



Implementing the Backyard Revolution: Perspectives of California's ADU Owners

| APRIL 22, 2021 |

UC Berkeley Center for Community Innovation

Authors

Karen Chapple, Ph.D., Dori Ganetsos, and Emmanuel Lopez

Acknowledgements

We thank the California Department of Housing and Community Development and Baird + Driskell Community Planning for funding this research. We are grateful to Julia Greenberg of the Center for Community Innovation, as well as David Garcia and Ben Metcalf of the Terner Center of Housing Innovation, for their review and feedback. We also thank Audrey Lieberworth, Isaac Schmidt, and Rachel Schten for their research assistance.

Cover photo courtesy of PreFab ADU

About the California Department of Housing and Community Development

The Department awards loans and grants to public and private housing developers, nonprofit agencies, cities, counties, and state and federal partners. The Department also develops housing policy, building codes, and regulates manufactured homes as well as mobile home parks.

The Center for Community Innovation (CCI) at UC Berkeley nurtures effective solutions that expand economic opportunity, diversify housing options, and strengthen connection to place.



Center for Community Innovation
c/o Institute of Governmental Studies
109 Moses Hall, #2370
Berkeley, CA 94720-237

Executive Summary

Accessory dwelling units (ADUs) are an increasingly popular housing type seen as a way to foster infill housing development, increase the housing supply without altering existing neighborhood character, provide multigenerational housing options, and generate supplemental income for homeowners. This report presents the findings from the first-ever statewide ADU owner survey in California.

Homeowner Characteristics

- Homeowners with an ADU are much more affluent and less likely to identify as Hispanic or Latine than the typical Californian homeowner.
- The top challenges that property owners face in building an ADU are the local approval process, design constraints or challenges, and the cost of construction.

Physical ADU Characteristics

- Almost all property owners in our sample (97%) only have one ADU on their property.
- The majority of new ADUs (53%) in California are detached units.
- The average square footage of new ADUs in the state is 615 square feet (sf), with minor regional variation.
- The majority of California's new ADUs (61%) contain just one bedroom, with studio units being the second most popular unit typology (18%). Units with two or more bedrooms only account for 21% of the ADUs in the state.

Local Approvals

- Half (50%) of homeowners found it difficult to obtain an ADU permit. The same percentage of homeowners found it difficult to build their ADUs to their jurisdiction's development standards.

Construction

- The median statewide construction cost of an ADU is \$150,000, or \$250/square foot.
- A significant portion of ADUs (37%) cost less than \$100,000 to build, and 71% of ADUs cost less than \$200,000 to construct.
- ADUs in the San Francisco Bay Area region are the most expensive to build, with a median construction cost of \$177,500 (\$329/sf). In the Central Coast region the median construction cost is \$140,000 (\$223/sf), followed by \$130,000 (\$200/sf) in Orange and San Diego Counties, and \$100,000 (\$197/sf) in Los Angeles County.
- We found notable per square foot cost variation of the ADUs in our sample based on the unit type, number of bedrooms, type of financing used to construct these ADUs, and household income of the property owner.
- Homeowners used some combination of the following financing schemes, though the proportions of which were not captured in the survey, to construct their ADUs: cash (53%), loans from a bank (43%) and money from friends or relatives (10%).

Rental Tenure

- About half (51%) of California's new ADUs serve as income-generating rental units, and

16% of ADUs provide no-cost housing to a relative of the homeowner.

- Only 8% of new ADUs in California are short-term rentals, though more affluent homeowners are more likely to list their ADUs as short-term rentals than those making less than \$100,000 a year.
- California's new ADUs typically do not result in family-sized rental units; in fact, 86% of the state's renter-occupied ADUs have just one or two people living in them. However, 21% of the occupied ADUs owned by property owners earning less than \$100,000 a year housed three or more people, compared to just 6% of the ADUs owned by property owners making over \$100,000 a year.
- Very few new ADUs provide housing for school-aged children (11%) or senior citizens (15%).
- Of the tenant-occupied ADUs, 40% of tenants do not park any cars on the street and 46% park just one car on the street.

Rental Prices

- The median rental price of an ADU in California is \$2,000, ranging from \$1,925 in the Central Coast region to \$2,200 in the San Francisco Bay Area.
- The median ADU rent per square foot in the state is \$3.68.
- The overall affordability of ADUs varies by region. The median rental price of an ADU is affordable (less than 30% of household income) to the median household of two people in the San Francisco Bay Area and the Central Coast regions.

- In the counties where we received greater than 20 total survey responses from landlords of new ADUs, we found that a large portion of units are available to those making less than 80% of the area median income (AMI), though the overall affordability varies significantly by county.

Moving Forward

ADUs do provide relatively affordable rental housing units for Californians, confirming our previous research. But there are still significant barriers to making these a widespread policy solution for tackling the state's affordable housing crisis. This survey suggests that despite legislative reforms, the ADU revolution has been slow to reach low-income homeowners of color. It will take a targeted effort at both the state and local level to meaningfully boost ADU production throughout the state and to eliminate structural barriers to ADU production so that all Californians can reap the benefits.

Introduction

Accessory dwelling units (ADUs) have grown from a relatively obscure housing type to a popular tool to foster infill housing development, increase the housing supply without altering existing neighborhood character, provide multigenerational housing options, and generate supplemental income for homeowners. In California, planners and policymakers promote ADUs as a means to combat the state's housing crisis. In recent years, the California State Legislature passed a suite of ADU legislation seeking to reform prohibitive zoning and land use regulations at the local level in order to bolster ADU production statewide. As a result, California has seen 9,000 ADUs completed in just the years 2018 and 2019.¹ In response to this new state initiative, some local governments promote ADUs as a way to subtly densify housing supply; nonprofit organizations advocate for broader ADU production; and startups produce prefabricated ADUs for homeowners. It is time for reflection: how do homeowners view the revolution in their backyards?

This report presents the results of the first survey of California-based homeowners with an ADU. It is important for policymakers, planners, and government officials to understand the experiences of those with an ADU on their properties to learn how best to support the production of ADUs as a means to alleviate the state's affordable housing crisis.

We begin with a summary of our research methodology, and then present the findings of our comprehensive ADU homeowner survey,

including new data on the characteristics of the property owners who completed our survey, the physical characteristics of their ADUs, local approvals, the construction process, and ADU finances (construction costs and rents charged by ADU type). We then conclude with a discussion on the policy implications of our findings, limitations of our data, and areas for future ADU research.

Methodology

In order to collect information from homeowners with an ADU on their property, we developed and administered a digital survey in both English and Spanish (see Appendix A for full survey text, and Appendix B for high-level survey results). We used the California Department of Housing and Community Development's (HCD) Annual Progress Report (APR) database of properties that applied for an ADU permit or received a Certificate of Occupancy for an ADU in the year 2018 or 2019 to identify our survey recipients. We supplemented our APR database with a list of ADUs completed in certain Bay Area jurisdictions provided by a private planning firm.²

In late Summer to Fall of 2020, 15,745 households in California received postcards inviting them to complete our digital survey. 823 of our postcard recipients took the survey, resulting in a 5.23% response rate. After eliminating respondents who were not the owner of a property with an ADU on it, our final response rate was 4.8%. Please see Appendix C for a detailed methodology outlining our postcard distribution process and acknowledged survey response biases.

Given our relatively limited sample size, we analyze all homeowner responses based on geographic region. Our regions with sufficient sample size for analysis included the San Francisco Bay Area, Los Angeles County, the Central Coast, and Orange and San Diego Counties (Figure 1). We categorize the remaining 38 respondents that were outside of those four regions as “other”, and include them only in our overall survey analysis.

Figure 1: Map of regions

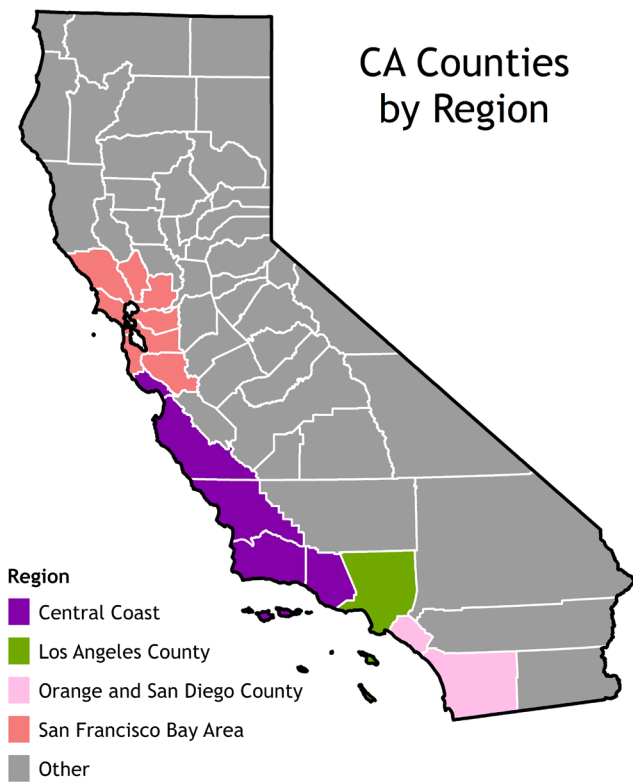


Table 1: Responses by region

Region name	# of responses	% of total responses
San Francisco Bay Area	391	52.0%
Los Angeles County	178	23.7%
Central Coast	88	11.7%
Orange & San Diego Counties	57	7.6%
Other	38	5.0%

We also compare some of our findings to state-level American Community Survey (ACS) data to contrast our sample of homeowners with an ADU to Californians in general. Of note, “construction costs,” as used in this report, refers to

the total cost that the homeowner spent on their ADU, and is inclusive of all costs for design, labor, materials, and permits.

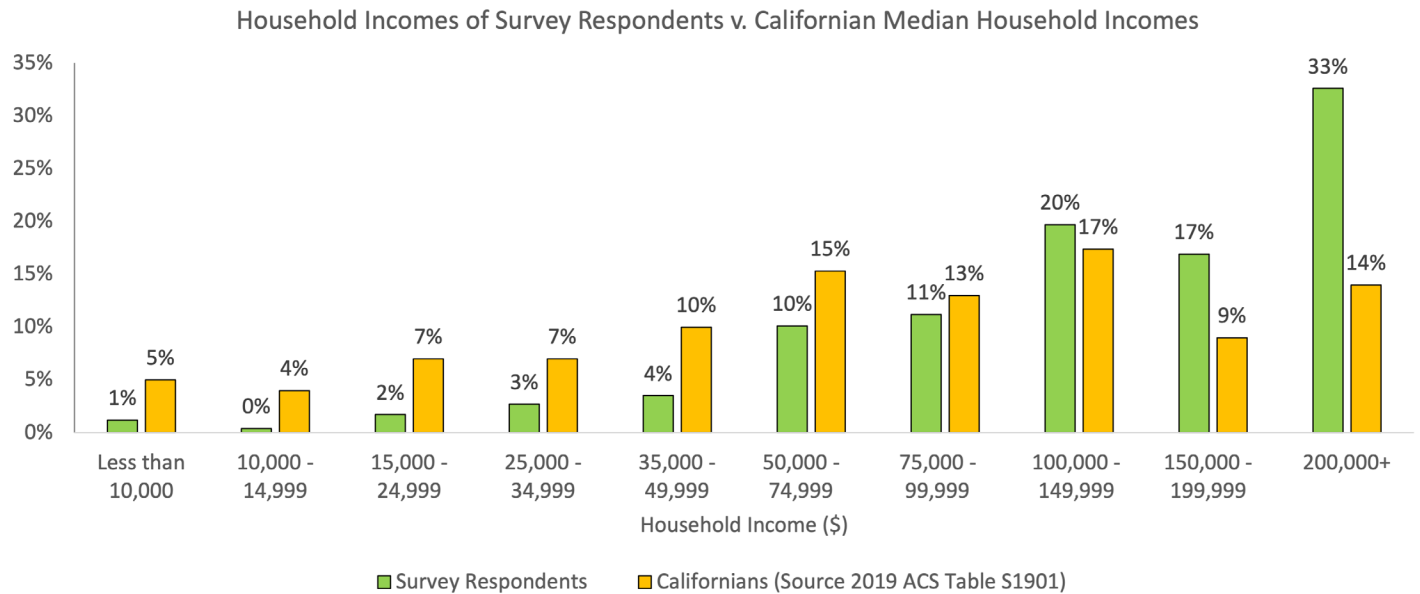
Findings

In this section, we present key survey findings regarding the characteristics of property owners with an ADU, physical characteristics of ADUs in the state, homeowners’ perspectives of the local approvals process, financing used to build ADUs, homeowners’ opinions on the construction process, rental tenure, and ADU rental prices. Where relevant, we analyze these results by region; the ADU type and number of bedrooms in the unit; the method of construction financing; and the income of the property owner.

Property Owner Characteristics

Property owners with a new ADU on their property are more affluent than the typical homeowner in California, where the median income is \$103,870. As shown in Figure 2, 33% of our survey respondents reported having a household income over \$200,000, compared to 14% of all Californians in 2019; 70% of respondents earned an income of \$100,000 or more, compared to 40% of Californians.³ One potential explanation for this is the large concentration of respondents who live in California’s coastal regions, which tend to have a higher area median income (AMI) than other parts of the state. Additionally, 52% of our survey respondents lived in the San Francisco Bay Area, which has some of the highest incomes in the state. Nonetheless, this suggests that there may not be adequate financing options for lower- to moderate-income households to construct an ADU.

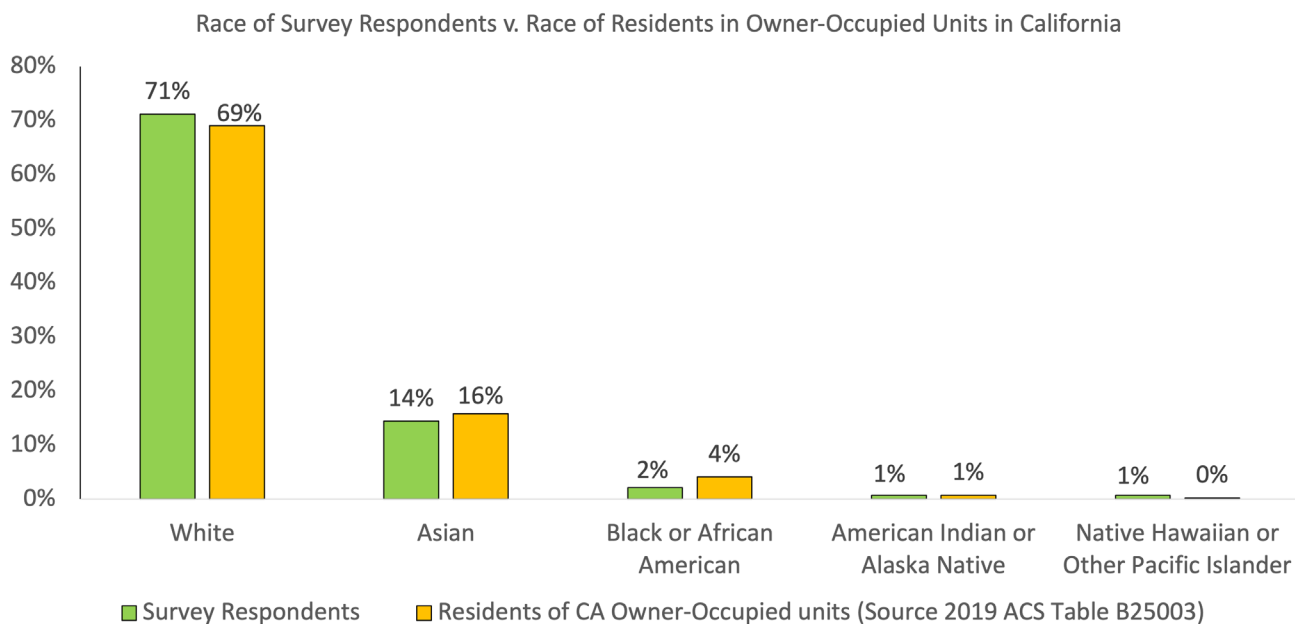
Figure 2: Household Incomes of survey respondents versus Californian median household incomes



The racial composition of homeowners that constructed an ADU is similar to the race of California’s homeowners, with 71% of our survey respondents identifying as White, compared to 69% of homeowners in the state (Figure 3). However, we did find lower

representation of survey respondents who identify as Hispanic or Latine (14%) than the average Californian homeowner (29%). Overall, then, the development of ADUs to date has not been equitable across ethnic and class lines, much like the ability to attain homeownership in the state.

Figure 3: Race of survey respondents versus all owner-occupied units in California



n of Survey Respondents = 694

n of California Owner-Occupied Units = 7,218,742

The homeowners who did successfully build an ADU were forthcoming regarding the benefits that these units provided to their families. One shared that building an ADU *“was one of the best decisions I’ve made to help my family”*, while another respondent noted that *“my ADU enabled me to retire at age 62 which was medically necessary.”* A third elaborated more on the benefits of building an ADU for her family:

“the cost of renting apartments is so high and prohibitive in the Bay Area, therefore having a separate unit for the adult children is a great way of keeping the family together in a financially and socially economical way. The family stays together, yet everyone has privacy and independence. We have the ability to rent it out in the future as well. But children not being stretched and stressed to afford housing while working in the Bay [A]rea is a good thing for everyone.”

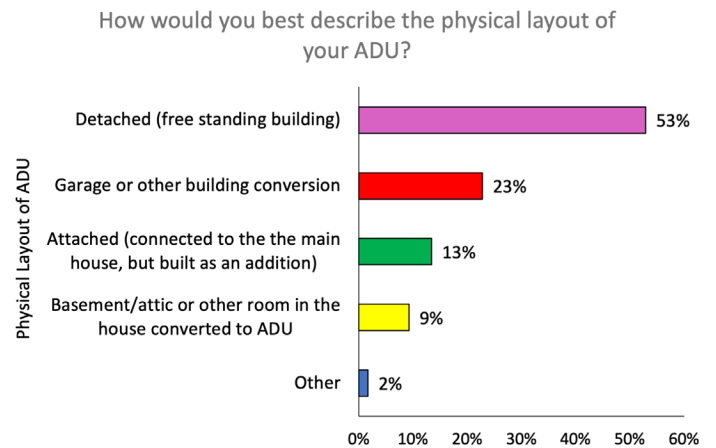
Many of our survey respondents shared similar stories, noting that their units provide private housing for live-in caregivers; preserve cultural connections by housing family members who speak their native language; allow elderly homeowners to downsize while still aging-in-place; and enable them to take care of their aging parents.

Physical ADU Characteristics

Until January 1, 2020, the State Legislation only required jurisdictions to permit one ADU on lots with a single-family home; thus, unsurprisingly, 97% of those with a completed ADU have only one. Of these ADUs, the majority (53%) are new construction detached units, while 23% use ex-

isting spaces from, or add new square footage to, existing detached garages or accessory structures. Less commonly, homeowners have built ADUs as additions attached to the main home (13%) or converted space from the main dwelling unit (9%) (Figure 4). The popularity of detached units may be attributed to the amount of privacy that these ADUs provide to homeowners, compared to attached or converted ADUs where the unit shares a wall with the primary residence.

Figure 4: Unit typologies



Although jurisdictions typically allow “generous ADU sizes” on paper,⁴ the average ADU is just 615 square feet, with some regional variation. Homeowners in Orange and San Diego Counties built the largest ADUs (694 sf), followed by homeowners in Los Angeles County (621 sf). ADUs in the San Francisco Bay Area (604 sf) and the Central Coast (600 sf) were the smallest. Many jurisdictions impose size restrictions on ADUs based on the square footage of the main residence, as noted by one of our survey respondents: *“one of the challenges was being limited to the ADU size because of the size of the main house. The requirement was that the ADU could not exceed 50% in size of the main house which is only 1,286 square feet, thus limiting the ADU*

to 643 square feet.” Additionally, zoning tools including lot coverage, floor area ratios (FAR), height limitations, and front setbacks work to limit the maximum size of ADUs on top of the stated maximum size limitations, though many of these limitations are now prohibited -- to an extent -- per the State Legislation.⁵

The majority of California’s ADUs (61%) contain just one bedroom, while studios are the second most common unit type (18%). Units with two bedrooms only account for 17% of the ADUs in the state, and only 3% of the state’s ADUs contain three or more bedrooms. This is consistent with the findings of an earlier ADU survey of homeowners in Portland, Seattle, and Vancouver, in which 81% of the ADUs were either one-bedroom or studio units.⁶ Minimum dwelling unit sizes imposed at the local level, in conjunction with the limits on the total square footage of ADUs, likely contribute to the number of bedrooms that homeowners ultimately build.

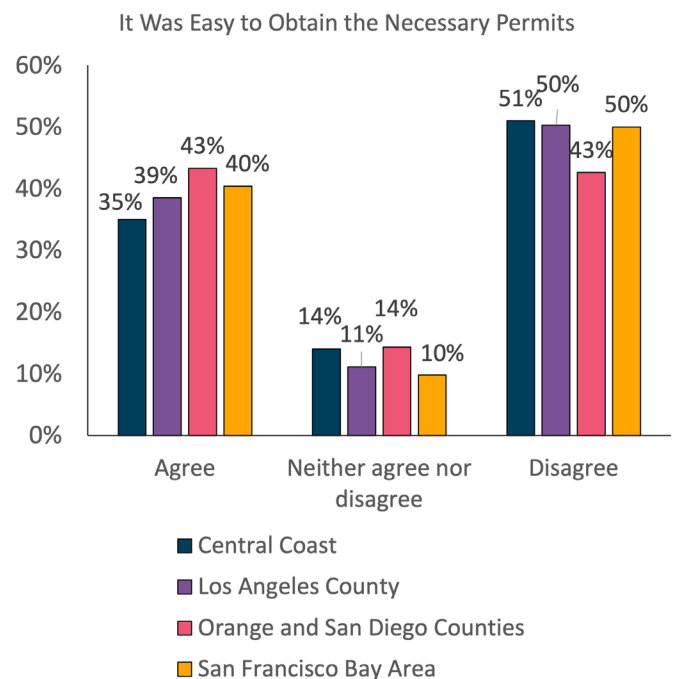
Local Approvals

Across the state, homeowners had quite different experiences designing and obtaining approval for their ADUs. Local zoning reforms were the top factor that made it possible for homeowners to build their ADUs: 28% of our survey respondents pointed to these reforms as enabling them to construct their units. Some homeowners said that their local jurisdictions made it fairly easy for them to obtain the necessary ADU permits, noting that they **“did not have to go to planning commission, which saved \$\$\$\$ and TIME,”** **“the permitting process went relatively quickly and smoothly,”** and that **“the ease and cost**

of permits” was a particularly positive aspect of their ADU project.

But for many, obtaining local approval to build an ADU was the top challenge associated with adding an ADU. About half (47%) of our survey respondents cited the approval process as one of their top two challenges in constructing an ADU. Homeowners shared that they **“knew the [C]ity had to approve the ADU due to new [C]alifornia law, but they threw up pointless rules and requirements to make it difficult and discouraging,”** and that they endured **“absolutely ridiculous red tape, the [C]ounty was no help in finding solutions.”** Statewide, 50% of homeowners disagreed with the statement that it was easy to obtain the necessary permits to build their ADU, with the most positive reviews coming from San Diego and Orange counties (Figure 5).

Figure 5: Ease of obtaining permits



n= Central Coast: 81, Los Angeles County: 153, San Francisco Bay Area: 348, Orange and San Diego County: 49

These homeowners struggled with the length and complexity of the permitting process. Homeowners often felt like their jurisdictions imposed unnecessary red tape in the permitting process, and some noted that their architects even struggled to navigate through the different departments' requirements. One homeowner outlined their frustrations with this process, saying:

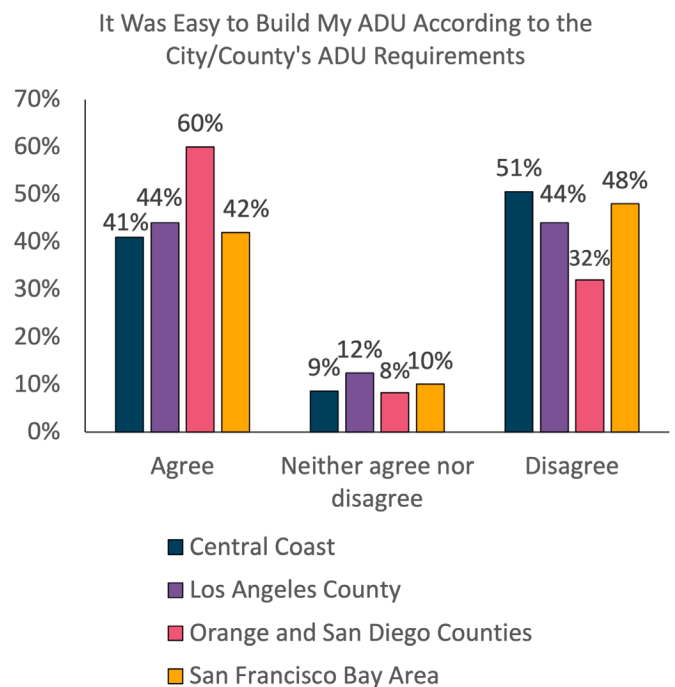
“[m]y bad experience was from the moment I submitted the plans to the City ... until they were approved, that single process took more than 12 months. It was a long time wasted, I paid a lot of extra money. And a super unpleasant experience. Next time I better do it regardless of City permits.”⁷

Adding to these difficulties, some jurisdictions' ADU programs do not comply with State Legislation, which the State minimally enforces. One homeowner outlined their experience with the inconsistencies in regulations and lack of enforcement:

“even though the State passed legislation to standardize the ADU regulations, the City...did not fully adopt [it]. We reached out to the State and they said they could do nothing to enforce that the cities follow it. We ended up following the City requirements. Thus, we were not allowed to convert our garage into [an] ADU. Instead we built a separate attached structure and also built on-site parking.”

Overall, 50% of homeowners found it difficult to build their ADUs to their city/county's development standards. These new ADU builders ranked design constraints (26%), lot setbacks or height limits (14%), utility connections (14%), and parking requirements (6%) among their top challenges.⁸ Notably, homeowners in Orange and San Diego Counties had the easiest time building their ADUs according to their jurisdiction's development standards, with 60% of homeowners in these counties either agreeing or strongly agreeing that it was easy to construct their ADU according to local regulations, compared to 44% in Los Angeles County, 42% in the San Francisco Bay Area, and 41% in the Central Coast (Figure 6).

Figure 6: Ease of following local ADU regulations



n = Central Coast: 81, Los Angeles County: 153, San Francisco Bay Area: 348, Orange and San Diego County: 49

Construction Financing

The median construction cost of the ADUs in our sample was \$150,000, or \$250/sf. A significant portion of ADUs (37%) cost less than \$100,000 to build, and 71% of ADUs cost less than \$200,000 to construct (see Appendix B for full cost breakdown). These construction cost figures represent significant savings when compared to the state-wide average construction cost of \$480,000 per unit (\$700/sf) for affordable housing units that received Low-Income Housing Tax Credits (LIHTC)

in 2019.⁹ However, some of the cost savings associated with ADUs compared to conventional affordable housing units built using LIHTC funding may be attributed to the fact that cost of a LIHTC unit includes land costs, and the cost of an ADU does not. We found notable cost variation among the ADUs in our sample based on the region, unit type, number of bedrooms, type of financing used to construct these ADUs, and property owner income (Table 2).

Table 2: Breakdown of median ADU construction costs

Region	Median total construction cost	Median construction cost/sf
Central Coast	\$140,000	\$223.04
Los Angeles County	\$100,000	\$197.22
Orange and San Diego Counties	\$130,000	\$200.00
San Francisco Bay Area	\$177,500	\$329.17
ADU unit typology		
Detached units	\$180,000	\$300.00
Additions (main residence)	\$150,000	\$250.00
Garage*	\$90,000	\$189.19
Conversion (main residence)	\$100,000	\$173.04
Number of bedrooms in ADU		
Studio (0)	\$100,000	\$241.27
1-bedroom	\$150,000	\$266.67
2-bedrooms	\$212,500	\$250.00
3 or more bedrooms	\$200,000	\$129.17
Financing used to pay for ADU **		
Cash	\$150,000	\$250.00
Loan(s) from a bank	\$175,000	\$307.69
Money from a friend or relative	\$185,000	\$291.67
Credit card/unsecured debt	\$100,000	\$204.52
Income of property owner		
Less than \$50,000	\$95,000	\$176.17
\$50,000 - \$99,999	\$110,000	\$200.80
Over \$100,000	\$170,000	\$306.12

*Garage includes garage conversions, and square footage added to existing garages either via vertical or horizontal expansions.

**Financing types are not mutually exclusive

A 2020 study by the Turner Center for Housing Innovation found that “compared to projects in other parts of the state, Bay Area [housing] projects cost \$81 more per square foot to build.”¹⁰ The cost differential for ADUs appears to be even greater; the median cost per square foot of an ADU in the San Francisco Bay Area is \$106.13 more expensive than the next most expensive region. On the other hand, the Turner Center found that hard construction costs in Los Angeles are typically \$35 more expensive per square foot than the state average, but we find that ADUs in Los Angeles County have a lower median cost per square foot (\$223.04) than the state median (\$250).¹¹

One possible explanation for the lower cost in Los Angeles County is the region’s reliance on garage conversions, which accounted for 39% of total ADUs built (compared to 11-14% in other regions). Garage conversion ADUs, which involve taking space from, or adding square footage to, existing garages, are the cheapest to build statewide both in terms of overall construction cost and cost per square foot. Garage conversions may be cheaper than the typical ADU because homeowners could theoretically use the ADU process to legalize already converted garage space, though our survey did not ask homeowners if their ADUs existed illegally before they applied for an ADU permit. Our survey also finds that new construction detached units, while the most popular ADU type, are also the most expensive to construct.

ADUs with two bedrooms were the most expensive to construct (median cost of \$212,500), and the median price of an ADU with three or more bedrooms (\$200,000) was \$50,000 more than a

one-bedroom unit. However, units with more bedrooms are cheaper to build per square foot due to the “sunk costs” associated with ADU construction, such as architectural fees and the cost of building a kitchen and bathroom, across all units.

Although ADUs are relatively affordable when compared to standard housing units in the state, they still require a significant amount of capital to construct. Overall, lower-income homeowners spent less to construct their ADUs than those with higher-incomes across the state. Homeowners who built ADUs using credit cards or unsecured debt paid much less overall for their units (median cost of \$100,000), as did property owners earning lower incomes. The types of financing used to construct an ADU were fairly consistent across race and economic status, though our limited sample size only allowed us to draw conclusions about Latine and Asian American homeowners. Prior research shows that there is a demonstrable need for additional financial mechanisms in order to spur the development of ADUs statewide.¹² The 2019 State Legislature restricted the types of impact fees that jurisdictions are allowed to charge for ADUs by prohibiting the collection of any impact fees for ADU projects less than 750 square feet.¹³ One homeowner cited this change in our ADU survey, saying that:

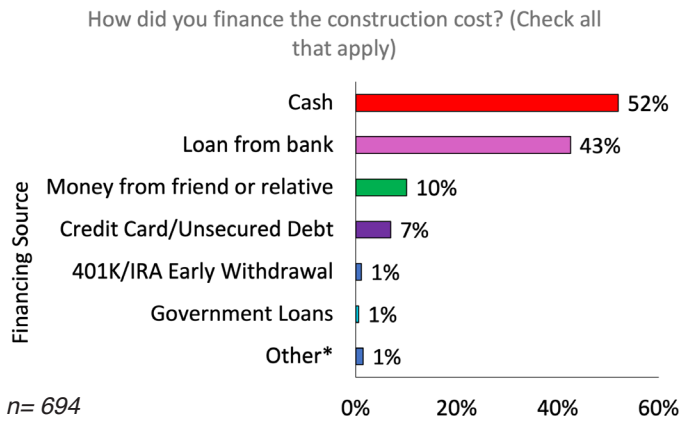
“the most ‘Positive Aspect’ regarding the developmental process was when I was informed that, due to the fact that the State had mandated and placed restrictions on the permit fee’s [sic] and costs the individual Cities could charge, I would no longer be required to sign a Promis-

sory Note and place a lien on my property to satisfy the fee requirements.”

Still, 158 (24%) of homeowners surveyed cited paying for the cost of construction as a top challenge associated with constructing their ADU, and 32 (5%) struggled to obtain financing for their projects. This is significant since the homeowners in our survey are more affluent than the typical Californian homeowner.

Overall, 62% of homeowners depended wholly or partially on cash savings, or money from a friend or a relative, to finance their new ADU (Figure 7).

Figure 7: Financing the construction cost



***"other" includes instances where respondents rebuilt their primary residence to include an ADU using insurance money after a wildfire event, equity co-investment programs, owners that bought the property with an ADU on it, and respondents that selected "other" but did not specify the financing used.*

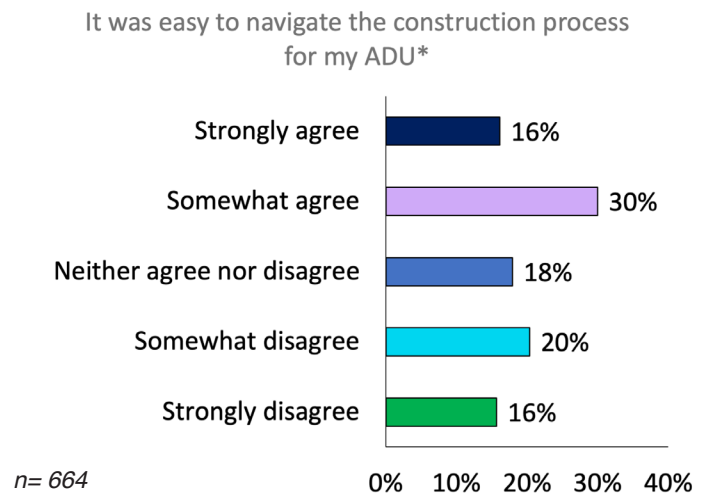
Of the 43% of homeowners who took out one or more loans from the bank, 66% used a Home Equity Line of Credit (HELOC), 41% refinanced their primary residence, 7% obtained a construction loan from a local lender, and 2% took out a personal loan from a bank. In an earlier report, we found that more than half of homeowners who built an ADU used a conventional loan such as

refinancing their primary residence with a cash out option, 27% relied on a HELOC, and just 1% used a construction loan.¹⁴ Further research is necessary to explore these differences, but the reliance on cash suggests both the lack of financing alternatives and the relative affluence of this set of homeowners.

Construction Process

Homeowners statewide had different experiences navigating the construction process (Figure 8), though almost all (94%) were involved in the decision-making process about construction decisions for their ADUs.

Figure 8: Navigating the construction process



**this may include issues finding a contractor.*

Notably, the construction experience for homeowners varied significantly based on their experience with contractors: over a hundred of our survey respondents volunteered that having a competent contractor was a particularly positive aspect of their ADU project. One homeowner noted that ***“It is absolutely key to find an excellent general contractor with veteran subcontractors. I don’t think anything is more important,”*** and another stated the importance of

“evaluat[ing] and find[ing] a good construction company to build the ADU...[to] lessen the pain and issues during the construction.”

On the other hand, some of our survey respondents were less fortunate, noting that they *“were the victims of fraud and theft”* on the part of their contractors or subcontractors. Despite the difficulties faced during construction, homeowners were still happy with the end result overall. One homeowner shared that *“although the construction was a nightmare, the finished apartment is wonderful and I have had some great tenants.”*

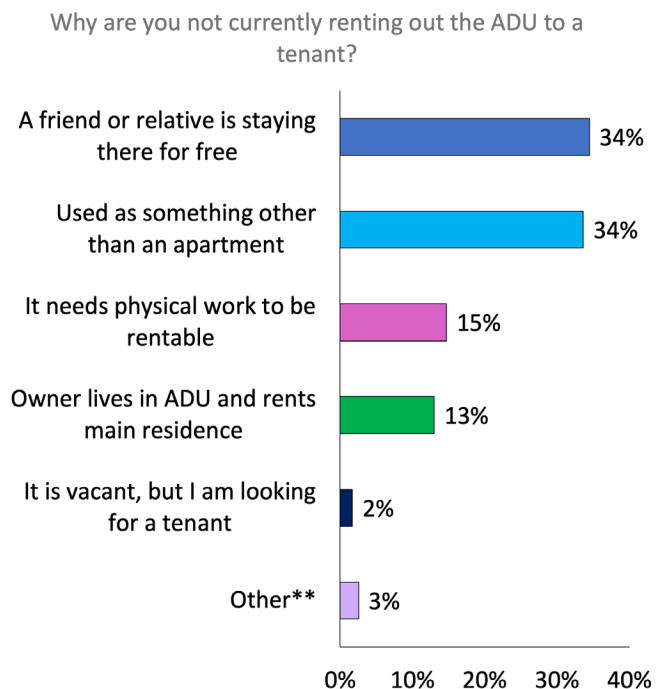
Rental Tenure

Thus far, about half (51%) of California’s new ADUs serve as income-generating rental units, a similar proportion to that in our previous Pacific Northwest survey.¹⁵ Of the ADUs that are rented out to tenants, only 8% function as short-term rentals with less than 1 month stays. Property owners earning \$100,000 a year or more were more likely to use their ADUs as short-term rentals (12%) than those earning less than \$100,000 a year (7%). Of note, many Californian jurisdictions’ ordinances include language prohibiting the use of ADUs as short-term rentals.

ADUs often serve as affordable housing for friends or relatives: 18% of the state’s new ADUs provide no-cost housing for family members (16%) or friends (2%), again, similar to the proportion found in the previous Pacific Northwest survey. Approximately 16% of the new ADUs serve as home offices, studios, or guest houses for the property owner (Figure 9). This may be the result of more people working from home during the COVID-19 pandemic, and the use of

these ADUs may evolve over time as the needs of the homeowner changes. As one homeowner noted, their *“original intent was to create a studio apartment for an aging parent, but it is now being used as a home office (which is coming in handy during shelter-in-place) and is also a comfortable guest cottage for family and friends.”*

Figure 9: Reasons not to rent out the ADU*



n= 366

*includes responses from the 49% of homeowners who reported that they were not renting out their ADU.

**“other” most commonly includes homeowners not renting their units out due to concerns about the COVID-19 pandemic, homeowners not wanting to rent their property out to a random tenant, and homeowners avoiding renting their units due to concerns about regulations such as rent control.

These new ADUs are typically not family-sized rental units; in fact, 86% of the state’s renter-occupied ADUs have just one to two people living in them. Once again, this echoes the findings of

the Portland, Seattle, and Vancouver homeowner survey: 93% of ADUs in those jurisdictions consisted of only one or two person households.¹⁶ Of California’s renter-occupied ADUs, only 11% have one or more school-aged children (less than 18 years old) living in them, and only 15% are occupied by a senior citizen (65+ years old). The number of people who live in an ADU varies by the ADU owner’s income. Only 6% of ADUs owned by property owners earning \$100,000 a year or more are rented to households of three or more people, compared to 21% of ADUs owned by property owners that make less than \$100,000 a year.

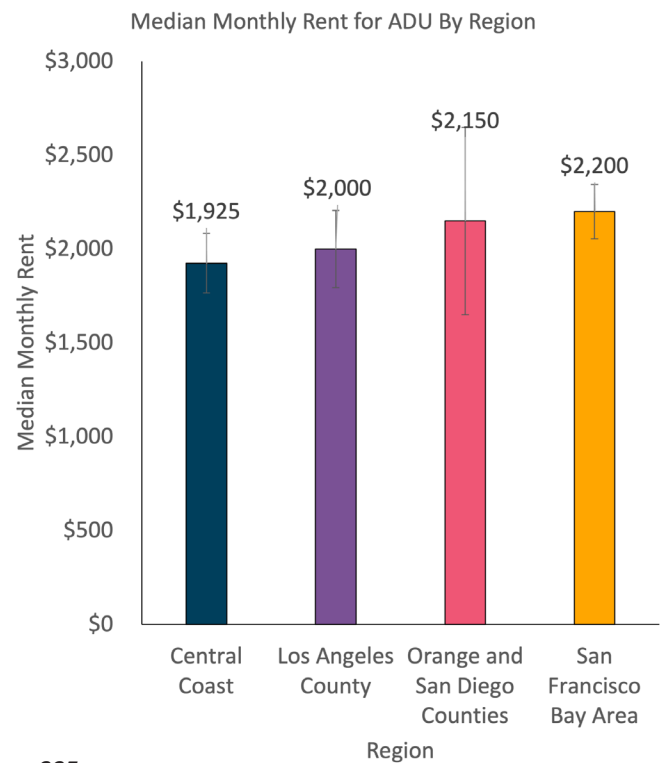
Recent legislative efforts to alleviate parking requirements appear to be effective, as only 6% of our survey respondents cited parking requirements as one of the biggest challenges in constructing their ADU.¹⁷ Some jurisdictions and residents have long maintained that the elimination or waiver of parking requirements would result in a lack of available street parking in residential neighborhoods.¹⁸ Of the occupied ADUs in our sample, 40% of tenants did not park any cars on the adjacent street, 46% parked one car on the street, 13% parked two vehicles on the street, and only 1% parked three or more cars on the street.

Rental Prices

The median rental price of an ADU in California is \$2,000, and the median ADU rent per square foot in the state is \$3.68. Notably, the median rents varied by region (Figure 10). ADUs in the San Francisco Bay Area appear to collect the most both in total rent and in rent per sf, though when

accounting for the margin of error associated with our dataset, ADUs in Orange and San Diego County may charge more in total rent. However, the ADUs in Orange and San Diego County are also much larger than units in the San Francisco Bay Area. In terms of median rents per square foot, ADUs in the San Francisco Bay Area collect the most (\$3.94), compared to those in the Central Coast region (\$3.75), Los Angeles County (\$3.38), and Orange and San Diego Counties (\$3.35).

Figure 10: Median monthly rent by region



The median ADU rental price is affordable (less than 30% of household income) to a two-person household making the area median income in the San Francisco Bay Area and the Central Coast regions.¹⁹ In Orange and San Diego counties, the large margin of error associated with the median rental price for an ADU makes it difficult to make claims about affordability. The median

ADU in Los Angeles County rents for \$2,000, but an affordable rent for the median household of two is \$1,546.¹⁹ Approximately 31% of ADUs in Los Angeles County are affordable to a two-person household making the AMI.

In the counties where we received greater than 20 total survey responses from new ADU landlords, we found that a significant portion of units are available to those making less than 80% of

the area median income (AMI), though the overall affordability varies significantly by county (Table 3). This is fairly consistent with the previous Pacific Northwest survey, which found that 58% of ADUs rent for below market rate.²⁰

There was also modest variation of rents charged based on the unit type, number of bedrooms in the ADU, type of financing used to construct the ADU, and property owner income (Table 4).

Table 3: Percent of income-generating rental units available to households making 80% or less of the area median income by county

County	Monthly rent at 80% of AMI for a family of two*	Percent of units affordable to a family of two making \leq 80% of AMI	n**
Alameda	\$1,907	29%	24
Los Angeles	\$1,237	12%	51
Marin	\$2,290	67%	21
Santa Clara	\$2,266	50%	32
San Mateo	\$2,290	38%	21

*Income limits sourced from <https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income-limits-2020.pdf>. We base this analysis on a family of two as 86% of ADUs in the state have just 1 or two people living in them.

**n includes all survey respondents that reported charging rent for the unit in a given county.

Table 4: Breakdown of median ADU rents

ADU unit type	Median total rent	Median rent/sqft
Detached units	\$2,200	\$3.82
Additions (main residence)	\$2,000	\$3.77
Garage*	\$1,875	\$3.47
Conversion (main residence)	\$2,200	\$3.33
Number of bedrooms in ADU		
Studio (0)	\$1,800	\$4.44
1-bedroom	\$2,000	\$3.61
2-bedrooms	\$2,800	\$3.06
3 or more bedrooms	\$2,800	\$2.33
Financing used to pay for ADU **		
Cash	\$2,000	\$3.73
Loan(s) from a bank	\$2,100	\$3.87
Money from a friend or relative	\$2,500	\$3.77
Credit card/unsecured debt	\$1,825	\$3.54
Income of property owner		
Less than \$50,000	\$1,868	\$3.02
\$50,000 - \$99,999	\$1,850	\$3.50
\$100,000 or more	\$2,200	\$4.00

*Garage includes garage conversions, and square footage added to existing garages either via vertical or horizontal expansions.

**Financing types are not mutually exclusive.

Conclusion and Policy Implications

This survey is the first statewide effort to understand the on-the-ground experiences of homeowners who successfully constructed an accessory dwelling unit. This report finds that while ADUs do provide relatively affordable rental housing units for Californians, there are still significant barriers to making these a widespread policy solution for tackling the state's affordable housing crisis.

Homeowners with an ADU are more affluent and less likely to identify as Hispanic or Latine than the average Californian homeowner. Despite the lower construction costs of ADUs when compared to "conventional" affordable housing units constructed using Low-Income Housing Tax Credits, ADUs still require a significant financial investment to build, with the median unit costing \$150,000 (\$250/sf). In order to finance these ADUs, homeowners across all races and economic status rely heavily on cash savings.

Financing the construction of an ADU, while a significant barrier, is not the only hurdle faced by homeowners seeking to add an ADU to their property in California. Homeowners struggle with proposing ADUs that meet their local planning department's requirements, obtaining the necessary permits, and finding an honest and reliable construction team. Those that successfully constructed ADUs noted the benefits that these units provide; for example, creating a source of supplemental rental income or providing multigenerational housing.

Moving forward, it is imperative that state and local policymakers work to expand access to ADUs so that all can reap the personal and financial benefits that these units provide. We recommend that state and local actors champion the following initiatives in order to bolster the state's supply of ADUs:

Facilitate the construction of ADUs for lower-income and minority families to promote equity in housing, provide benefits to marginalized Californians, and combat the state's housing affordability crisis.

- We found that lower-income homeowners were more likely to have more tenants in their ADUs, and were less likely to use their ADUs as short-term rentals. Promoting ADUs to low-income Californian homeowners may result in the construction of more family-sized housing units.
- This can take the form of expanding ADU financing options for homeowners, ideally with terms that are more lenient than a conventional mortgage or construction loan in order to allow lower-income Californians and those with lower credit scores to access ADU financing.
- Assembly Bill 561, which was introduced by Assembly Members Ting and Bloom in February 2021, is a good first step toward accomplishing this. AB 561 would require the State Treasurer to develop a "Help Homeowners Add New Housing Program" with the stated purpose of assisting homeowners in qualifying for loans to build an ADU.²¹ This legislation replicates the efforts of the 2018

Assembly Bill 69, which the State Legislature approved but Governor Newsom vetoed in September 2020.

Fund and require state-level review of local ADU regulations to ensure that the regulations, and the interpretation of those regulations, are in compliance with all relevant state-level legislation.

- Although local jurisdictions are currently required to submit their adopted ADU ordinances to the California Department of Housing and Community Development, HCD currently does not enforce State Legislation or penalize jurisdictions for ADU requirements that are out of compliance with State Law.
- Governor Gavin Newsom’s proposed 2021-2021 budget includes resources to create a Housing Accountability Unit within HCD that would be tasked with monitoring and enforcing state housing legislation, as well as funds for HCD to increase technical assistance to help jurisdictions implement state housing legislation.²² The creation of this Housing Accountability Unit is a necessary step towards ensuring that jurisdictions act in good faith when developing ADU programs, and increasing the viability of ADUs statewide.

Make local permitting processes more user-friendly, and better assist inexperienced homeowners with obtaining local approvals to build an ADU.

- This can include creating a dedicated ADU website with accurate information, dedicating city staffers as ADU specialists to an-

swer any technical questions, and offering pre-approved ADU plans. These efforts will help to remove barriers associated with permitting and local approvals.

- Ensure that all ADU outreach materials are accessible in multiple languages to increase ADU production in minority communities, particularly among the Hispanic and Latine communities.
- Jurisdictions should also make all relevant ADU requirements, not just the requirements of planning departments, easily accessible to homeowners seeking to build an ADU in order to mitigate “surprise” regulations and fees as plans for an ADU move through the local permitting process.
- Introducing local amnesty ADU programs, or unit legalization programs, can also help bring informal in-law units into California’s legal housing supply while ensuring that these existing units meet all relevant health and safety codes.

Facilitate a smoother construction process for homeowners.

- The construction process can be a lengthy and emotional process for homeowners as they invest their own time and money in a construction process that takes place on their property. Jurisdictions and nonprofit organizations can help improve this process by providing digital resources on navigating the construction process, matching homeowners with experienced contractors, and providing project management services or support groups to homeowners going through the ADU process.

While our research provides the most comprehensive look to date at physical and economic characteristics of ADUs constructed throughout the state, our data has limitations. Our sample of homeowners only included those who built ADUs in 2018 and 2019. Importantly, the 2019 state-level ADU Legislation, which became effective on January 1, 2020, may have addressed or mitigated some of the pain points associated with constructing an ADU that this survey identifies. Additionally, our survey sample over-represents the San Francisco Bay Area and under-represents Los Angeles County. Future surveys should continue to monitor the extent to which new ADUs alleviate the affordability crisis in California.

Endnotes and Works Cited

1. Chapple, K., Garcia, D., Tucker, J., & Valchuis, E. (2020, December 10). Reaching California's ADU Potential: Progress to Date and the Need for ADU Finance. Retrieved from <https://ternercenter.berkeley.edu/research-and-policy/reaching-californias-adu-potential-progress-to-date-and-the-need-for-adu-finance/>
2. Cities that provided supplemental ADU addresses include: Belmont, Brisbane, Burlingame, Cloverdale, Corte Madera, Cupertino, Foster City, Half Moon Bay, Healdsburg, Kenfield, Lagunitas, Larkspur, Marin County, Mill Valley, Milpitas, Mountain View, Novato, Pacifica, Palo Alto, Redwood City, San Anselmo, San Bruno, San Jose, San Mateo, San Rafael, Saratoga, Sunnyvale & Tiburon.
3. U.S. Census Bureau. 2019 American Community Survey 1-year Income in the Past 12 Months (in 2019 Inflation-Adjusted Dollars).
4. Chapple, K., Lieberworth, A., Hernandez, E., Ganetsos, D., Alvarado, A., & Morgan, J. (2020, February 1). The ADU Scorecard - ADU California. Retrieved from <https://www.aducalifornia.org/wp-content/uploads/2020/02/ADU-Scorecard-InterimReport-200201-1.pdf>
5. Assembly Bill (AB) 68, passed by the State Legislature in 2019, seeks to limit the use of zoning tools to restrict lot size by requiring all jurisdictions to permit "at least an 800 square foot accessory dwelling unit that is at least 16 feet in height with 4-foot side and rear yard setbacks to be constructed. This bill would additionally prohibit the imposition of limits on lot coverage, floor area ratio, open space, and minimum lot size if they prohibit the construction of an accessory dwelling unit meeting those specifications." (AB 881, Bloom)
6. Chapple, K., Wegmann, J., Mashhood, F., & Coleman, R. (2017, July). JUMPSTARTING THE MARKET FOR ACCESSORY DWELLING UNITS. Retrieved from https://ternercenter.berkeley.edu/wp-content/uploads/pdfs/Jumpstarting_the_Market_-_ULI.pdf
7. Original Spanish text: "[m]i mala experiencia fue desde el momento que sometí los planos a la ciudad...hasta que me los aprobaron, se tardaron más de 12 meses ese sólo proceso. Fue mucho tiempo perdido, pague mucho dinero extra. Y una experiencia súper desagradable. La próxima vez mejor lo hago sin tomar en cuenta permisos de la ciudad."
8. State-level ADU legislation passed in 2019 (Assembly Bill (AB) 68, AB 881, and Senate Bill (SB) 13, reduced the scope of regulation that localities could impose around lot setbacks, height limits, and parking requirements for ADU projects. As such, these difficulties may no longer be an issue for homeowners seeking to add an ADU to their property today.
9. Reid, C. (2020, December 22). The Costs of Affordable Housing Production: Insights from California's 9% Low-Income Housing Tax Credit Program. Retrieved from <https://ternercenter.berkeley.edu/research-and-policy/development-costs-lihtc-9-percent-california/>
10. Raetz, H., Kneebone, E., Reid, C., & Forscher, T. (2020, December 22). The Hard Costs of Construction: Recent Trends in Labor and Materials Costs for Apartment Buildings in California. Retrieved from <https://ternercenter.berkeley.edu/research-and-policy/hard-construction-costs-apartments-california/>
11. Raetz, Kneebone, Reid, & Forscher, 2020.
12. Chapple, Garcia, Tucker, & Valchuis, 2020.
13. SB13, Wieckowski. Accessory dwelling units, 2019 Reg. Sess. (CA 2019). https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB13
14. Chapple, K., Lieberworth, A., Ganetsos, D., Valchuis, E., Kang, A., & Schten, R. (2020, October). ADUs in CA: A Revolution in Progress. Retrieved from <https://www.aducalifornia.org/wp-content/uploads/2020/10/ADU-Progress-in-California-Report-October-Version.pdf>
15. Chapple, Wegmann, Mashhood, & Coleman, 2017.
16. Chapple, Wegmann, Mashhood, & Coleman, 2017.
17. In the 2019 legislative session, the State mandated that no replacement parking spaces may be required if a garage, carport, or covered parking space is demolished or converted to create an ADU. In addition, the state strengthened its existing requirements for jurisdictions to provide certain exemptions from local parking requirements depending on the characteristic and location of the ADU and the subject property in the same legislative session.
- AB 881, Bloom. Accessory dwelling units, 2019 Reg. Sess. (CA 2019). AB 68, Ting. Land use: accessory dwelling units, 2019 Reg. Sess. (CA 2019). https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB881 https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB68
18. Chapple et al. 2012 (Yes in My Backyard)
19. Affordable monthly rents for a family of two earning 100% of the area median income per HUD, based on counties in the region:
 - Central Coast (\$1,633 - \$2,200)
 - Los Angeles County (\$1,546)
 - Orange and San Diego Counties (\$1,853 - \$2,060)
 - San Francisco Bay Area (\$1,908 - \$2,862)
- Calculated by taking the high and low values of 30% of the HUD provided 2020 household area median incomes (<https://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits/docs/income-limits-2020.pdf>) for each county in a given region, and then dividing by 12 to reflect a monthly rental price.
20. Chapple, Wegmann, Mashhood, & Coleman, 2017.
21. AB 561, Ting. Help Homeowners Add New Housing Program: accessory dwelling unit financing, 2021 Reg. Sess. (CA 2021). https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB561
22. California Budget 2021-22. (2021, January). Retrieved from <http://www.ebudget.ca.gov/>

Appendix A: Full Survey Text

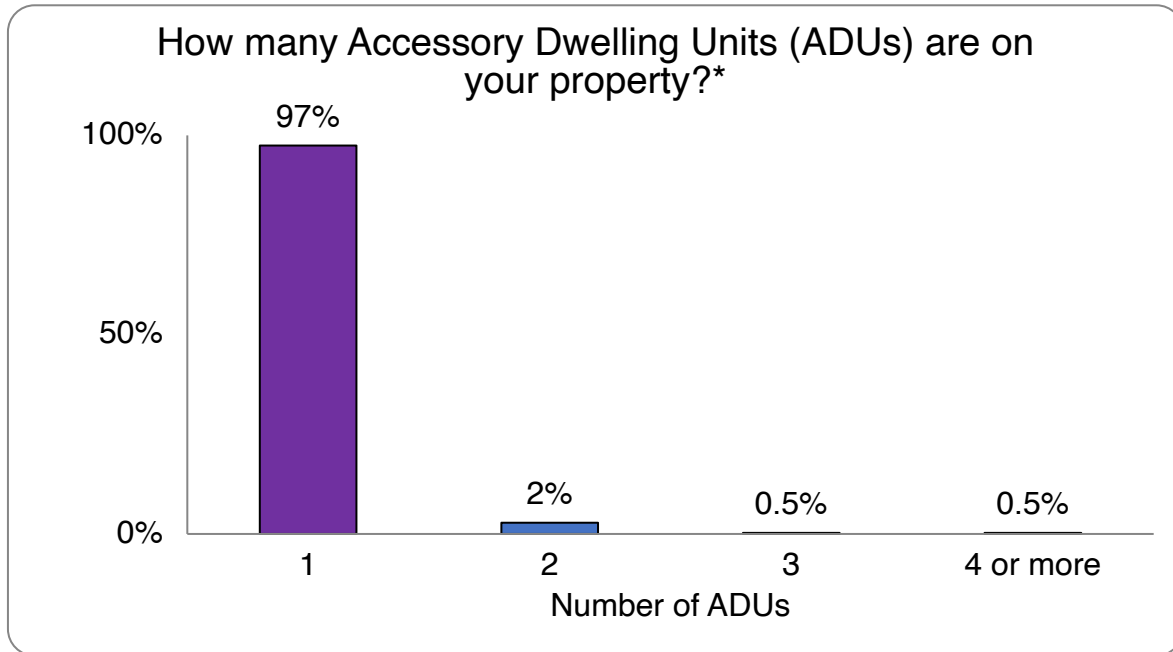
1. Are you the owner of the property/ADU?
(Yes, No)
2. How many Accessory Dwelling Units (ADUs) are on your property? ADUs can take different forms, including a first floor or basement that has been converted to a unit, a freestanding backyard cottage, a garage that has been turned into an apartment, and others. ADUs are often rented out to tenants.
(1, 2, 3, 4 or more)
3. What stage of construction is your ADU in?
(Completed, Under Construction, Not Yet Under Construction, Other (Please Specify))
4. Is the ADU a rental property at any time?
(Yes, I rent to a tenant that I did not know previously; Yes, I rent to a family member/acquaintance; No)
5. What type of rental property is your ADU?
(Short-term rental (less than 1 month stay), Long-term rental)
6. How many people live in the ADU?
(0, 1, 2, 3, 4 or more)
7. Of those living in the ADU, are there any school-aged children (18 & under) living there?
(Yes, only one; Yes, more than one; No)
8. Of those living in the ADU, are there any senior citizens (65+) living there?
(Yes, only one; Yes, more than one; No)
9. On average, how much do you charge in rent per month? (Number only please: E.g. 1500)
(Total monthly rent: _____, Tenant portion of utilities: _____)
10. Why are you not currently renting out the ADU to a tenant?
(It needs physical work to be rentable; A friend is staying there for free; A relative is staying there for free; It is vacant, but I am looking for a tenant; It is being used as something other than an apartment (home office, workshop, studio, etc); Other (Please Specify))

11. Do you receive any services from the ADU occupant(s) in exchange for all or part of the rent (e.g. childcare, lawn maintenance, etc.)?
(Yes (Please Specify), No)
12. How would you best describe the physical layout of your ADU?
(Detached (free standing building), Attached (connected to the the main house, but built as an addition), Garage or other building conversion, Basement/attic or other room in the house converted to ADU, Other (Please Specify))
13. How many bedrooms are in the ADU?
(0, 1, 2, 3, 4 or more)
14. What is the approximate square footage of your ADU? (Numbers only: E.g. 600)
(_____)
15. Did you own the property when the ADU was built?
(Yes, No)
16. How much did you or someone else pay for your ADU to be constructed? Please include the costs for design, labor, materials, and permits. Your best estimate is fine. (Numbers only: E.g. 5000). If you do not know, enter 0.
(_____)
17. How did you finance the construction cost? (Check all that apply)
(Cash, Credit Card/Unsecured Debt, Money from friend or relative, Loan from bank, Other (Please Specify))
18. What kind of loan did you take out? (select all that apply)
(Home Equity Line of Credit, Refinancing, Construction loan, Other (Please Specify))
19. Were you involved in the decision-making about ADU construction?
(Yes, No)
20. What were the two biggest challenges you faced in building your ADU? Check up to two.
(Obtaining financing, Paying for the cost of construction, Permitting fees, Lot setbacks or height limits, Utility connections, Parking requirements, Design constraints or challenges, Approval process, Don't know, Other (Please Specify))

21. What was the factor that was most helpful in making it possible for you to build?
(Fee Waivers; Relaxing the requirement that the owner must live on the property; Neighbor built one; Educational website, event, advertisement; Cash Availability; Zoning Reforms; Policy Reform: (Please name specific policies); Other (Please Specify))
22. From the beginning of the approval process start to completion of the ADU, how many months did it take? Please select the total number of months (E.g. 14 for one year and two months)
(_____)
23. It was easy to obtain the necessary permits to build my ADU. (This may include zoning counter issues, level of transparency of requirements, duration of permitting timelines, number of plan revisions required, and code changes impacting design mid-city review.)
(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
24. It was easy to build my ADU according to the city/county's ADU development requirements. (This may include local requirements for ADU height, side/rear setbacks, parking, and the zones where ADUs are allowed.)
(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
25. It was easy to navigate the construction process for my ADU. (This may include issues finding a contractor.)
(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
26. It was easy to pay for my ADU. (This may include cost of construction, permitting fees, number or diversity of financing options, and cost of design professionals.)
(Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
27. Who did the physical construction on your ADU? (Select all that apply)
(A paid contractor, Myself or another owner of the property, A paid friend or relatives, Other (Please Specify))
28. Please describe any particularly positive aspects about the process to construct your ADU.

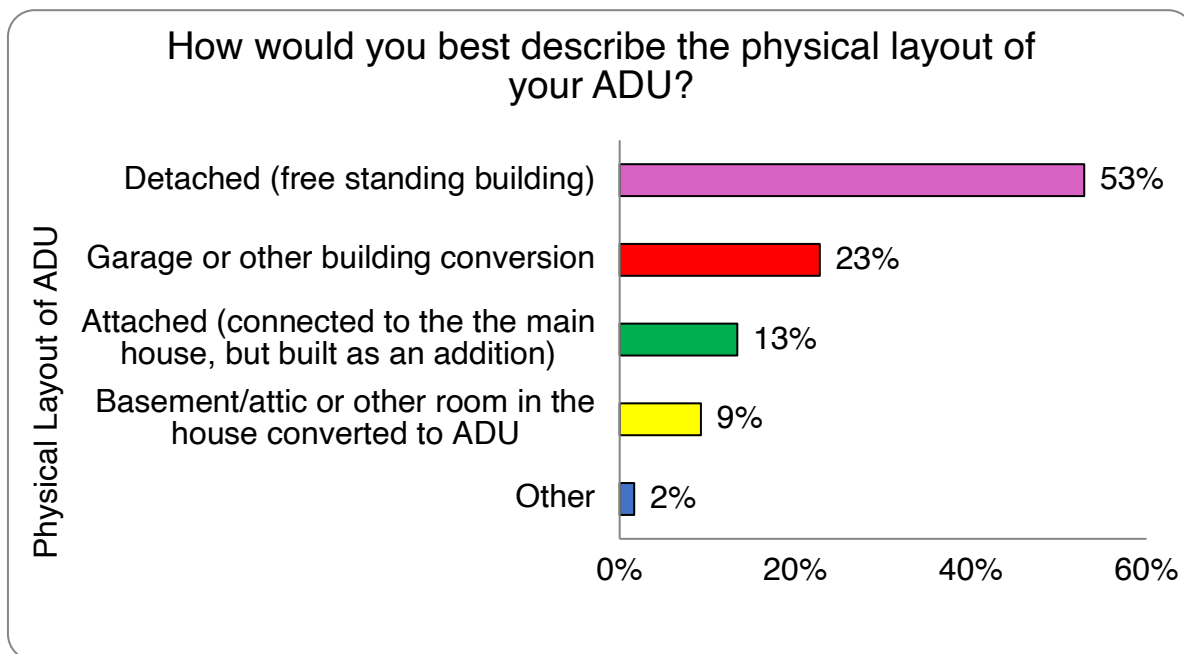
29. How many total cars do your tenants living in the ADU normally park on the street? If you don't have any tenants, choose "I don't have any tenants living in the ADU."
(None, 1, 2, 3 or more, I don't have any tenants living in the ADU)
30. What was your household's before-tax income in the last 12 months? Please include all income, including salaries, wages, investments, government benefits, etc. Please do not include people living in the ADU (if any) as members of your household for the purposes of this question.
(Less than \$10,000, \$10,000 to \$14,999, \$15,000 to 24,999, \$25,000 to \$34,999, \$35,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$199,999, \$200,000 or more)
31. Are you of Hispanic, Latino or Spanish origin?
(No, not of Hispanic, Latino or Spanish origin; Yes, Mexican, Mexican-American, Chicano; Yes, Central American; Yes, other Hispanic, Latino or Spanish origin (Please specify); Undisclosed)
32. How would you best describe yourself?
(American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, Undisclosed)
33. While we tried to be comprehensive in selecting the questions to include in this survey, there surely are issues that we have not considered. If there is anything else about your experience building an ADU that you would like to tell us about, if so please write it below.

Appendix B – Summary of All Survey Findings

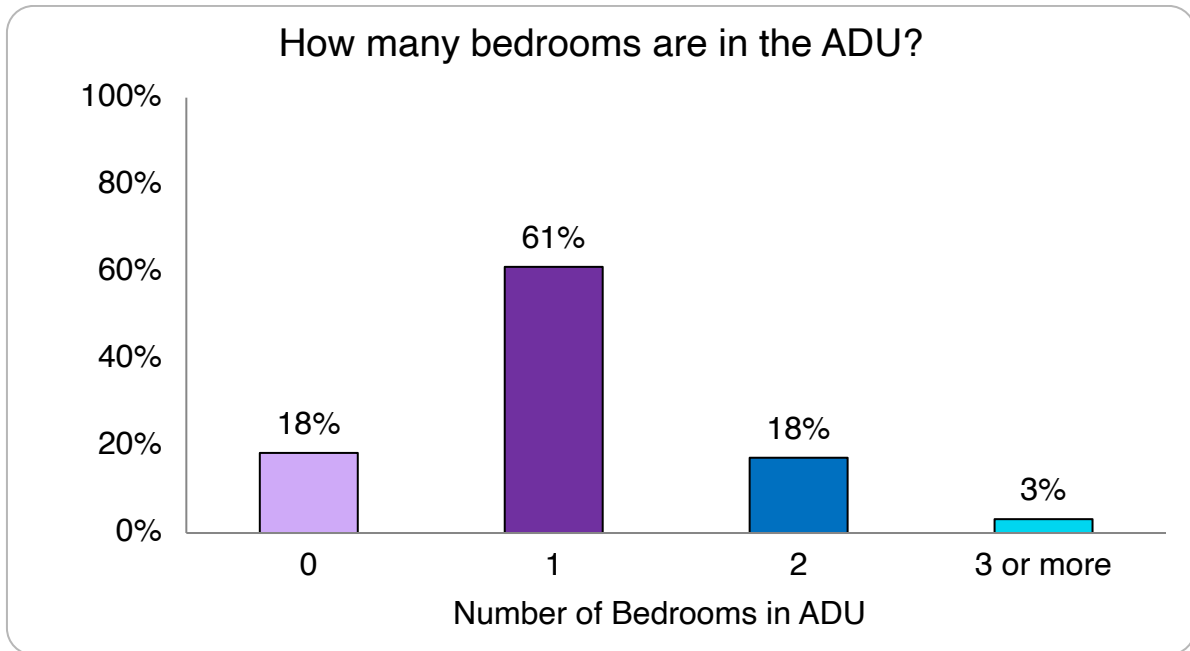


n=746

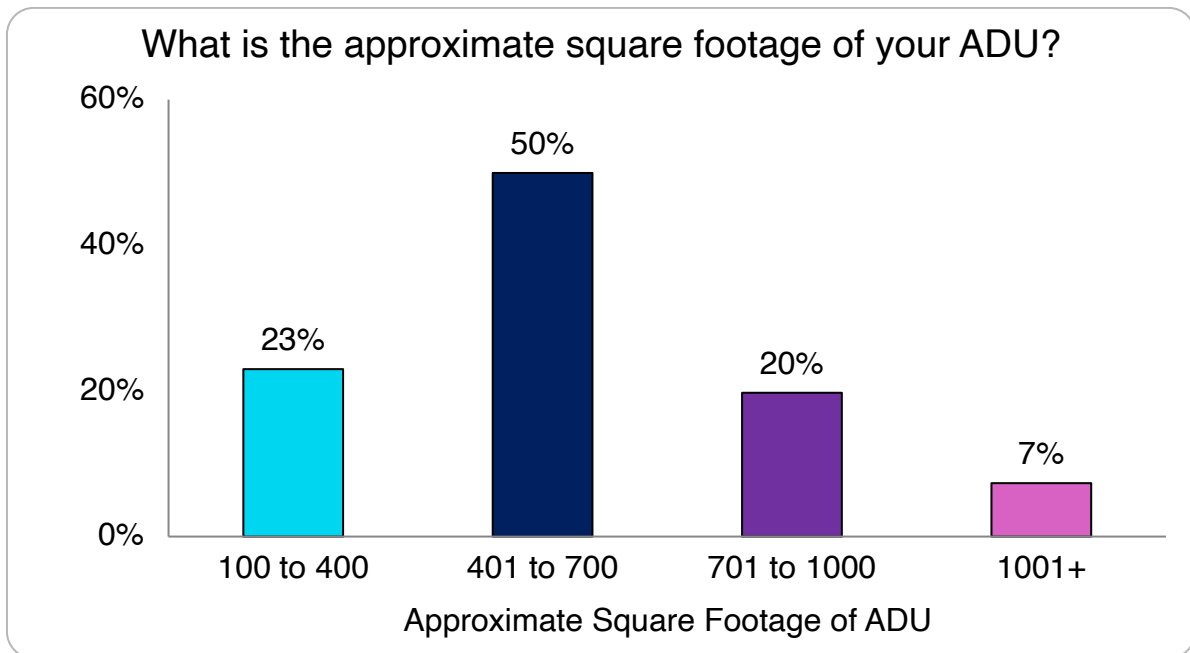
*ADUs can take different forms, including a first floor or basement that has been converted to a unit, a freestanding backyard cottage, a garage that has been turned into an apartment, and others. ADUs are often rented out to tenants.



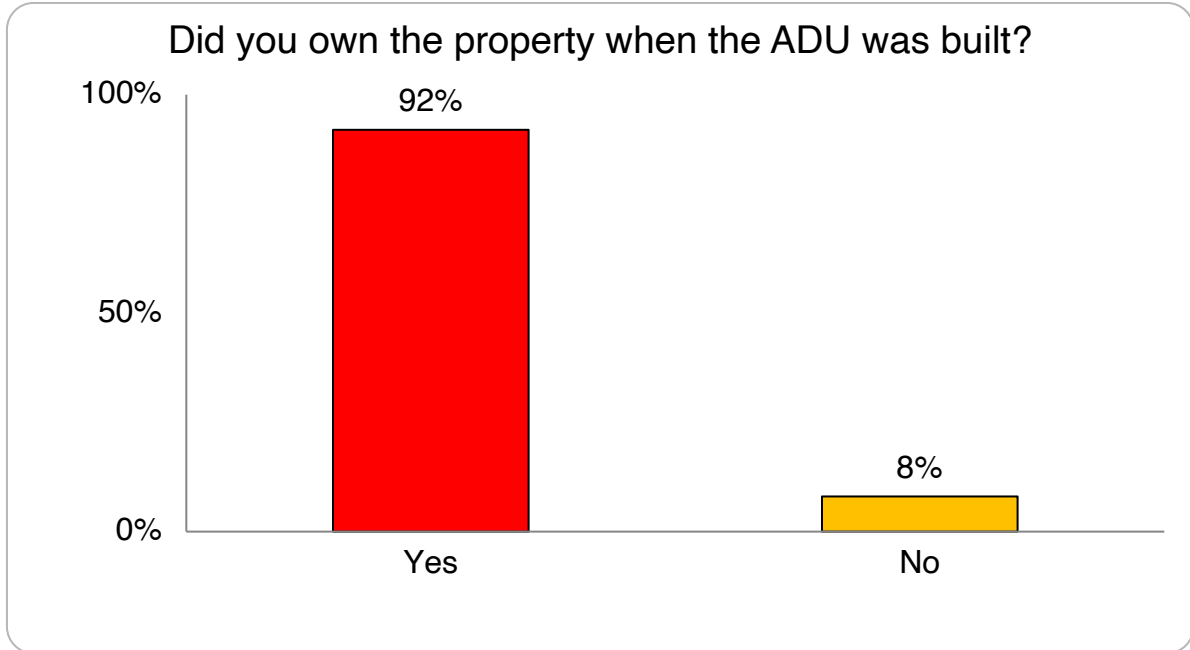
n=724



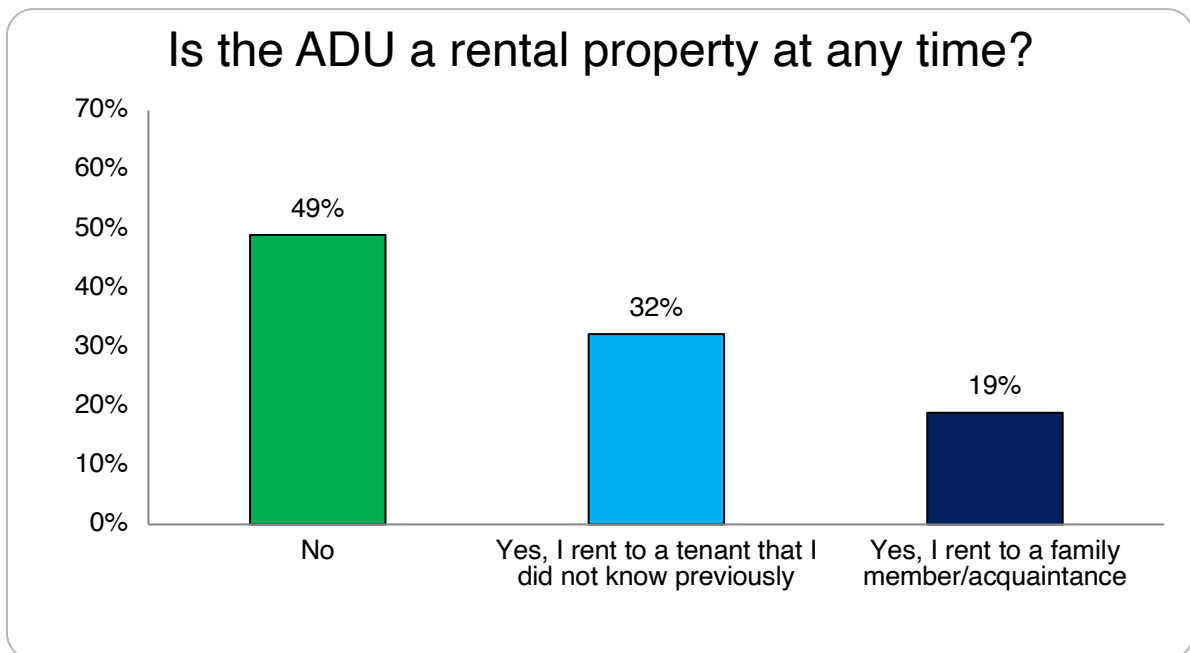
n=724



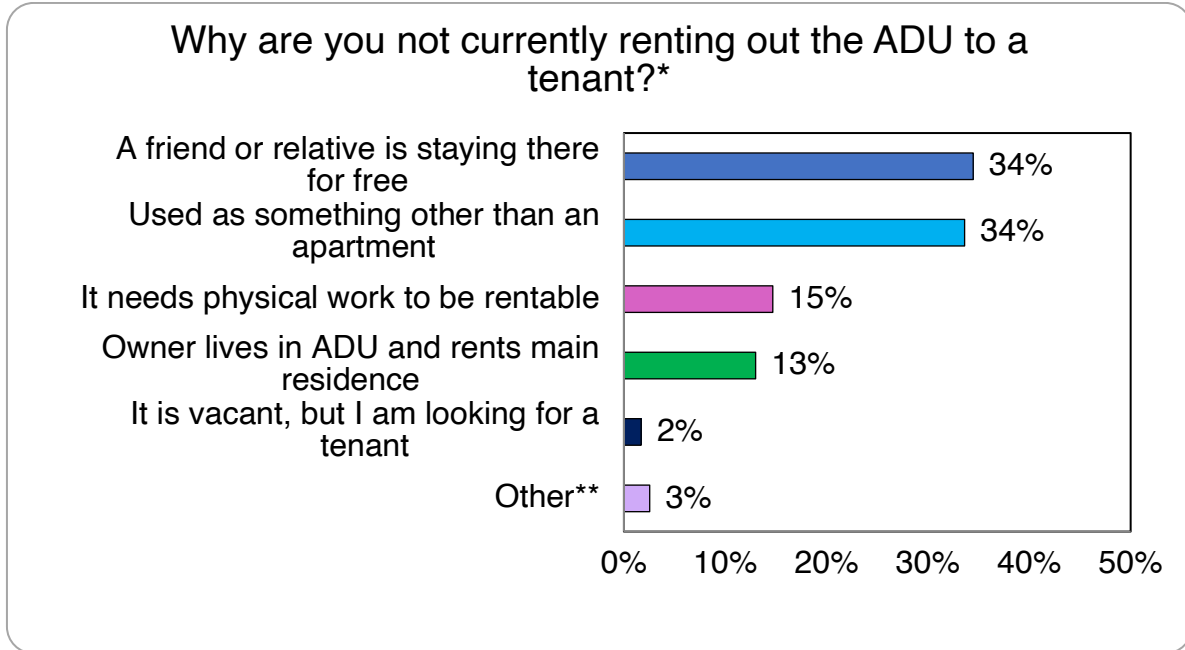
n=709



n=721



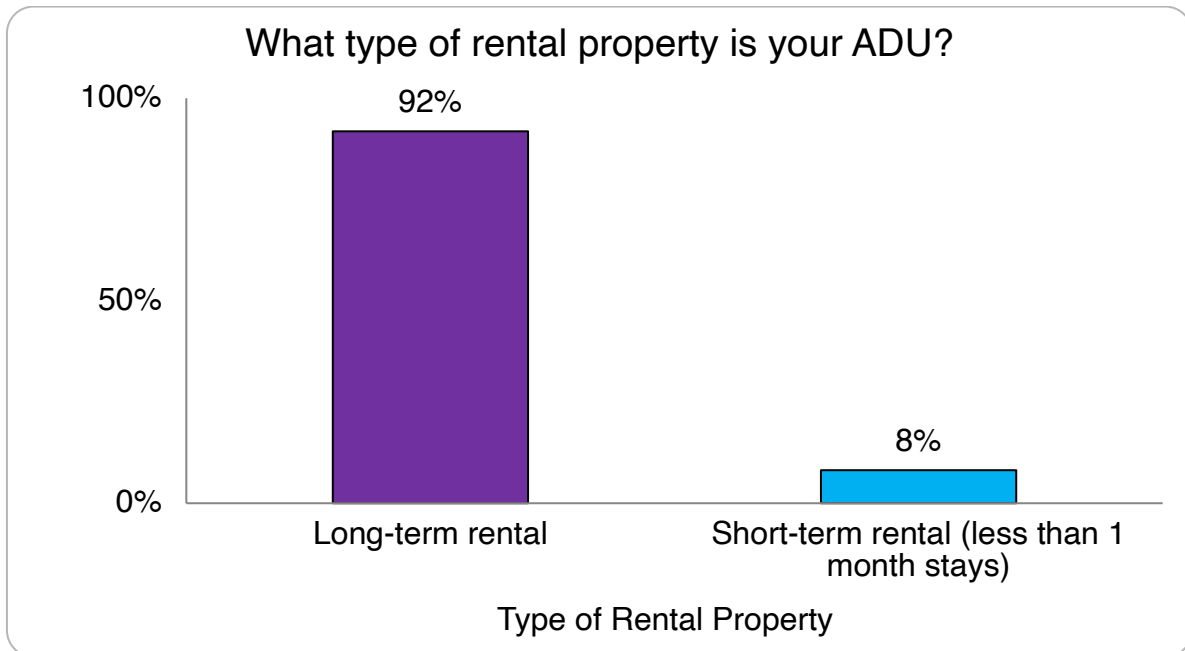
n=747



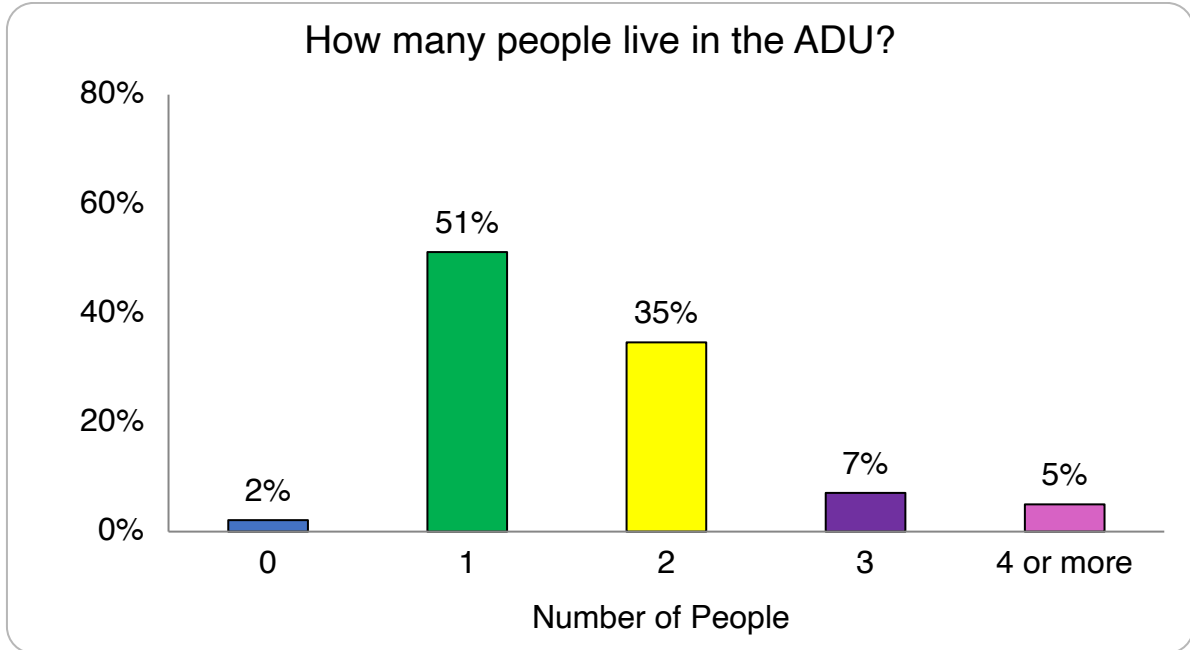
n=366

*includes responses from the 49% of homeowners who reported that they were not renting out their ADU.

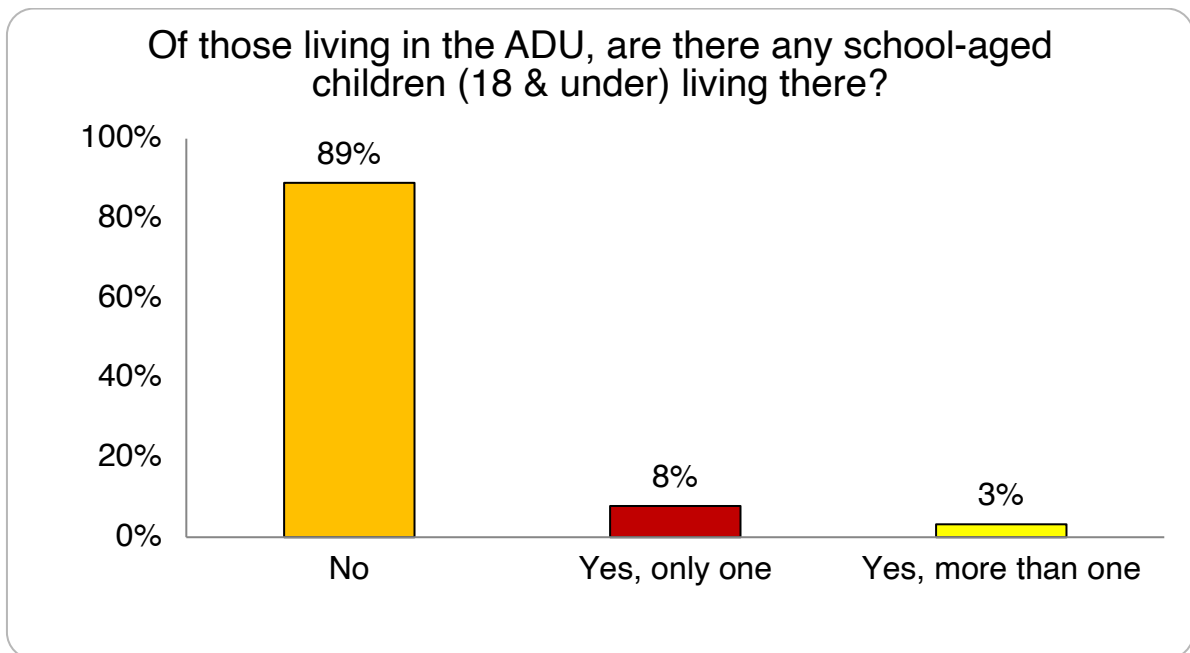
**“other” most commonly includes homeowners not renting their units out due to concerns about the COVID-19 pandemic, homeowners not wanting to rent their property out to a random tenant, and homeowners avoiding renting their units due to concerns about regulations such as rent control.



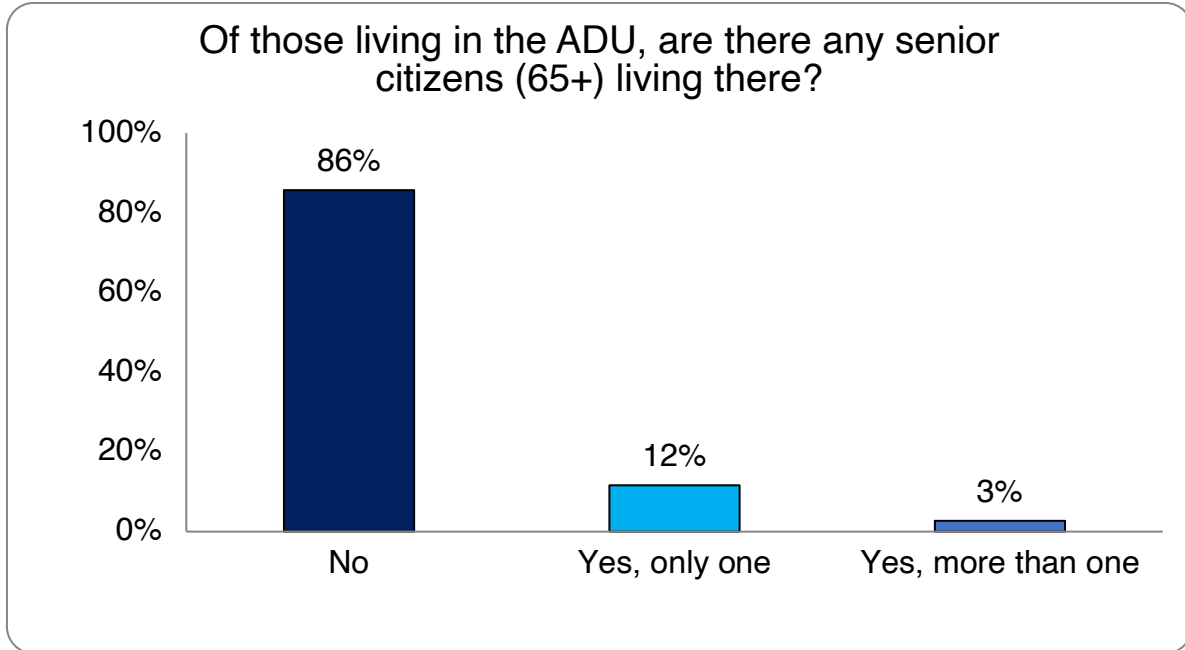
n=380



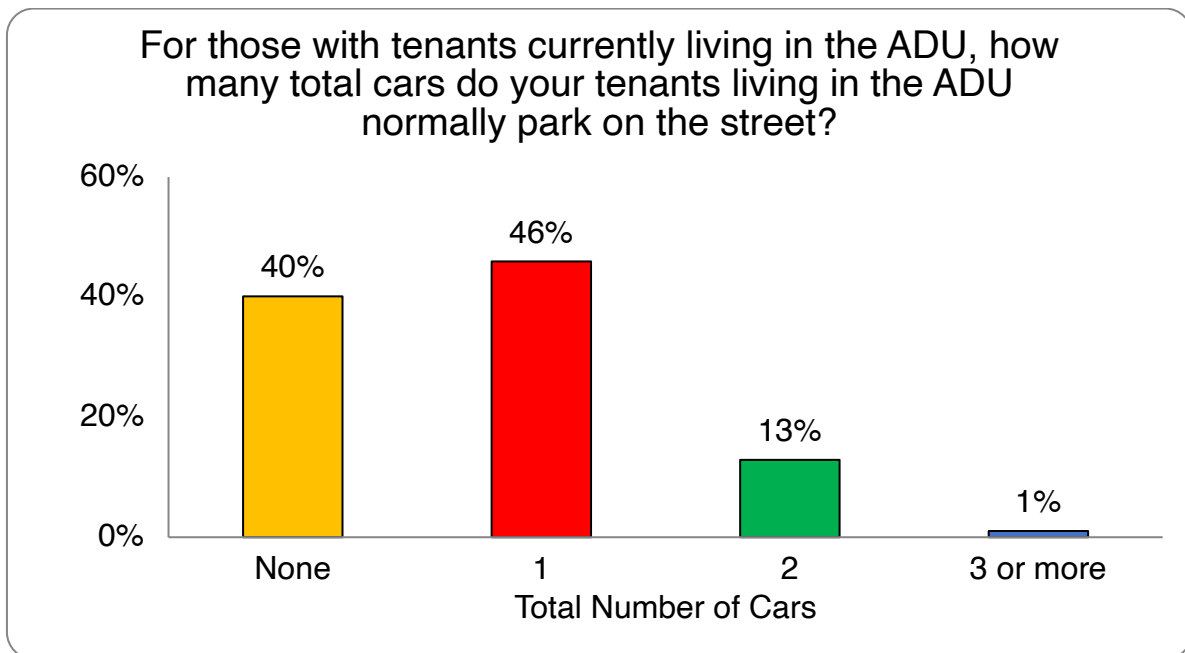
n=381



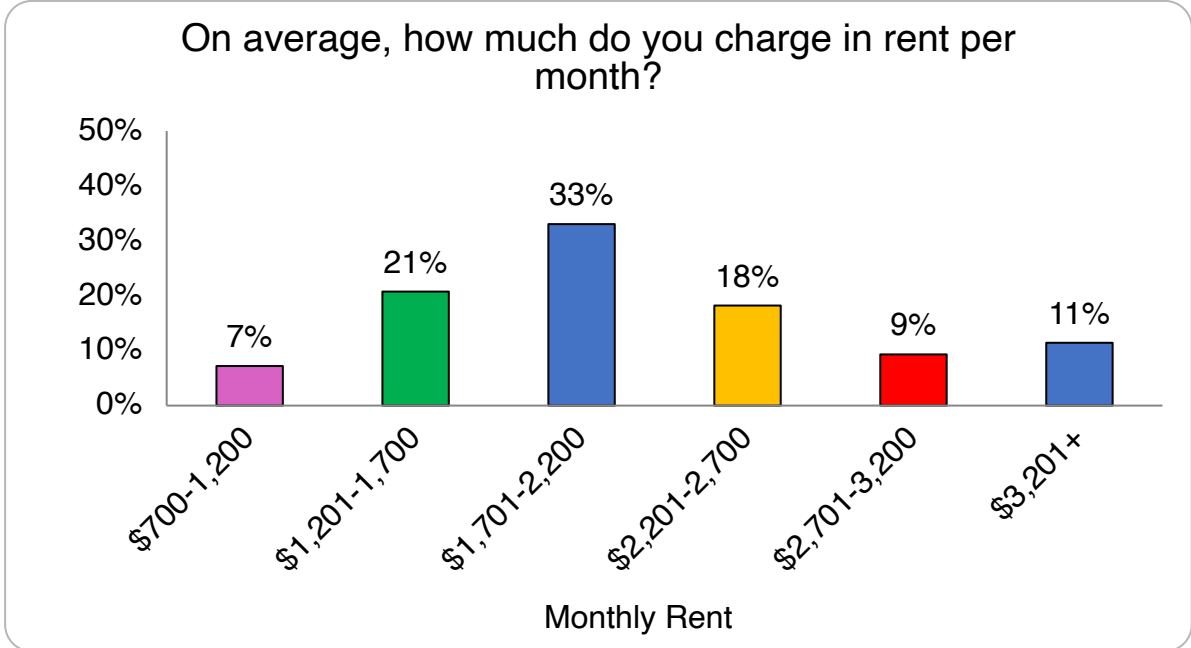
n=370



n=370

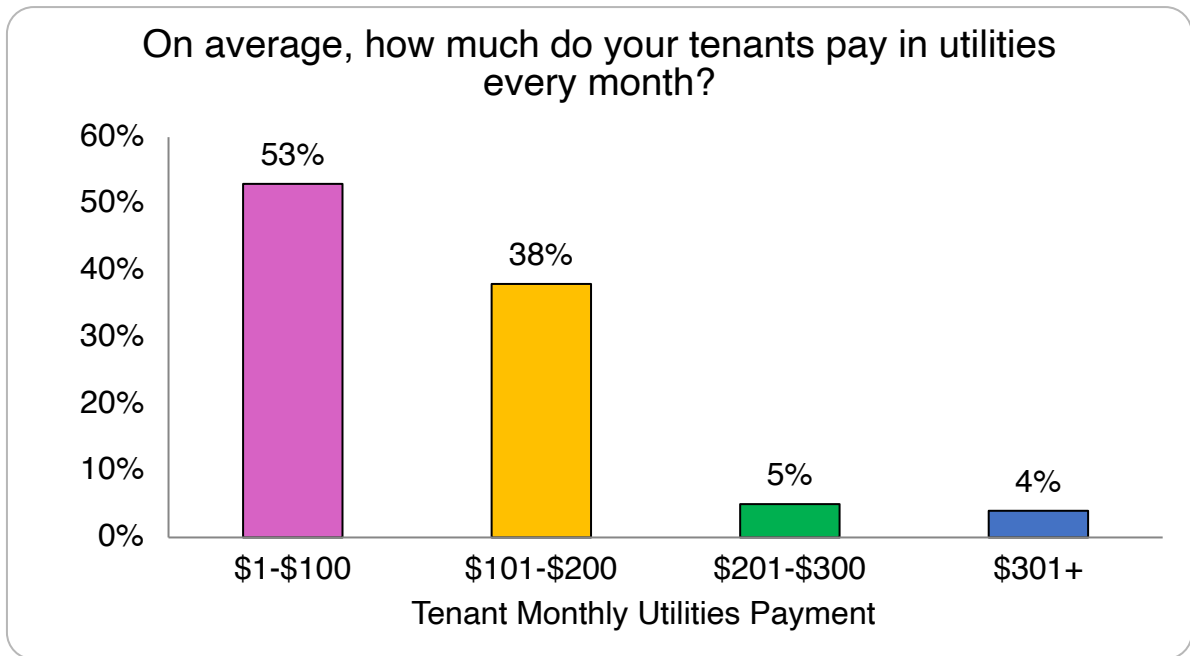


n=481

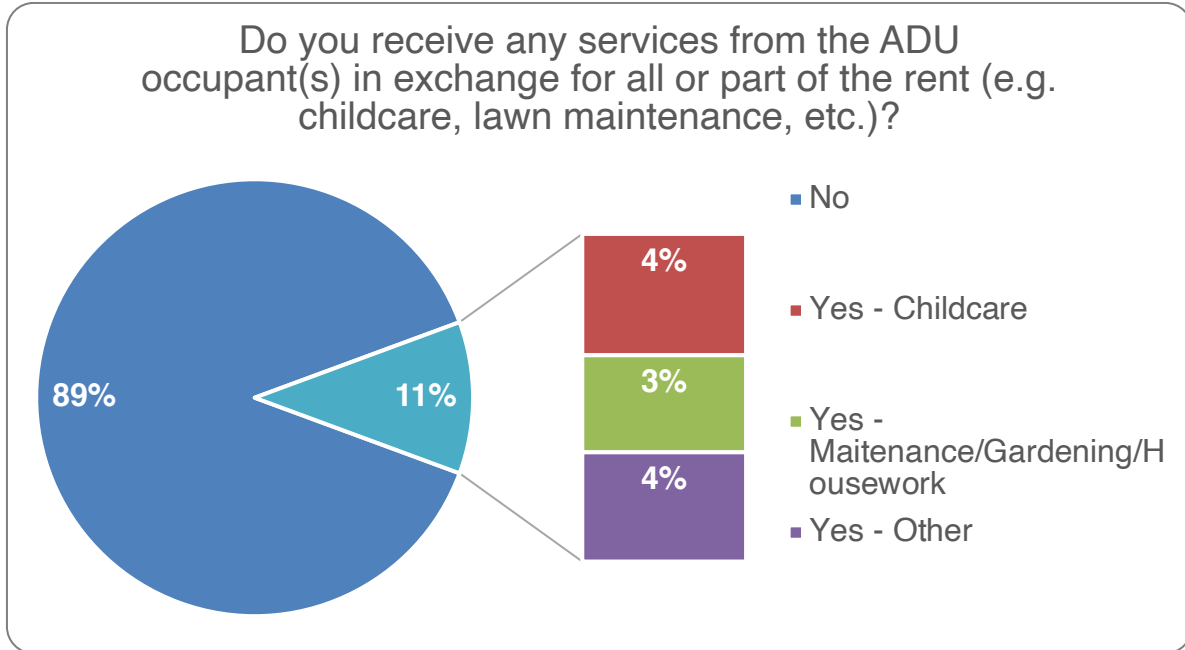


n=209

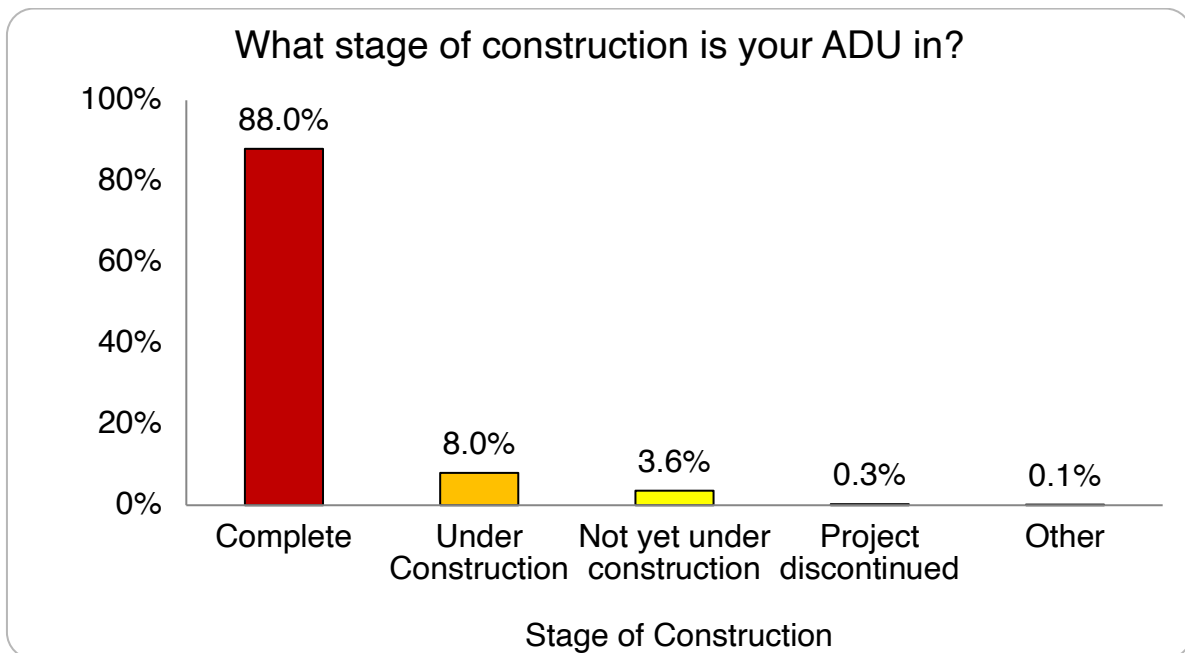
**Note, only includes respondents who have paying tenants*



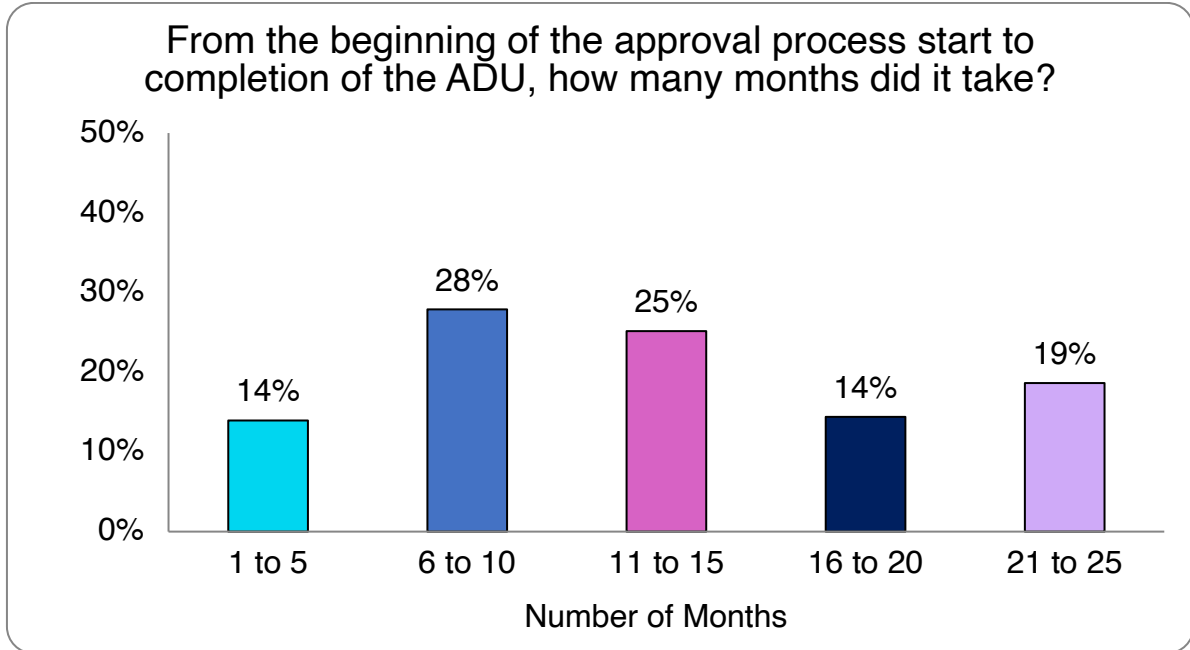
n=100



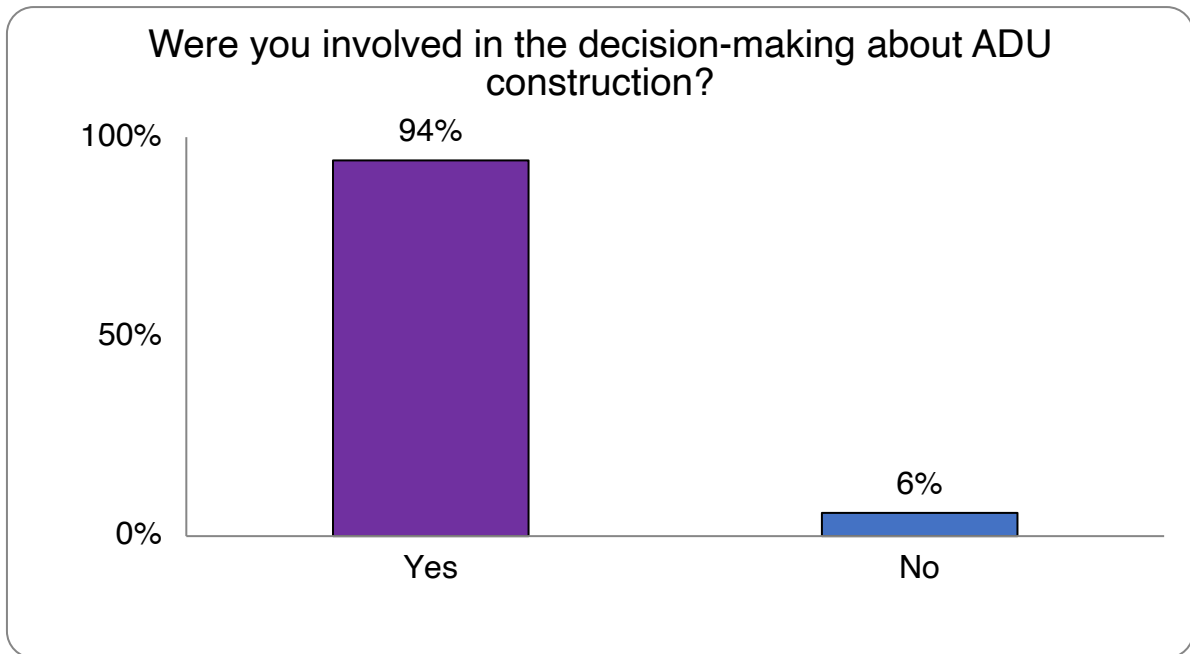
n=478



n=752



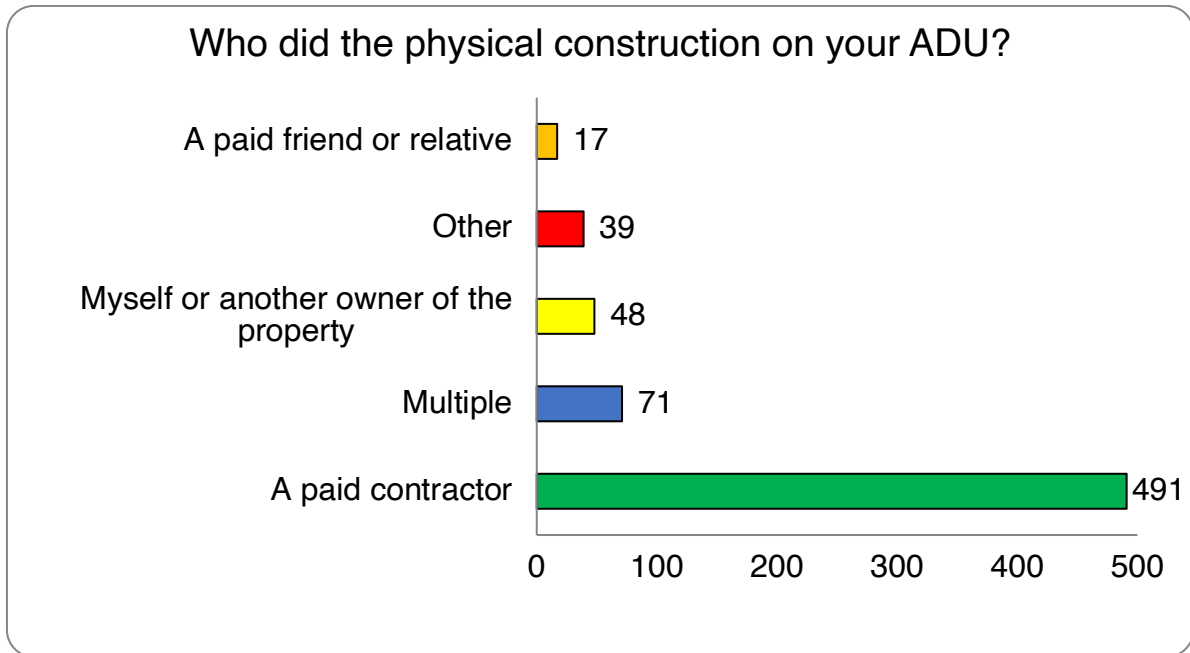
n=660



n=721

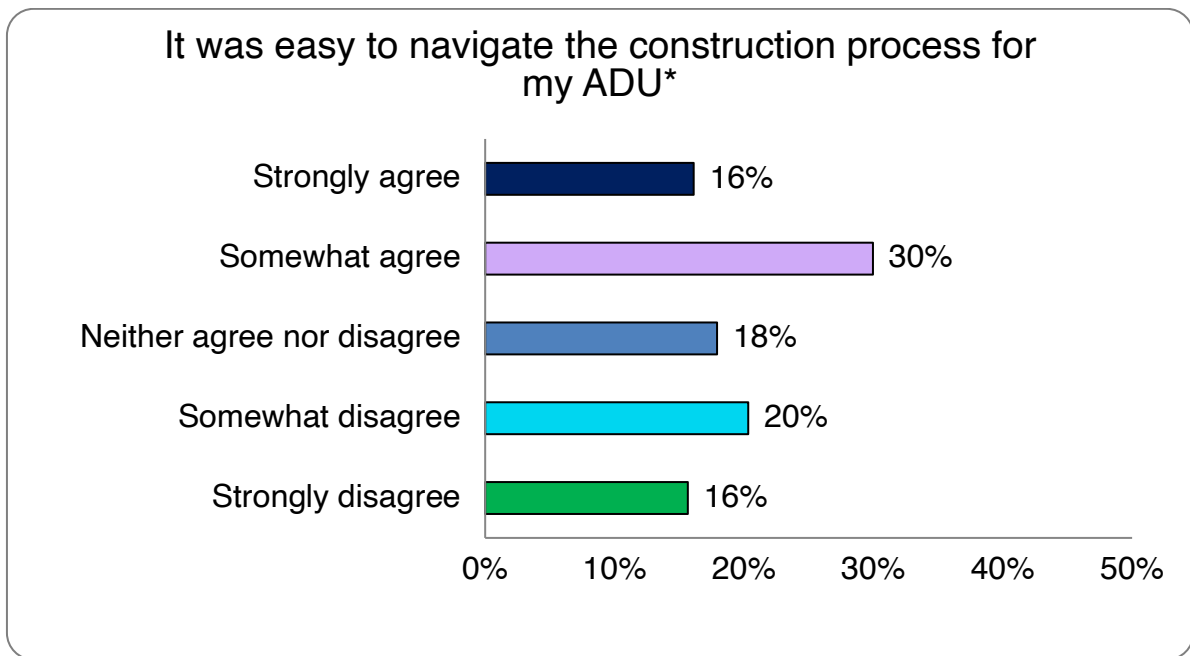
What were the two biggest challenges you faced in building your ADU?	
Challenge	Occurrence (Total)
Approval process	311
Design constraints or challenges	176
Paying for the cost of construction	158
Permitting fees	118
Lot, setback, or height limits	120
Utility connections	90
Parking requirements	37
Obtaining financing	32
None	9
Other	32

What was the factor that was most helpful in making it possible for you to build?		
Factor	Occurrence (%)	Occurrence (Total)
Zoning Reforms	28%	181
Cash Availability	22%	141
Other: Please Specify	18%	116
Policy Reform	17%	110
None	4%	27
Relaxing the requirement that the owner must live on the property	4%	25
Educational website, event, advertisement	4%	23
Fee Waivers	3%	22
Neighbor built one	1%	9
Total	100%	654



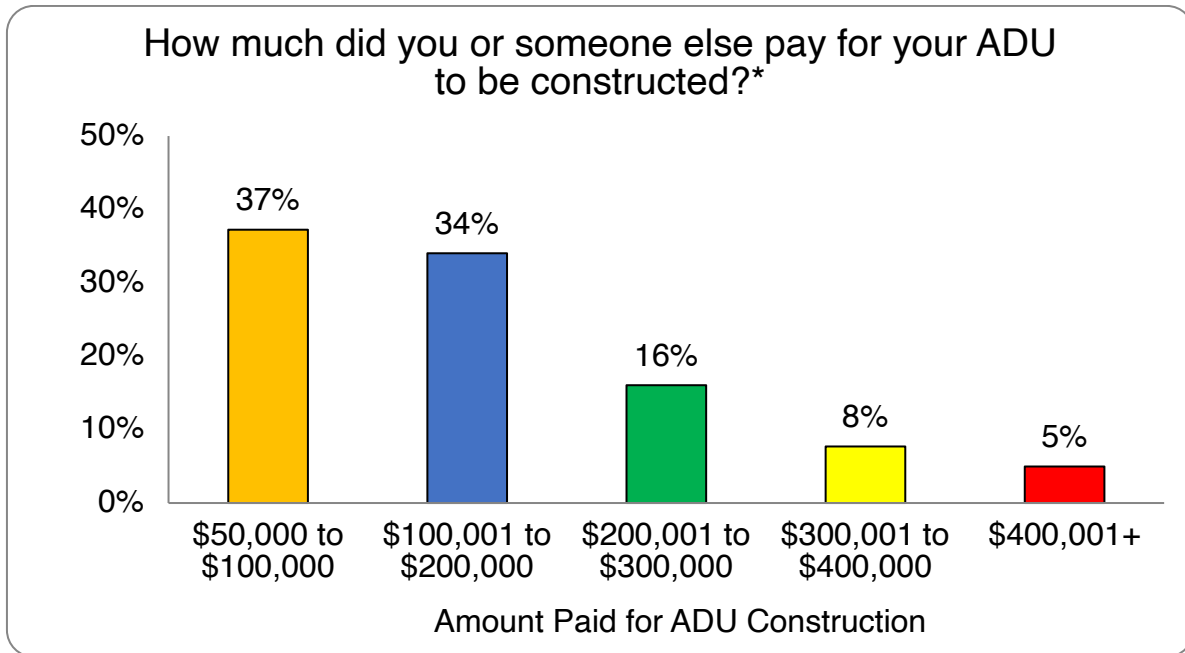
n=674

**select all that apply*



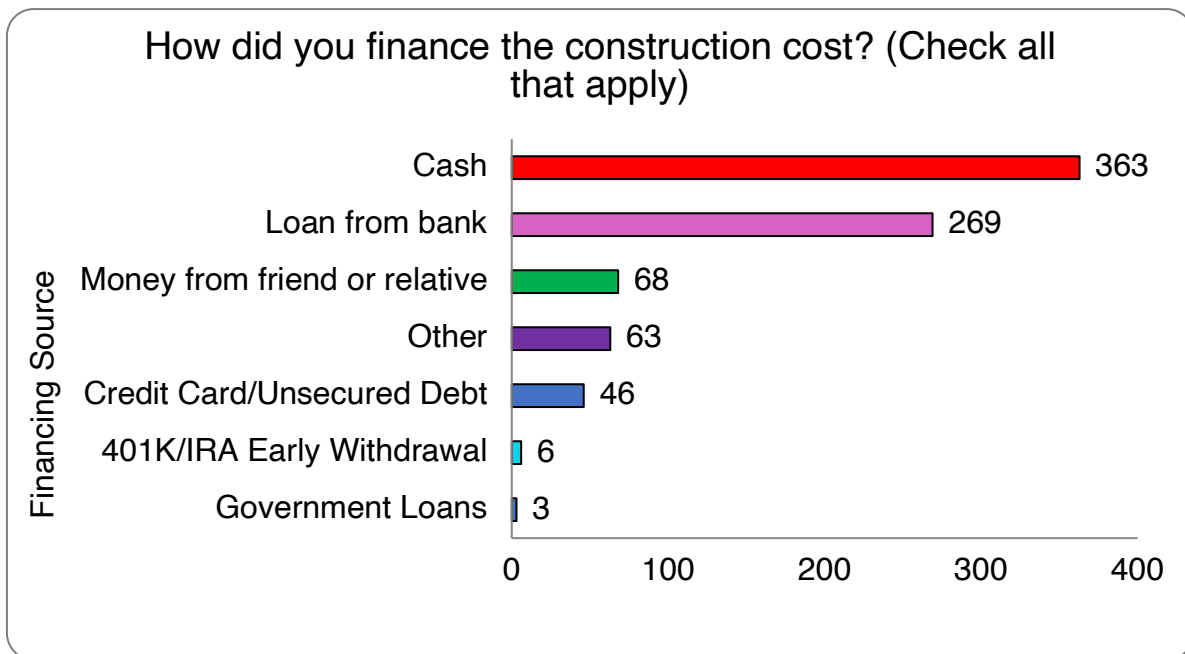
n=664

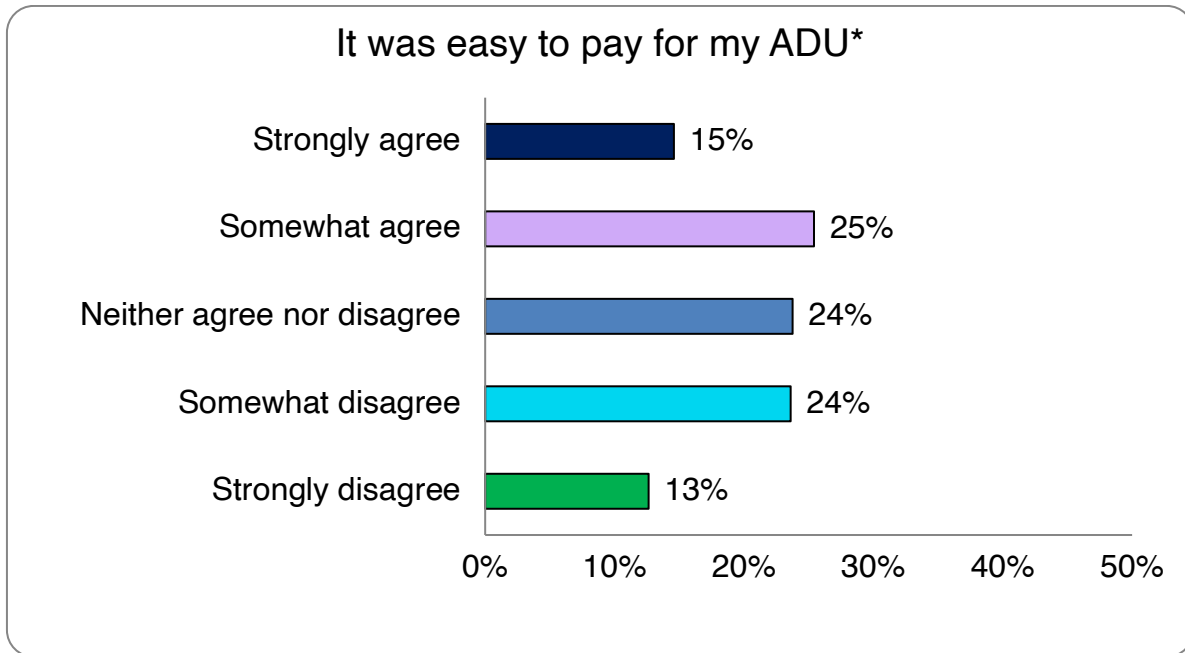
** This may include issues finding a contractor*



n=623

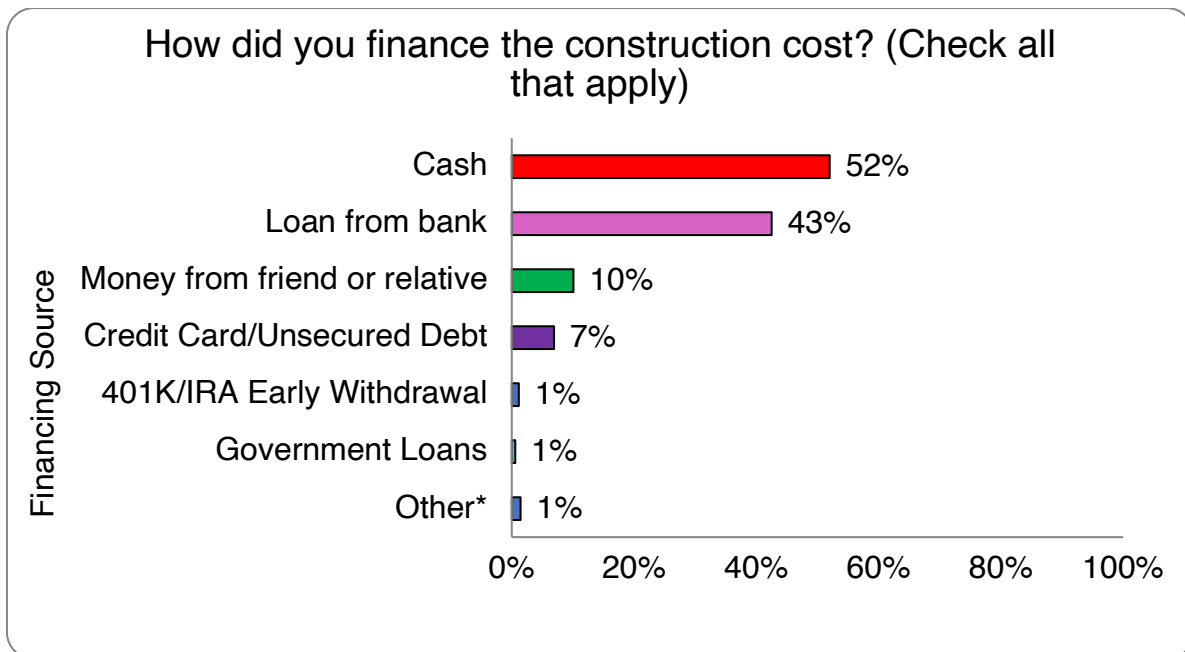
*Please include the costs for design, labor, materials, and permits. Your best estimate is fine.



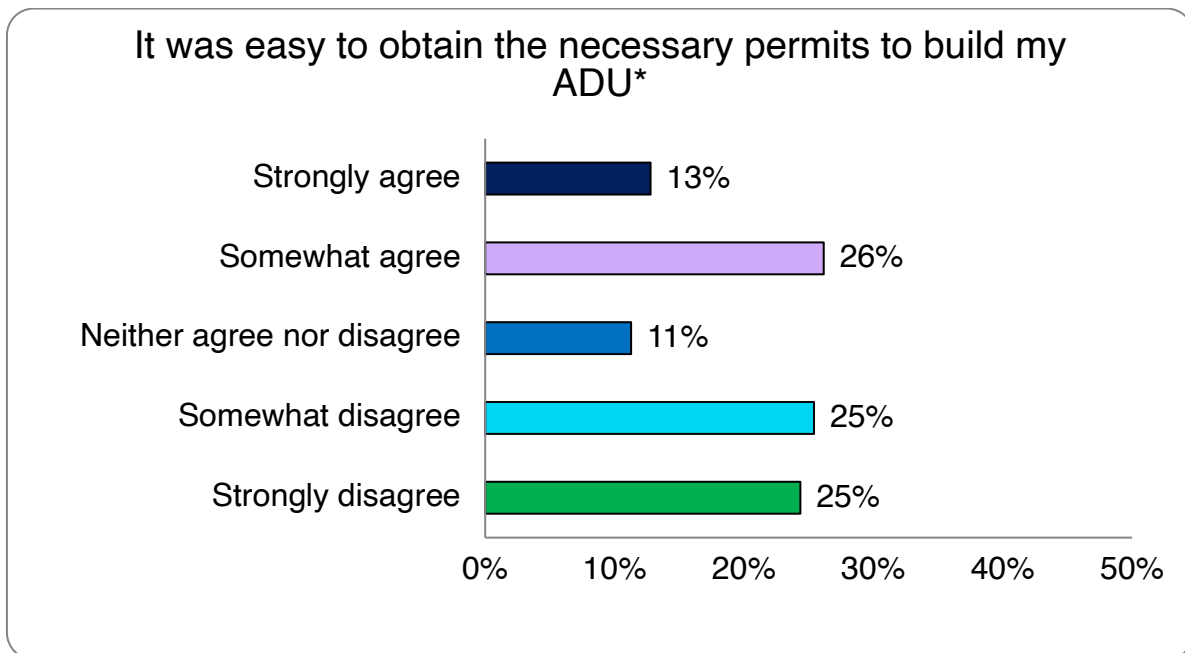
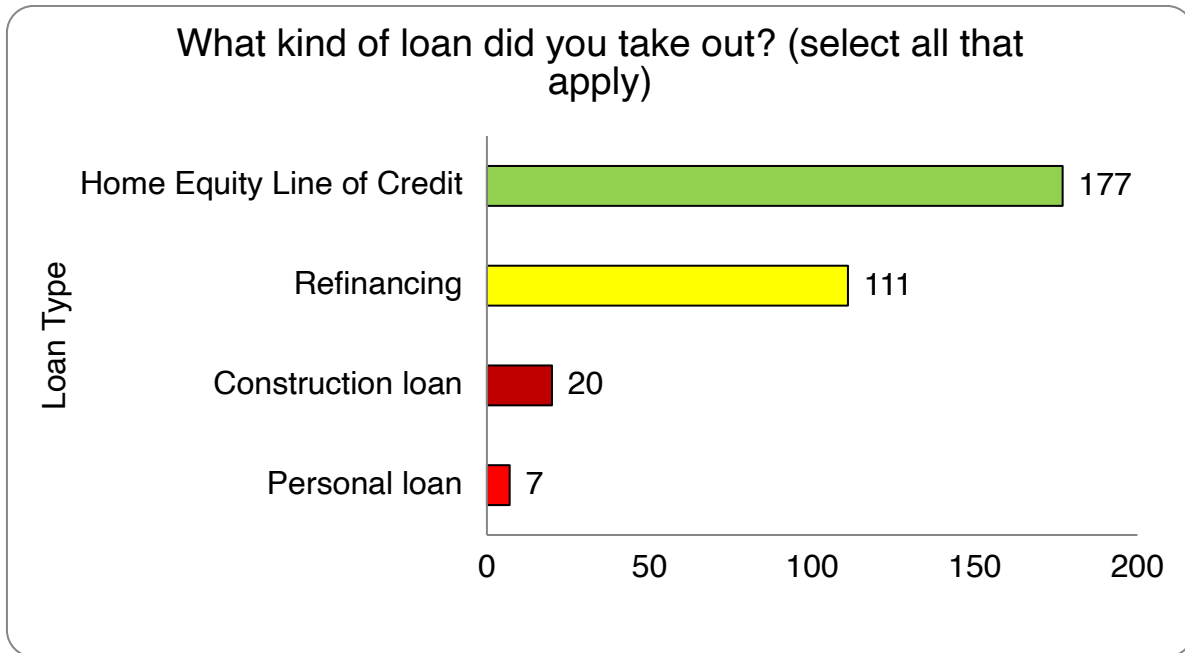


n=665

* This may include cost of construction, permitting fees, number or diversity of financing options, and cost of design professionals.

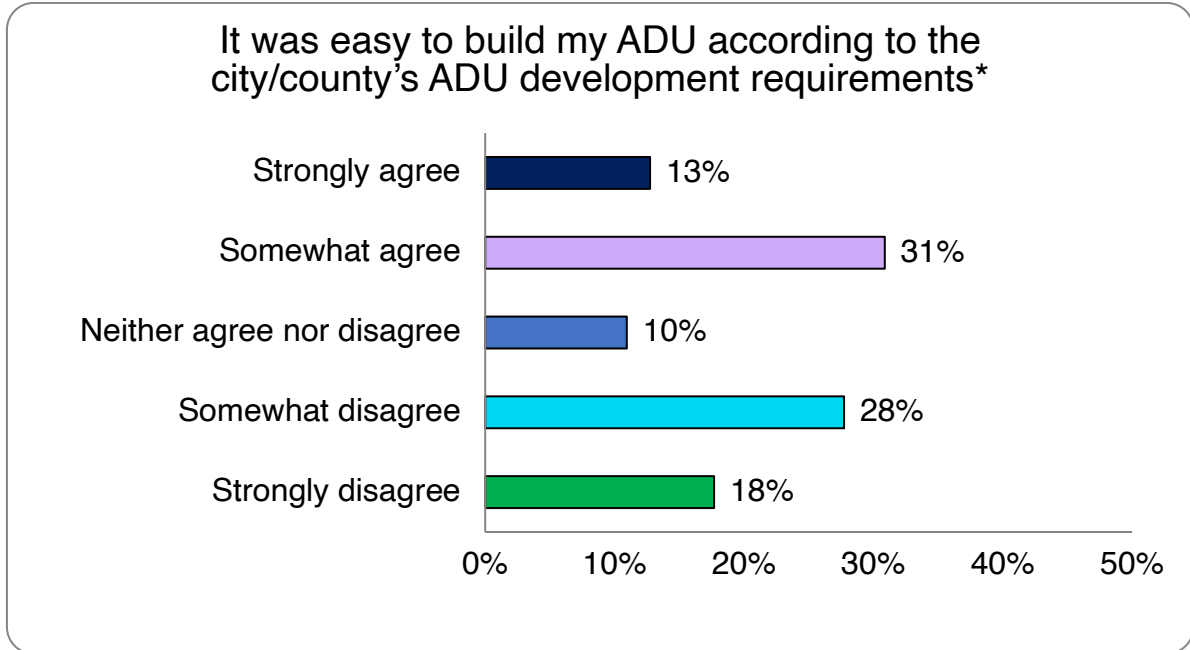


n=694



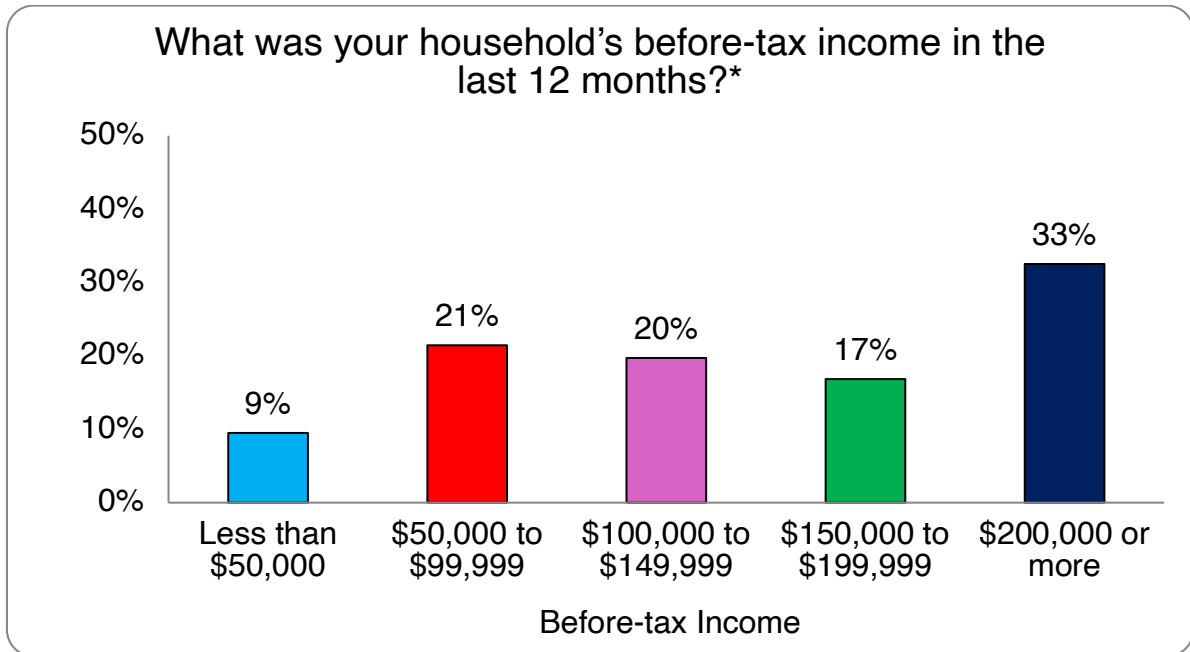
n=665

* This may include zoning counter issues, level of transparency of requirements, duration of permitting timelines, number of plan revisions required, and code changes impacting design mid-city review



n=667

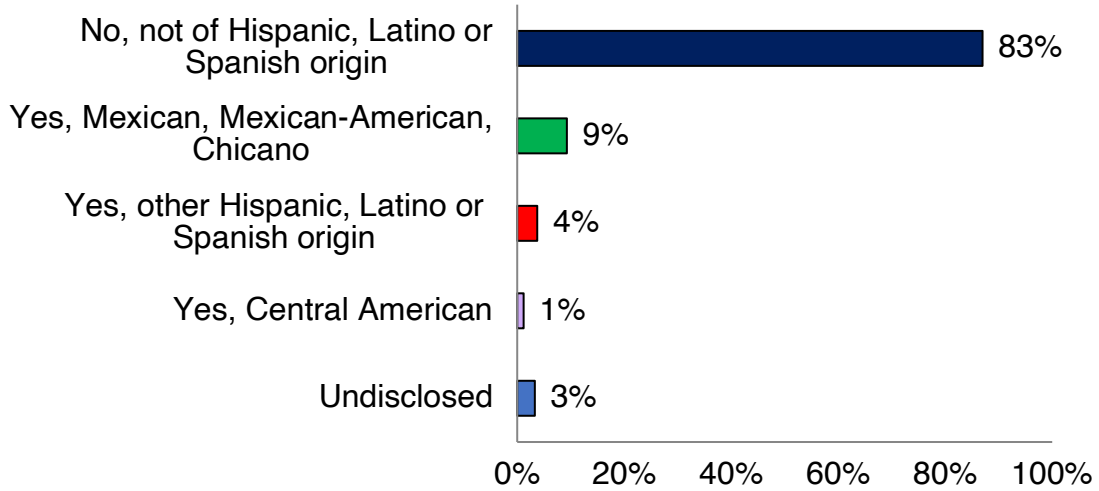
* This may include local requirements for ADU height, side/rear setbacks, parking, and the zones where ADUs are allowed



n=695

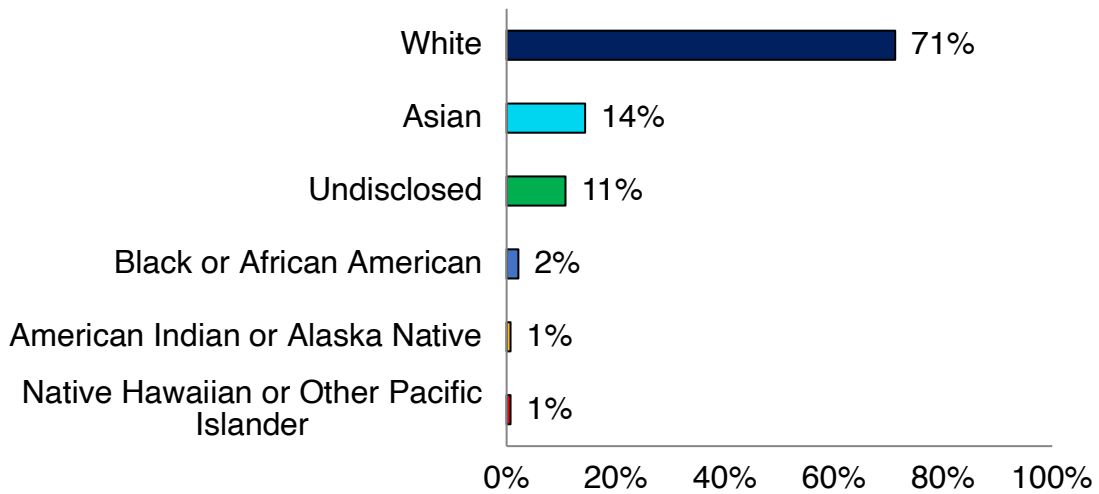
* Please include all income, including salaries, wages, investments, government benefits, etc. Please do not include people living in the ADU (if any) as members of your household for the purposes of this question.

Are you of Hispanic, Latino or Spanish origin?



n=698

How would you best describe yourself?



n=695

Appendix C: Detailed Methodology

Survey Population

In order to collect information from homeowners with an ADU on their property, we developed and administered a digital survey in both English and Spanish (see Appendix A for full survey text, and Appendix B for high-level survey results). We used the California Department of Housing and Community Development's (HCD) Annual Progress Report (APR) database of properties that applied for an ADU permit or received a Certificate of Occupancy for an ADU in the year 2018 or 2019 to identify our survey recipients. We supplemented our APR database with a list of ADUs completed in certain Bay Area jurisdictions provided by a private planning firm. The jurisdictions that provided supplemental ADU addresses include: Belmont, Brisbane, Burlingame, Cloverdale, Corte Madera, Cupertino, Foster City, Half Moon Bay, Healdsburg, Kenfield, Lagunitas, Larkspur, Marin County, Mill Valley, Millitas, Mountain View, Novato, Pacifica, Palo Alto, Redwood City, San Anselmo, San Bruno, San Jose, San Mateo, San Rafael, Saratoga, Sunnyvale & Tiburon.

Postcards

Based on our population of ADU projects, we sent out three rounds of English-language postcards to 15,745 addresses on August 31, 2020, September 8, 2020, and October 5, 2020 inviting property owners to take our online survey. We also distributed a fourth round of Spanish-language postcards on November 11, 2020 to 4,367 addresses in our database located in the top quartile of Spanish speaking census tracts in the state, where 57.1% or more of the households reported being Spanish speaking. Each postcard contained a unique survey URL and a scannable QR code that directed the postcard recipient to our digital survey. The recipients of the Spanish postcards had the option to complete our survey in either English or Spanish. We incentivized our postcard recipients to complete our survey by offering the chance to win one of three gift cards valued at \$450, \$250, and \$100 respectively to one of the following retailers: Home Depot, Amazon, Apple Store, or Nike. The winners were selected via random lottery.

Notably, our postcard distribution efforts in late summer and early fall coincided with the 2020 pandemic and elections, so it is possible that our low response rate may be attributed to our postcard getting lost in the large volume of mailers and flyers that typically accompany an election season.

Response Bias

Importantly, our survey respondents are not representative of the universe of ADU owners in California. Despite our efforts to distribute postcards to most properties that either completed an ADU project or applied for an ADU permit in 2018 or 2019, the distribution of counties among those who took our survey is different than the distribution of counties in the ADU population. For example, jurisdic-

tions in Los Angeles County accounted for 54% of the ADU projects in our postcard population, but only 24% of our survey respondents live in Los Angeles County. On the other hand, Alameda County only holds approximately 5% of the state's ADUs, but residents in Alameda County accounts for approximately 15% of our survey responses. Thus, our sample population is both under-representative of some regions of the state and over-representative of others.

In order to gauge the representativeness of our survey respondents' income levels, we used home value as a proxy for income. We find that our typical survey respondent has a higher income level than even the members of our ADU population that received a postcard from us as our survey respondents typically had higher property values than the values of all properties in our population. Looking at property values at or below \$100,000, there is a significantly lower proportion of those properties in our survey compared to the ADU population. The same is true even if we pick a much higher threshold, like \$600,000.