



A PROPOSAL FOR MIDDLE HOUSING DESIGN GUIDELINES FOR THE CITY OF SAN LUIS OBISPO

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for the City of San Luis Obispo

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CHAPTER 1

Background and
Existing Conditions

Project Purpose and Content

The City of San Luis Obispo is interested in developing a Missing Middle Housing Plan to promote the development of attractive, affordable housing in the city. Missing middle housing is “a range of house-scale buildings with multiple units [that are] compatible in scale and form with detached single-family homes” (Opticos Design, 2021, para. 1). This includes duplexes, triplexes, cottage courts, and townhomes. Although middle housing is not necessarily affordable by definition, it can increase housing affordability by improving the diversity of housing types available. Design guidelines will help ensure that the proposed developments will fit into the character of existing neighborhoods and the community as a whole.

The term “Missing Middle Housing” was coined by Daniel Parolek in 2010 to describe house-scale buildings with multiple units in walkable neighborhoods (Opticos Design, 2021). These building types are missing from many cities, even illegal in some cases.



Figure 1. An example of middle housing in San Luis Obispo (Google, 2019).

Duplexes, fourplexes, cottage courts, and courtyard buildings are all examples of middle housing. In terms of form and scale, middle housing is a spectrum between single-family homes and mid- or high-rise apartments. Middle housing offers diversity in housing stock that many American cities lack. In addition, it can be integrated into existing neighborhoods.

The key best practices for designing middle housing are to make it walkable, consider the housing scale, and reduce off-street parking requirements. In addition, middle housing should be designed to be sustainable. Keeping these factors in mind helps direct the creation of design guidelines.

Background

San Luis Obispo is located on California’s Central Coast about midway between San Francisco and Los Angeles. The City was founded in 1772 when Mission San Luis Obispo de Tolosa was established. It became a town in 1856 (City of San Luis Obispo,

2020). Today, the City has a population of about 47,459 (U.S. Census Bureau, 2019). Two colleges lie just outside city limits: California Polytechnic State University (Cal Poly) and Cuesta College. These schools contribute to the city's large student population. The City serves as the county seat for San Luis Obispo County and is the retail, business, governmental, and transportation hub of the County (City of San Luis Obispo, 2020).

One of the challenges the City faces is high housing costs. While household incomes have remained steady or increased slowly in recent years, housing costs have risen sharply, making it difficult for many to find affordable housing in San Luis Obispo (City of San Luis Obispo, 2020). In 2015, the City's median real estate sales price was \$546,600. By 2019, this cost had risen to \$693,000. In contrast, the County's median sales price was \$487,700 in 2015 and \$585,800 in 2019 (City of San Luis Obispo, 2020). The median household income in San Luis Obispo was \$49,640 in 2017, reflecting the City's high percentage of student households. The student population strongly influences the City's housing market. About 38 percent of the City's housing stock is owner-occupied while 62 percent is renter occupied (San Luis Obispo, 2020). Although Cal Poly has been increasing on-campus housing for students, the majority live in rental units in the City. All of these factors impact the availability of affordable housing in San Luis Obispo.

In Cal Poly's Fall 2020 and Winter 2021 Community Planning Lab, an Existing Conditions Report on the status of missing middle housing in San Luis Obispo was prepared for the City. In our report, we examined the current housing inventory of the City, the relationship between middle housing and transportation, the linkage between middle housing and the environment, possible design solutions for middle housing, and community engagement strategies. We also developed policy recommendations for the City to add to its General Plan and Zoning Ordinance in order to make the development of middle housing feasible in San Luis Obispo.

Housing in San Luis Obispo

In terms of residential land use, most of the City is composed of low-density, detached, single-family housing (City of San Luis Obispo, 2020). San Luis Obispo has approximately 8,600 acres of zoned land, and over 41 percent is zoned for residential

use. About 63 percent of the City’s existing housing stock was built prior to 1980, but the majority is still in fair to good condition (City of San Luis Obispo, 2020).

San Luis Obispo’s housing stock includes a variety of housing types, although the majority are single family homes. Table 1 shows the breakdown of the City’s housing stock by unit type for 2010 to 2019. The housing stock did not change significantly during this time period. It is composed of “53 percent single-family units (both attached and detached), 40 percent multi-family units (both structures containing 2-4 units and 5 or more units), and 7 percent mobile home units” (City of San Luis Obispo, 2020, p. A13).

Table 1: Composition of Housing Stock by Unit Type, 2010-2019

Unit Type	2010		2019		Percent Change, 2010-2019
	Number of Units	Percent of Total	Number of Units	Percent of Total	
Single-Family Detached	9,541	46%	9,882	46%	4%
Single-Family Attached	1,379	7%	1,403	7%	2%
Multi-Family (2-4 units)	2,627	13%	2,723	13%	4%
Multi-Family (5+ units)	5,524	27%	5,912	27%	7%
Mobile Homes, Other	1,482	7%	1,482	7%	0%
Total	20,553	100%	21,403	100%	4%

Source: California Department of Finance (DOF), 2010, 2019

SLOCOG 6th Cycle Data Package 2019, Table 9; California Dept. of Housing & Community Development (HCD)

(Source: City of San Luis Obispo, 2020, p. A13)

Between 2010 and 2019, an average of 99 residential units were built each year (City of San Luis Obispo, 2020). Table 2 shows the net change in housing units from completed construction during this period. 600 multi-family units were built, and 377 single-family units were built. In general, multi-family units provide a wider range of affordability, as seen in Table 2. Of the 1,186 total single and multi-family units built, 904 were market rate.

Table 2: Net Change from Completed Construction, 2010-2019

Year	Single Family Units		Multi-Family Units		Annex Units	Total Units	Net Market Rate	Growth Rate
	Market Rate	Affordable	Market Rate	Affordable				
2010	32	0	23	34	0	89	55	0.27%
2011	0	2	23	42	18	85	41	0.20%
2012	17	0	17	0	0	34	34	0.17%
2013	16	3	63	10	0	92	79	0.38%
2014	67	0	25	22	0	114	92	0.45%
2015	28	0	34	11	0	73	62	0.30%
2016	72	2	63	52	0	189	135	0.65%
2017	46	0	65	20	0	131	111	0.53%
2018	73	0	11	46	0	130	84	0.40%
2019	184	0	27	38	0	249	211	1.00%
10-yr Total	535	7	351	275	18	1,186	904	0.56%*

*Represents the 10-year average growth rate

Source: City of San Luis Obispo, Community Development Department, 2018 General Plan Annual Report

(Source: City of San Luis Obispo, 2020, p. A12)

Housing prices have been increasing in San Luis Obispo since 2014, as seen in Table 3. Housing costs in the City are consistently higher than those in the County or State. The median price of a home in San Luis Obispo was \$693,300 in 2019, about 18 percent higher than the median price in the County and 38 percent higher than the median price in the State (City of San Luis Obispo, 2020). Rental prices are also high in San Luis Obispo. As seen in Table 4, the average rent in the City in 2019 was \$1,445 for a one-bedroom apartment and \$2,094 for a two-bedroom. The fair market rate was \$1,196 and \$1,542, respectively. Part of the reason for high rents in the City is the low vacancy rates. A balanced vacancy rate is 5 percent, but the rental vacancy rate in San Luis Obispo was 4 percent in 2017 (City of San Luis Obispo, 2020).

Table 3: Median Residential Real Estate Sales Prices, 2014-2019

Year	SLO City		SLO County		CA State	
	Median Price (\$)	Percent Change	Median Price (\$)	Percent Change	Median Price (\$)	Percent Change
2014	\$594,200	---	\$441,300	---	\$374,200	---
2015	\$546,600	-8.0	\$478,700	8.5	\$398,300	6.4
2016	\$602,800	10.3	\$502,300	4.9	\$415,100	4.2
2017	\$611,900	1.5	\$532,200	6.0	\$435,800	5.0
2018	\$655,500	7.1	\$573,100	7.7	\$482,800	10.8
2019	\$693,000	5.7	\$585,800	2.2	\$500,500	3.7
Change, 2014-2019	\$98,800	16.6	\$144,500	32.7	\$126,300	33.8

Source: Zillow, 2010-2019

(Source: City of San Luis Obispo, 2020, p. A17)

Table 4: Comparison of Rent Costs, City and County, 2019

Unit Type	SLO City	SLO County Fair Market Rent (HUD) ¹	Percentage difference between City & County average rents
	Average Rent (\$)	Average Rent (\$)	
1-Bedroom	\$1,445	\$1,196	21%
2-Bedroom	\$2,094	\$1,542	36%

Source: Rentcafe.com, 2020 Affordable Housing Nexus Study

¹From HUD FY 2019 Fair Market Rent Documentation System for the SLO-Paso Robles-Arroyo Grande MSA

(Source: City of San Luis Obispo, 2020, p. A18)

Total cost of housing is one indicator of affordability, but monthly payment is the most significant determinant. Typically, affordable housing is defined as housing in which the total monthly payment does not exceed 30 percent of gross monthly household income (City of San Luis Obispo, 2020). Mortgaged median-price houses in San Luis Obispo, the County, and the State were below the 30 percent threshold in 2017. However, though median family incomes have increased since 2010, they have not kept pace with the rate of increase for house prices (City of San Luis Obispo, 2020). As seen in Table 5, median family income in the County grew 13 percent from 2014 to 2019 while median sales prices of homes grew 16 percent. The table includes the median family income and income required to afford the median sales price of homes in the City. The income needed to afford a median mortgage has been well over San Luis Obispo's actual median family income since 2014 (City of San Luis Obispo, 2020). This demonstrates that much of the housing in the City is unaffordable.

Table 5: Median Housing Costs vs. Median Family Income, 2014-2019

Year	Median City Sales Price (\$)	Percent Change from Previous Year	Median Family Income (\$)¹	Percent Change from Previous Year	Income Required To Afford (\$)²	% of Median Income Needed To Afford
2014	\$594,200	---	\$77,000	---	\$121,200	157
2015	\$546,600	-8.0	\$77,100	0.1	\$111,520	145
2016	\$602,800	10.3	\$77,100	0.0	\$122,960	159
2017	\$611,900	1.5	\$83,200	7.9	\$124,840	150
2018	\$655,500	7.1	\$83,200	0.0	\$133,720	161
2019	\$693,000	5.7	\$87,500	5.2	\$141,360	162
Change, 2014-2019	\$98,800	16.6	\$10,500	13.6	\$20,160	4

Source: Zillow, 2014-2019

¹Based on HCD Official Income Limits for a four-person household.

²Income required to afford is annual income such that 30 percent of gross monthly income is the monthly mortgage payment for a median priced home. Mortgage payments are derived assuming 30-year fixed rate loan, at 5% interest, with a 5% down payment

(Source: City of San Luis Obispo, 2020, p. A19)

Rental units are also expensive in San Luis Obispo. In 2017, the City's median gross rent was 45 percent of household income, which suggests that overpayment for rental units is common (City of San Luis Obispo, 2020). Table 6 shows the amount of rent different income groups can afford. As seen previously in Table 4, the average rents of one- and two-bedroom apartments in San Luis Obispo in 2019 were \$1,445 and \$2,904 respectively. Based on these numbers, an average one-bedroom apartment in San Luis Obispo would be considered affordable for low- and moderate-income households. An average two-bedroom apartment would be considered affordable to moderate-income households (City of San Luis Obispo, 2020).

Table 6: Affordable Rents by Income Group in San Luis Obispo, 2019

Income Group	Percent of Median Income Earned	Income Earned (4 person household)	Affordable Rent*
Extremely Low	30 or less	< \$26,950	\$459 - \$761
Very Low	31-50	\$26,950 - \$44,950	\$766 - \$1,269
Low	51-80	\$44,950 - \$71,900	\$919 - \$1,523
Moderate	81-120	\$71,900 - \$105,000	\$1,276 - \$2,115

*Affordable is defined as 30 percent or less of gross income spent on rent

Source: HCD 2019; based on median income of four-person household, which is \$87,500.

(Source: City of San Luis Obispo, 2020, p. A21)

In summary, the majority of housing in San Luis Obispo is zoned single-family residential. About two-thirds of the City's housing is renter-occupied, and much of it is

unaffordable, with renters paying an average of 45% of their monthly income on rent. The average median home price in San Luis Obispo exceeds the average household income. Housing costs continue to increase at a faster rate than income. Though new housing is being built in the City, most of it is single-family development and market rate, which is unaffordable for many residents of San Luis Obispo.

CHAPTER 2

Case Studies

Case Study Selection

California is experiencing a housing crisis. There is a lack of affordable housing units in the state, and local jurisdictions are trying to find ways to support new housing development that provides a diverse array of housing options that are affordable. Missing middle housing is one way cities are addressing this need (Opticos Design 2021). However, it is difficult to successfully build middle housing in established neighborhoods due to misconceptions and concerns from local residents.

Many cities have single family zoning districts and multi-family districts, but they lack the “middle” zones. The elimination or reduction of single-family zoning and implementation of middle housing and is becoming more prominent in California. For example, a Senate bill currently proposed in California would “stop the misuse of floor area ratio and minimum lot size requirements that prevent the construction of multifamily buildings in areas already zoned to allow them” (California YIMBY, 2021, para. 1). The bill, SB 478, would set a standard 1.5 floor area ratio for land zoned for between two and ten homes, which would ensure multifamily housing could actually be built in those zones (California YIMBY, 2021). Meanwhile, Sacramento City officials recently moved forward with plans to eliminate single-family zones and allow up to four units on a lot (Clift, 2021). Berkeley eliminated its single-family residential zones in March 2021 and plans to allow duplexes, triplexes, and fourplexes in those zones with a general plan amendment (Yelimeli, 2021). These proposed changes would not result in the demolition of existing single-family homes or prevent single-family homes from being built. The intent is to allow for the development of more diverse housing types that will help alleviate the housing shortage in California (Clift, 2021). With more middle housing being implemented in built-up areas, it is important that its design fits well with the existing neighborhoods. For this reason, design guidelines are a valuable tool that cities can use to aid the successful implementation of middle housing.

The three case studies explored here, Minneapolis, Sacramento, and Cincinnati, were chosen because of three main criteria. First, each has demonstrated leadership in middle housing planning. In addition, they have shown dedication to public outreach and participation. Finally, their plans and policies emphasize compatibility with existing single-family zones. The City of San Luis Obispo can learn from the strategies

employed by Minneapolis, Sacramento, and Cincinnati when planning for middle housing.

Minneapolis

One city that has successfully adopted a plan to eliminate single family zoning is Minneapolis, Minnesota. The City's new comprehensive plan, Minneapolis 2040, recognizes the importance of affordable housing and diverse housing stock. Equity in the planning process was one of the major focuses of the plan (City of Minneapolis, 2018). Community visioning and public outreach was a significant component of the Minneapolis 2040 planning process, and the support of local organizations and activist groups was crucial to the plan's success (City of Minneapolis, 2018).



Figure 2. Public outreach was a major component of the planning process for Minneapolis 2040 (City of Minneapolis, 2018).

Minneapolis 2040 includes broad goals, one hundred policies, and supporting implementation tools (City of Minneapolis, 2018). Several of the policies are aimed at improving access to housing through diversity of supply. This includes allowances for higher density development downtown and along high-frequency transit routes. In addition, every single-family zone in Minneapolis is now eligible for up to three dwelling units per lot (City of Minneapolis, 2018). In order to implement this policy, the City has amended allowable floor area ratios,

building heights, lot sizes, and setbacks in their zoning code. These changes encourage the development of middle housing types.

The key takeaways from the Minneapolis 2040 plan for San Luis Obispo are to expand upon existing frameworks, consider the link between housing and transportation, and engage in public outreach. The City of San Luis Obispo has seen an increase in mixed use developments, which are great opportunities for middle housing. The City should

continue to encourage these projects to help support the development of a range of housing types. Creating design guidelines for these areas can help facilitate such development. Because housing and transportation are closely linked, the City should learn from Minneapolis's policy of higher-density development along transit routes and downtown areas. Middle housing can be particularly effective when residents are able to make trips to and from home without needing a personal vehicle. Finally, Minneapolis 2040 was successfully adopted in large part because community members were involved throughout the process. When considering any policies or guidelines related to middle housing, San Luis Obispo must be sure to meaningfully engage the public in the planning process.

Sacramento

As the first city in California to initiate the elimination of traditional single-family zoning, Sacramento is a significant resource in the approach to middle housing implementation. In January 2021, the Sacramento City Council unanimously voted to proceed with a draft zoning plan that allows for up to four dwelling units per parcel (Associated Press, 2021). The proposal would not prohibit the construction of single-family homes, but it would allow more units to be built if property owners desired (City of Sacramento, 2021). Seventy percent of Sacramento's residential neighborhoods are zoned for single-family only, with duplexes allowed on corner lots, and 43 percent of the City's total land area is zoned single-family (City of Sacramento, 2021). By allowing up to fourplexes in single-family zones, the City hopes to permit a greater variety of housing types in existing residential neighborhoods (City of Sacramento, 2021). The neighborhoods would not lose their existing character because of height restrictions, historical protections, and lot coverage limits (Associated Press, 2021). It is expected that the changes to the zoning code and General Plan will be officially adopted by late 2022 (City of Sacramento, 2021).

The proposed land use changes to allow for duplexes, triplexes, and fourplexes in single-family zones will be regulated through floor area ratios and other zoning tools (City of Sacramento, 2021). As a result, building scale and mass will be similar to those that already exist in the neighborhoods. The middle housing types that are supported by the proposed plan would be compatible with detached single-family homes. The City of

Sacramento looked to Portland and Minneapolis while drafting proposals since both cities have altered their land use and zoning regulations to allow small-scale multi-unit development in all residential zones.

San Luis Obispo can learn from Sacramento's strategies for middle housing implementation. Most significantly, Sacramento is using existing single-family zoning standards as a basis for new middle housing development in those zones. Thus, multi-unit developments are similar in appearance to existing single-family homes (City of Sacramento, 2021). This is important, especially for residents who fear that allowing multiple units on lots in single-family zones will disrupt the character of their neighborhoods. In addition, Sacramento has numerous fact sheets and information available online to inform the public about the proposed changes and what they mean (City of Sacramento, 2021). At the City Council meeting where the draft zoning code was passed, many members of the public came out in support of the proposal (Associated Press, 2021). San Luis Obispo should follow Sacramento's example of clearly presenting information and thoroughly addressing the public's major concerns.

Attachment A

Examples of duplexes, triplexes and fourplexes currently found in the City's "single-family" neighborhoods.

Two examples of existing duplexes:

- 1. An existing duplex in the Curtis Park neighborhood.**



- 2. An existing duplex in the Land Park neighborhood.**



Figure 3. An excerpt from the City of Sacramento's FAQ document regarding proposed General Plan strategies (City of Sacramento, 2021).

Cincinnati

Cincinnati adopted a form-based code that serves as an excellent example for how to encourage purposeful design of middle housing types. While traditional zoning focuses on building use, form-based codes place more emphasis on physical form (Opticos Design, 2021). Although Cincinnati is a much larger city than San Luis Obispo, its use of form-based codes can serve as a valuable study in developing middle housing standards for building in existing neighborhoods.

Cincinnati adopted its form-based code in 2013 as part of an update to the General Plan. The City pursued a form-based code approach to help spur the development of walkable neighborhoods and promote context-sensitive design (City of Cincinnati, 2013). Cincinnati's form-based code emphasizes the importance of neighborhood compatibility. By placing a focus on building form, the City is able to ensure that infill development fits in with existing neighborhoods (City of Cincinnati, 2013). This approach is transferable to any neighborhood or city and is particularly important in the development of middle housing.

C. Allowed Building Types			
Building Type	Lot		Standards
	Width A	Depth B	
Carriage House	n/a	n/a	1703-3.40
Detached House: Compact	30' min.; 50' max.	75' min.	1703-3.60
Cottage Court	75' min.; 100' max.	100' min.	1703-3.70
Duplex	40' min.; 75' max.	100' min.	1703-3.80
Rowhouse	18' min.; 35' max.	80' min.	1703-3.90
Multi-Plex: Small	50' min.; 100' max.	100' min.	1703-3.100
Live/Work	18' min.; 35' max.	80' min.	1703-3.130

Figure 4. An excerpt from Cincinnati's form-based code showing the allowed building types in the T4N.SF transect (City of Cincinnati, 2013, p. 2-24).

The Cincinnati form-based code utilizes T3-T6 transects, with T3 similar to single-family zoning, T4 and T5 resembling medium-density zoning, and T6 most like high-density residential or mixed-use zoning. The transects include both residential and commercial development, but this study focuses on the residential components. The code includes regulations to promote development that is suitable to the context of each transect (City of Cincinnati, 2013). For example, the T4 Neighborhood Small Footprint (T4N.SF) transect allows for the development of detached or attached building types, including cottage courts

and duplexes, if the lot meets certain size requirements, as shown in Figure 4 (City of Cincinnati, 2013). This transect is intended for development similar to traditional medium-density residential zones. Using lot size to determine allowed building types helps prevent development that is ill-suited to the lot by ensuring that the scale of development is compatible with surrounding buildings.

In addition to traditional zoning regulations, including setback, height, and lot coverage requirements, Cincinnati's form-based code contains standards for specific building types (City of Cincinnati, 2013). The purpose of these standards is "to ensure development that reinforces the highly-valued existing character and scale of Cincinnati's neighborhoods and downtown" (City of Cincinnati, 2013, p. 3-1). Unlike conventional density-based zoning, form-based codes use a transect format that focuses on street and building types (Form-Based Codes Institute, 2021).

Given building types are allowed on certain lot sizes within certain transects. For example, duplexes are allowed in the T3N, T4N.MF, and T4N.SF transects, as seen in Figure 5 (City of Cincinnati, 2013). The T3N transect is intended for small-to-medium lots with detached homes (City of Cincinnati, 2013). The T4N.MF transect is the T4 Neighborhood Medium Footprint zone. It is intended for a variety of housing choices in a medium footprint (City of Cincinnati, 2013). The T4N.SF transect is the T4 Neighborhood Small Footprint zone, which is intended for a variety of housing choices in medium-to-high density building types (City of Cincinnati, 2013). All three of these transects are primarily residential zones that support the inclusion of middle housing.

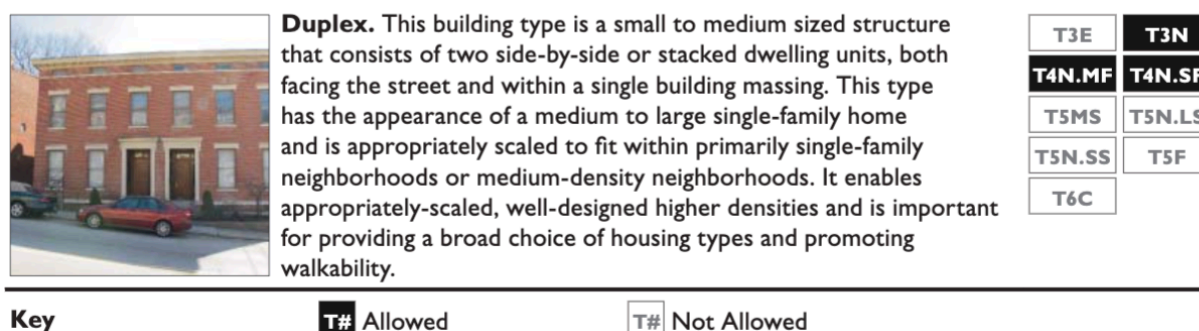


Figure 5. An excerpt from the City of Cincinnati's form-based code that highlights the duplex building type and where it's allowed (City of Cincinnati, 2013).

Height is regulated per transect standards, but other components, such as maximum length and width, are regulated by building type (City of Cincinnati, 2013). Each building type in the form-based code is given a description and regulations for the number of units, size and massing, allowed frontage types, pedestrian access, and private open space (City of Cincinnati, 2013). There is much less emphasis on proposed building uses. By focusing on building form instead of use, Cincinnati's form-based code promotes the development of a range of housing types in neighborhoods where they will be compatible.

The key takeaway for San Luis Obispo is to clearly align middle housing standards with existing patterns of development. It is evident that middle housing types can be designed to fit into existing neighborhoods while simultaneously providing additional residential units. Cincinnati's approach acknowledges that in areas with primarily detached single-family homes, a duplex can be compatible while a fourplex may not be. In a slightly more urban area, cottage courts and fourplexes can also be allowed. Property owners are able to trust that new development will match the character of the neighborhood. San Luis Obispo should keep neighborhood compatibility at the forefront of middle housing design guidelines. The guidelines can be used to ensure that middle housing is implemented in a way that prevents overbuilding

CHAPTER 3

Design Guidelines

Purpose and Definitions

The City of San Luis Obispo has existing design guidelines that were adopted in 2010. The Community Design Guidelines were prepared to maintain the City's distinct and attractive physical character that is widely appreciated by residents and visitors (City of San Luis Obispo, 2010). The existing guidelines include a section for multi-family and clustered housing design, which serves as a reference point for a complete set of middle housing design guidelines. The existing guidelines should be expanded to adequately account for the variety of middle housing types that could be built in the City.

The Community Design Guidelines include three main goals for design quality and character in San Luis Obispo. These goals help shape the content of the guidelines. First, design should keep San Luis Obispo architecturally distinctive (City of San Luis Obispo, 2010). High quality craftsmanship, consideration of historical context, and thoughtful design are key components of this goal. Second, design should create and maintain a pedestrian scale where appropriate (City of San Luis Obispo, 2010). Pedestrian-oriented buildings are important for this goal. Third, design should protect natural resources and integrate them into building and site planning whenever possible (City of San Luis Obispo, 2010). Site planning to reduce vehicular trips, protect viewsheds, and control streetscape landscaping are important elements to consider. Design guidelines should help promote these three goals.

The City's existing Community Design Guidelines include a section for multi-family and clustered housing design (City of San Luis Obispo, 2010). One of the major concerns with multi-family development is parking design, which can create negative visual impacts and reduce usable open space if designed poorly (City of San Luis Obispo, 2010). The existing guidelines focus on site planning, parking and driveways, and project architecture. However, these guidelines are written for multi-family development in general. There are a variety of middle housing types, and more specific design guidelines can help facilitate their development. Six categories of middle housing are covered here:

- Duplex
- Triplex/Fourplex
- Cottage Court
- Townhouse
- Multiplex
- Blended Types

The intent is to integrate middle housing design guidelines with the City's existing zoning and development standards.

Duplex



Figure 6. A side-by-side duplex in San Luis Obispo (Google, 2019).

A duplex is a detached one to two-story residential building that consists of two dwelling units, typically arranged side-by-side so that each has an entry from the street, as seen in Figure 6. (Opticos Design, 2021). Duplexes can also be stacked so that one unit is arranged above the other, though each still has street entry, as seen in Figure 6. A stacked duplex can fit on narrower lots than its side-by-side counterpart. This housing type usually has a similar appearance to a single-family residence (Opticos Design, 2021).

Quick Facts:

- Two units
- Looks like a single-family residence
- Compatible with single-family residential neighborhoods

Triplex/Fourplex



Figure 7. A fourplex in San Luis Obispo (Google, 2019).

A triplex or fourplex is a detached two to three-story building with three to four dwelling units. In a triplex, the units are typically stacked on top of each other (Opticos Design, 2021). In a fourplex, the most common orientation is two units on the ground floor and two on the second story, as seen in Figure 7. Triplexes and fourplexes have either shared or individual entries from the street. These structures may look like medium-sized single-family homes (Opticos Design, 2021).

Quick Facts:

- Three to four units
- Looks like a large single-family residence
- Great for converting large, older homes into smaller units

Cottage Court



Figure 8. A cottage court with entries from the central courtyard (Opticos Design, 2021).

A cottage court is a group of five to ten detached units arranged around a shared outdoor court that is visible from the street (Opticos Design, 2021). The court often serves as an alternative to private backyards and acts as a central location for unit entrances, as seen in Figure 8. Each unit is usually one story (Opticos Design, 2021).

Quick Facts:

- Five to ten units
- Central courtyard creates sense of community
- Units remain detached, similar to a single-family home

Townhouse



Figure 9. A row of townhouses on March Street in San Luis Obispo (Google, 2019).

A townhouse is a structure of attached multi-story dwelling units that are placed side-by-side (Opticos Design, 2021). There are typically two to 16 units in a row of townhouses. Entries face the street, and front façades usually do not have garages, as seen in Figure 9. Townhouses are two to three stories (Opticos Design, 2021).

Quick Facts:

- Two to 16 units in a row
- Garage access typically from rear
- Oriented toward the street for an attractive streetscape design

Multiplex



Figure 10. A two-story multiplex (Opticos Design, 2021).

A multiplex is a detached building that contains five to 12 dwelling units with shared entry from the street (Opticos Design, 2021). Multiplexes are typically two stories tall, and the units can be arranged side by side and/or stacked. This housing type may look like a large single-family house from the street, as seen in Figure 10 (Opticos Design, 2021).

Quick Facts:

- Five to 12 units
- Alternative to a small, blocky apartment building
- Designed to look like a large single-family home

Blended Types



Figure 11. A blend between a multiplex and townhouse-style development in San Luis Obispo (Google, 2019).

Middle housing is not limited to singular types. One development can be composed of multiple types of middle housing. For example, townhouses may be built around a central courtyard, a blend between traditional townhouses and a cottage court. Figure 11 shows a blend between multiplex and townhouse since each unit has its own entry but looks like a large single-family home from the street. Middle housing provides variety in unit size and type, and design guidelines should allow for such flexibility.

Quick Facts:

- Middle housing can be a blend of multiple types
- Flexible design can help middle housing be compatible with existing development
- It is important to offer variety in unit size and type

Proposed Design Guidelines

The proposed middle housing design guidelines are divided into three sections: site planning, parking, and architecture. This format was inspired by the existing design guidelines. Middle housing is a range of housing between single-family development and mid- to high-rise apartment buildings. Middle housing can be successfully integrated into existing neighborhoods with considerate design. These guidelines address problems that may arise in middle housing development. Where appropriate, the guidelines are divided by middle housing type. The proposed design guidelines replace Section 5.4 – Multi-Family and Clustered Housing Design in the existing Community Design Guidelines.

- A. **Site Planning:** Site layout for new developments should be designed to be pedestrian-friendly. The design should respect any adjacent existing residential developments in terms of building orientation, bulk, and height. New middle housing developments should be careful not to impair the indoor or outdoor privacy of adjacent units.
- Duplex: Building orientation and site layout should be comparable to a single-family residence. Both units should be accessible from the street.
 - Triplex/Fourplex: Building orientation and site layout should resemble a medium to large single-family home.
 - Cottage Court: Site layout should include a central courtyard that is accessible via a pedestrian sidewalk or walkway from the street. Residential units should face the central courtyard and have access from it.
 - Townhouse: Buildings should face the street and have walk-up entrances. Where possible, garage access should be in the rear of the units and not visible from the street.
 - Multiplex: Building orientation and site layout should resemble a large single-family home.

- Blended Types: Site layout should be consistent with the prevailing patterns of the existing neighborhood.



Figure 12. A courtyard-style development with a central patio accessible to all units (Google, 2019).

- B. **Parking:** Parking for middle housing developments should be individual closeable garages whenever possible. If garages are not provided, dispersed parking courts are allowed. The use of landscaping and attractive pavers is encouraged. Parking requirements may be reduced for housing in close proximity to transit stops. Infrastructure for alternative modes of transportation is encouraged.
- Duplex: Parking should be provided in the form of a garage for each unit.
 - Triplex/Fourplex: Parking should be provided in the form of a garage for each unit where possible. Parking courts should be hidden from the street to maintain a pedestrian-friendly streetscape.
 - Cottage Court: Parking should not be accessed through the central courtyard. Parking spaces should be consolidated to minimize impact on the site.
 - Townhouse: Parking should be provided as individual garages in the rear of the building.
 - Multiplex: Parking courts should be hidden from the street and accessible via an attractive entry drive.

- **Blended Types:** Parking should be provided in the form of garages when possible. Parking courts should be hidden from the street and landscaped to reduce negative visual impacts.



Figure 13. The use of pavers for driveways is encouraged (Google, 2019).



Figure 10. A fourplex with parking in the rear of the property (Opticos Design, 2021).

C. Architecture: In terms of height and massing, the exterior design of middle housing should be inspired by the surrounding neighborhood. The height and bulk of middle housing should be carefully designed so as not to overwhelm adjacent single-family housing. Unique architectural style is encouraged.

1. Facade & roof articulation

- **Duplex:** The exterior design of the duplex should resemble a single-family home. Roof pitch and design should be consistent with the architectural style of the structure.
- **Triplex/Fourplex:** The structure should resemble a medium to large single-family home and include elements like balconies, porches, and other architectural features to avoid monotony. Roof pitch and design should be consistent with the architectural style of the structure.
- **Cottage Court:** Each unit in the development should be the same architectural style. Roof pitch and design should be consistent with the chosen architectural style.
- **Townhouse:** Significant wall and roof articulation should be used to reduce apparent scale and avoid monotony. The inclusion of elements such as balconies, porches, bay windows, and other features is encouraged.

- Multiplex: The inclusion of elements such as balconies, porches, arcades, dormers, and cross gables is encouraged to avoid long flat walls and roofs.
- Blended Types: The inclusion of elements such as balconies, porches, arcades, dormers, and cross gables is encouraged to avoid long flat walls and roofs. Architectural elements that break up monotony and reduce apparent scale are encouraged. Structures exceeding 150 feet in length are discouraged.



Figure 15. Stylistic details, such as porches, balconies, and varied roof lines are encouraged. This duplex is located in San Luis Obispo (Google, 2019).

2. *Scale*: The scale of middle housing projects should be considered within the context of their surroundings. Large projects should be broken up into multiple structures. Structures with greater height may require larger setbacks so that adjacent properties are not shaded. Upper stories may need to be reduced in bulk from lower stories.

3. *Balconies, porches, and patios*: the use of balconies, porches, and patios in middle housing development is encouraged. Such features may be both practical and/or aesthetic. They should be used to break up blank walls, offset upper and lower-level floor setbacks, and contribute to the human scale of the building. Where possible, units with individual access to the street should have private covered porches.



Figure 16. A duplex with a covered front porch (Opticos Design, 2021).

4. *Dwelling unit access*: In all cases, distinctive architectural elements and materials should be used to highlight primary entrances.
- Duplex: Each unit should have its own entry that is accessible from the street.
 - Triplex/Fourplex: Where possible, main entrances to individual units should be from the street.
 - Cottage Court: Each unit should have a primary entrance that is accessible from the central courtyard.

- Townhouse: Each unit should have its own entry that is accessible from the street.
 - Multiplex: The use of balconies or corridors to provide access to five or more units should be avoided. Access points to units should be clustered in groups of four or less.
 - Blended Types: Wherever possible, each unit should have a main entry that is accessible from the street. The use of balconies and corridors to provide access to five or more units should be avoided.
5. *Exterior stairways:* Stairways that provide access to the upper levels of multi-family structures should be located within the buildings themselves wherever possible. If exterior stairways are necessary, they should be protected from the weather and complementary to the architectural style of the building. The stairs should be integrated with the design of the structure, and open metal prefabricated stairs are discouraged.
6. *Accessory structures:* Accessory structures should be designed to be complementary to primary structures. The materials, color, and details should be the same as the other structures.

Conclusion

Encouraging the development of more middle housing is one way cities can work to reduce housing shortages and offer more housing variety. Middle housing can be successfully implemented in existing neighborhoods through purposeful design. With current moves towards the elimination of single-family zoning and proposed state legislation, it is important for cities to find ways to implement middle housing. These proposed design guidelines consider existing conditions and future possibilities. The City of San Luis Obispo can benefit from the implementation of middle housing design guidelines that aim to enhance community character.

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