middle" of the spectrum

**Figure 1.** The Spectrum of Housing

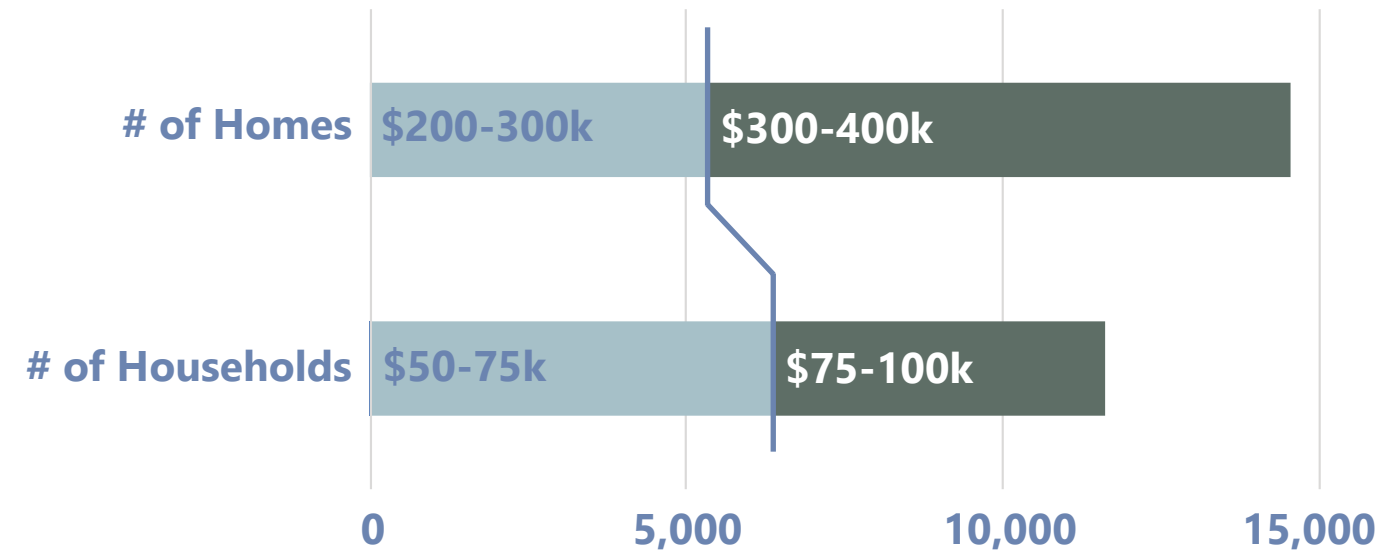


(and increasing) portion of residents' incomes. Median home prices reached \$446,000 in 2017, double the 1999 median price (City of Centennial, 2019a; Zillow Group, 2020). High housing values manifest in increased costs for recent buyers or those in the market to purchase a home, in addition to higher taxes and insurance premiums for existing owners. These costs have resulted in middle-income households experiencing high rates of cost burden, which is defined as spending more than 30% of household income on housing-related expenses (ACS, 2018b; Joint Center for Housing, 2018). Cost burden is undesirable due to its relationship to housing instability, lack of educational progress, short- and long-term medical conditions, and a weakened local economy (Joint Center for Housing, 2018; Anderson, et al., 2003; Newman and Holupka, 2015).

A shortage of lower-cost, for-sale units may also prevent some Centennial workers from living in the community (**Figure 2**). Workers that commute long distances contribute to traffic congestion, and minimal variety in home prices undermines Centennial's Economic Development Department's goal of enabling residents to live, work, and shop locally (Williams, et al., 2016; US DOT, 2015; J. Houlne & M. Gradis).

2. *Housing Type Mismatch.* There is a discrepancy between the

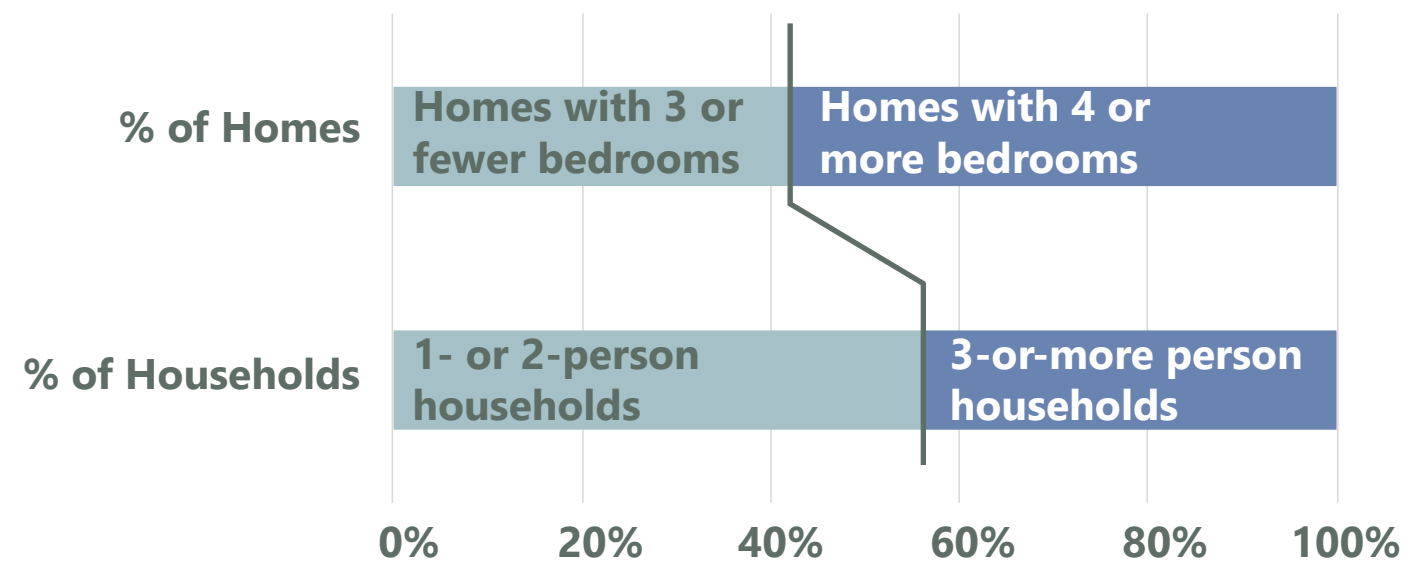
**Figure 2.**  
**Home Price vs. Household Income**



Comparison based on rule that Centennial households should spend no more than 4x annual income on home purchase

Source: ACS 2018 5-year estimates (B25075, T151756)

**Figure 3.**  
**Home Size vs. Household Size**



Comparison conservatively assumes that households with 3 or fewer people do not require 4 or more bedrooms

Source: ACS 2018 5-year estimates (S2504, S2501)

type of housing that residents need (now and in the future) and what currently exists. In Centennial, 77% of housing units are detached single-family homes, a number that drastically exceeds the 58% in the Denver metro area (ACS, 2018a). Centennial's mix of unit sizes and types suggest that the community's housing is adapted well to fit families with children, but not other types of households (**Figure 3**). Centennial has an older population than many other Metro Denver communities, contributing to the need for housing types that are appropriate for seniors, who tend to comprise smaller households and may need single-floor living arrangements to address physical mobility limitations (City of Centennial, 2019a). Inappropriate housing can contribute to social isolation, increased fall risk, premature entry into an assisted living facility, or the need to find housing outside of Centennial (Enterprise Community Partners, n.d.). Larger and more expensive units may also contribute to younger households locating in other parts of Metro Denver instead of Centennial (City of Centennial, 2019a).

## Middle Housing Solutions

Middle housing offers a likely solution to the housing challenges Centennial faces. Common middle housing types include accessory dwelling units (ADUs), cottage clusters, duplexes, townhomes, multiplexes, and mixed-use buildings. ADUs are smaller units that complement single-family homes, while cottage clusters are groupings of detached homes centered around a common courtyard. Duplexes and townhomes share common walls with other units but maintain individual ground-floor entrances, while multiplexes contain multiple

stacked units in a house-scale building. Mixed-use buildings comprise retail space on the ground floor and residences above. Each of these unit types offers its own set of benefits that make it appropriate for certain households and contexts (**Figure 4**).

Middle housing types tend to cost less than detached single-family homes since units are smaller and land costs are spread out among more homes (Ford, 2017). Smaller units offer their own advantages, including lower heating and cooling costs and less upkeep, making them preferable for some households. Some types of middle housing also offer the benefit of single-level living, making these units a good choice for seniors with physical mobility limitations and allowing them to remain in Centennial as they age.

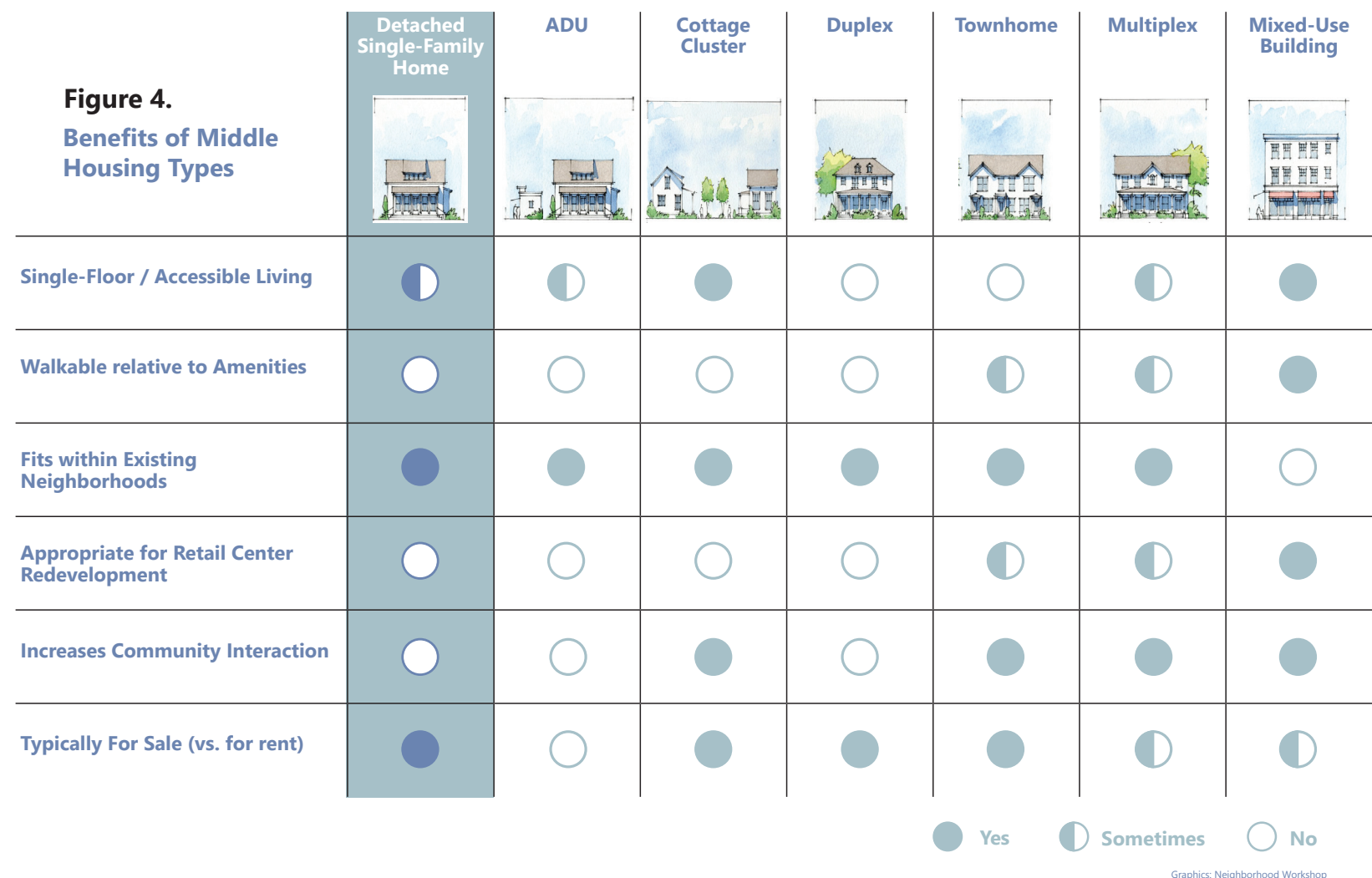
Additionally, middle housing is more compact than detached single-family homes, often enabling residents to reach nearby amenities on foot. In addition to improving quality of life, nearby amenities can provide aging homeowners with access to groceries and other basic services without the need to drive. The mix of land uses that housing variety provides has also proven to improve communities' resilience in the face of economic recession (Wang, 2019).

## Local Conditions

Centennial’s local context impacts which middle housing solutions are likely to be most successful. A few conditions within the community are particularly relevant:

1. *Site Availability.* Centennial is seeing an increasing number of vacancies in its commercial shopping centers, suggesting some of these sites are nearing the end of their economic lifespans (City of Centennial, n.d.(b)). While these underutilized shopping centers have become an eyesore for the community, they present an opportunity for redevelopment into lively, mixed-use centers that support both housing and small-format retail space.
2. *Resident Preferences.* According to input gathered for the Centennial NEXT plan, 77% of survey respondents say they are likely to support ADUs, while four out of five respondents support walkable spaces in future shopping centers (City of Centennial, 2018b). Resident preferences indicate latitude to implement creative housing solutions that enhance affordability and walkability.
3. *Traffic Congestion.* Based on Centennial NEXT community input, traffic congestion is the primary concern that residents have in relation to increases in housing density (City of

Centennial, 2018a). While several of the City’s roadways are at or above capacity, there are also many streets that can accommodate additional vehicles without the need for widening (City of Centennial, 2018b; City of Centennial, 2013). Mixed-use and walkable developments tend to contribute much less traffic per resident than spread-out, single-family neighborhoods (Ewing and Cervero, 2010).





4. *Neighborhood Character.* Most residential neighborhoods in Centennial consist primarily of American Colonial and Traditional architecture, and residents have expressed a strong desire to preserve this style (City of Centennial, 2018b). Numerous examples of middle housing in the South Denver Metro area demonstrate that architectural style can complement existing neighborhood character quite well.
5. *School Capacity.* Some of Centennial's schools are at or near capacity, particularly on the east side of I-25. This suggests that any additional development could require the redrawing of school boundary service areas, expansion of facilities, or construction of new schools. Areas west of I-25 have significant ability to accommodate new homes without any adverse impact on in-district students or school quality (J. Houlne & M. Gradis). Middle housing, which typically contains no more than 3 bedrooms, tends to generate less than one-third of the impact of larger single-family homes on local schools (Vermont Housing Finance Agency, 2007).
  6. *Regulations.* Centennial's Land Development Code (LDC) allows middle housing types in very limited capacity throughout the community. While the LDC includes several residential districts that permit attached homes and multifamily buildings, these districts are scarce on the Zoning Map (City of Centennial, 2020; City of Centennial, n.d.(c); City of Centennial, n.d.(d)). The prevalence of HOAs that further restrict home types presents an additional barrier to the development of middle housing.
  7. *Finances.* Centennial, like many Colorado communities, is highly dependent upon sales tax revenue to fund city services. Sales tax is budgeted to account for 60% of General Fund

revenue in 2020, and the City is eager to maintain its sales tax revenue base (City of Centennial, 2019b).

## Recommendations

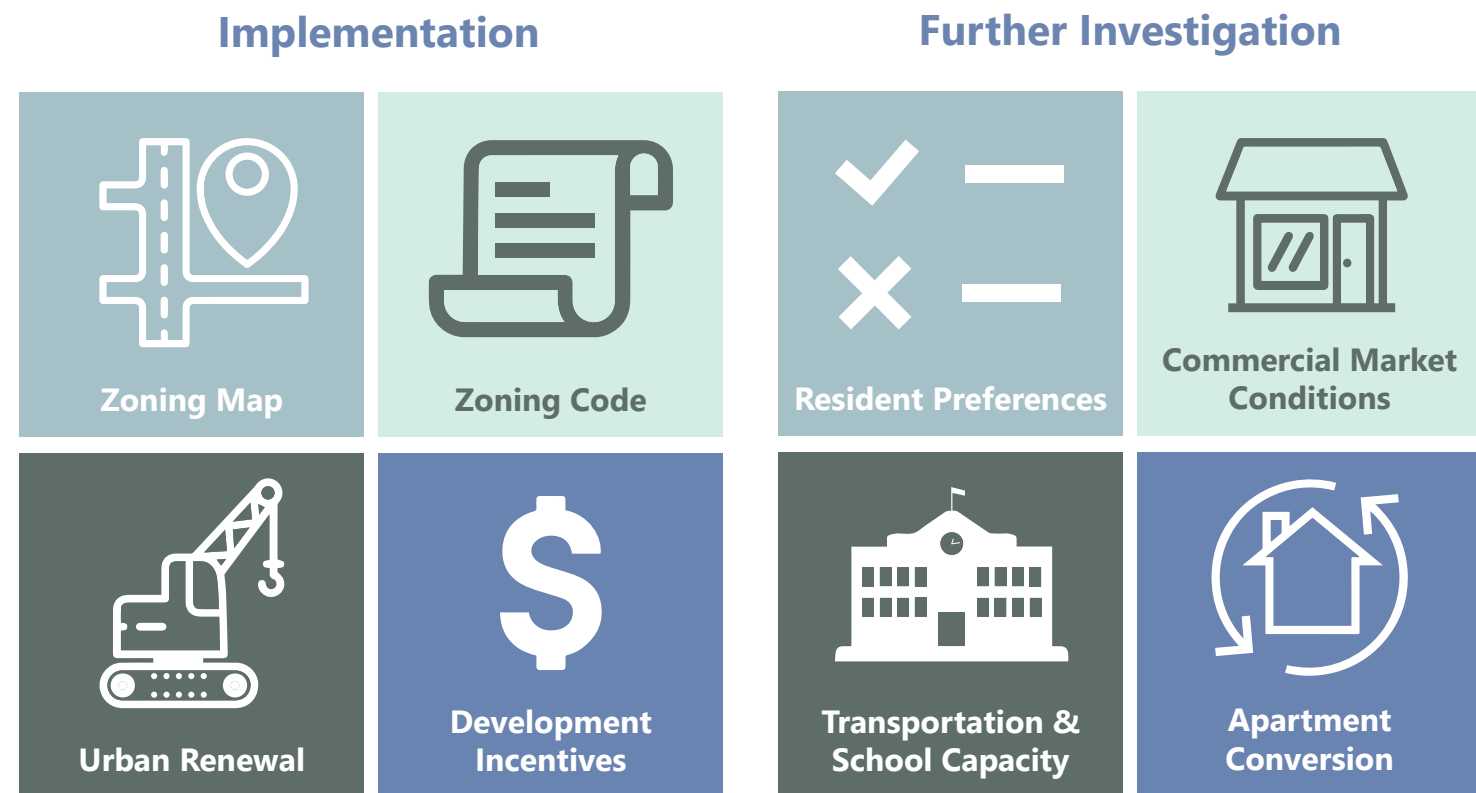
Based on the benefits of middle housing and Centennial's local context, the City should consider enabling and encouraging middle housing development citywide and working to spur the redevelopment of underutilized commercial centers (**Figure 5**). Among the most significant policy changes needed to accommodate middle housing is an update to Centennial's zoning map. While the City's LDC permits various middle housing types in several zone districts, the zoning map fails to apply these zoning districts to more than a few properties. In particular, the City should explore locations at the edges of existing neighborhoods to rezone to allow duplexes, townhomes, and multiplexes. Centennial should also consider updating its LDC to allow more flexibility in single-family zone districts. Since duplexes, multiplexes, and cottage clusters have similar form to single-family homes and can actually bolster character by providing architectural relief, these uses should be allowed by-right in Neighborhood Infill (NI) Districts. The City should also explore attached ADUs as an addition to

existing single-family zone districts or as an overlay district.

Centennial's many underutilized commercial shopping centers are showing no signs of redevelopment, despite existing zoning that supports mixed-use development up to 50 feet. Because of the opportunity these centers pose to provide the unique experiences that residents crave and to meet the community's housing needs, the City should consider using Urban Renewal or investing in infrastructure and community amenities to spur redevelopment. To encourage development of middle housing types community-wide, the Centennial could offer a variety of development incentives, including density bonuses, expedited permitting, and fee waivers (San Mateo County, n.d.).

Further exploration of several topics would help the City understand effective approaches to providing housing variety. In particular, the City should investigate specific resident preferences, commercial market conditions, school and transportation capacity, and incentives to convert apartments into for-sale homes. Collectively or individually, these proposed actions promise to further Centennial's vision of providing a desirable and attainable community for all residents.

**Figure 5.**  
**Toolkit of Options**



Icons: The Noun Project (Berkah Icon, Adiyogi, Atif Arshad, Wolf Bose, Ramesha, Orin zuu, Marco Livolsi, Creative Stall)

# Middle Housing: Challenges & Solutions

## Issues

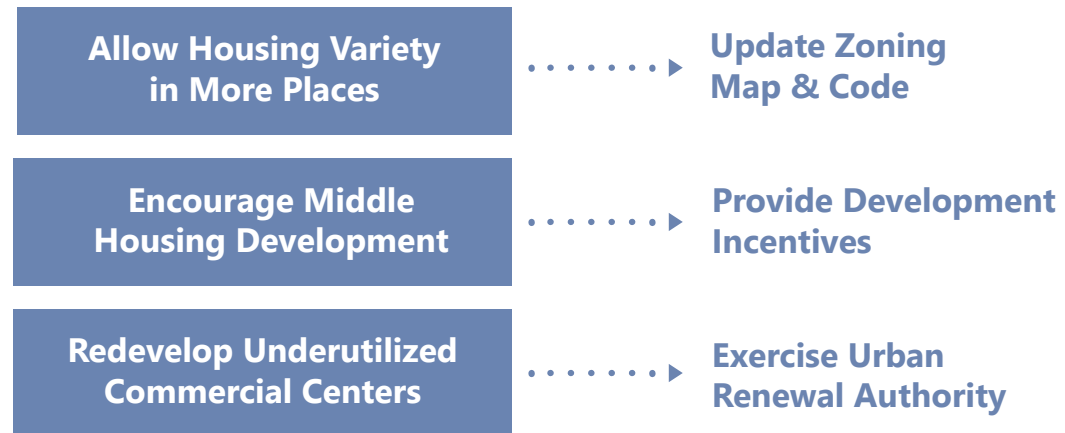
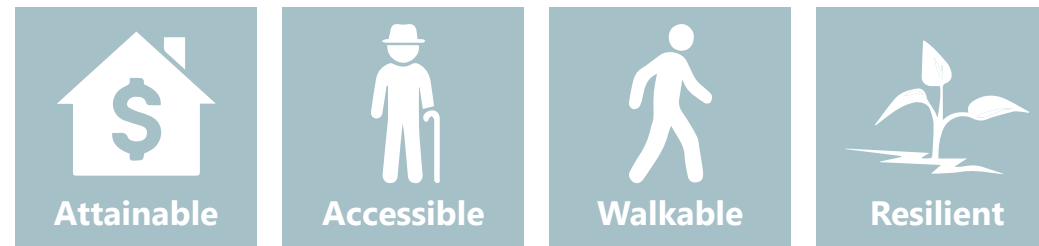
### Housing Challenges in Centennial

## Negative Impacts

## General Benefits

### Middle Housing Solutions

## Context-Specific Recommendations



Icons: The Noun Project (Wolf Bose, Adrien Coquet, Bakunetsu Kaito, Stephen Borengasser)



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 Centennial