



# Designing Accessory Dwelling Unit Regulations

## Recommendations for the City of Alexandria, Virginia

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**Accessory dwelling units (ADUs), or secondary housing units on residential lots, may be one way to increase housing supply without changing the physical character of neighborhoods. They represent a potential wealth-building opportunity for cost-burdened homeowners, a way for elderly residents to age in place while maintaining privacy, and an alternative for young people who want to live at home to save money. ADUs may also increase the supply of rental housing for low- and moderate-income renters in high-cost neighborhoods.**

However, designing ADU regulations that minimize the barriers for their development while being sensitive to the desires of existing residents can be challenging. Although many cities have enacted laws allowing for ADU construction, some regulations make adding an ADU too burdensome for homeowners interested in development (Chapple et al. 2018). For example, in Arlington, Virginia, tight regulations on ADUs meant only 20 units were built between 2009 and 2017 (Anacker 2018). Portland, Oregon, on the other hand, has a flexible ADU regulation with a clear and streamlined permitting process, and the city issued 4,047 ADU permits between 1995 and 2019 (Lo et al. 2020).

This brief summarizes recommendations for the design of an ADU regulation for the City of Alexandria, Virginia, based on an evaluation of prior research, community engagement and feedback, discussions with leaders in cities who have instituted ADU regulations, and civic engagement. We make 10 recommendations:

- **Adopt a “by-right” process** for ADU development that reduces uncertainty for homeowners, reduces cost, and streamlines the process for development, and **make the initial review**

process for determining whether an ADU is allowed on a property as quick and easy as possible.

- **Do not impose an owner occupancy requirement** on either the main dwelling or the ADU.
- **Do not require off-street parking.**
- **Adopt a tiered approach to setbacks**, whereby single-story detached ADUs have smaller, less restrictive setbacks than larger, two story units, and **implement regulations for ADU window placements** to maintain the privacy of nearby homes.
- **Impose size limits on ADUs** that ensure the units are not too large (and therefore less like to be affordable) but also do not overly restrict the size of the ADU for homeowners with smaller homes.
- **Do not place any minimum lot size restrictions** on the development of ADUs.
- **Adopt the same restrictions around short-term rentals** for ADUs as for other homes in Alexandria.
- **Consider developing innovative financing mechanisms** and partnerships with banks and CDFIs to ensure that homeowners of all wealth and income levels are able to build their own ADUs.
- **Support programs that incentivize rather than require affordability** to increase the supply of affordable rental units in the city. Also consider partnering with a local developer or nonprofit to front the cost of building an ADU in exchange for rent sharing or affordability.
- **Consider both resident input and equity implications** in the design and implementation of an ADU regulation.

We hope that these recommendations allow the city to minimize barriers to ADU construction while maintaining the unique character and charm of the City of Alexandria. These recommendations should also be helpful for other cities looking to implement or revise their ADU regulations.

## What Are ADUs?

“Accessory dwelling unit” is a legal and regulatory term for a secondary house or apartment that shares the building lot of a larger, primary house. ADUs generally come in three forms: interior, attached, and detached. An interior ADU could be an attic, a basement, or an internal carve-out on a main floor. An attached ADU, sometimes called a “bump-out,” is an addition to the primary home. A detached ADU is a separate building in the side or back yard. Some detached ADUs are apartments above garages. Figures 1 through 4 show some examples of ADUs.

**FIGURE 1**  
**A Detached ADU**



Source: buildinganadu.com.

**FIGURE 2**  
**An Interior ADU (basement)**



Source: rightarmconstruction.com.

**FIGURE 3**  
**A Detached, Above-Garage ADU**



Source: buildinganadu.com

**FIGURE 4**  
**A Bump-Out ADU**



Source: buildinganadu.com

Building an ADU can take from a few months to a few years depending on a city's zoning and permitting process, and it can cost anywhere from \$20,000<sup>1</sup> to \$400,000 to build; a typical detached ADU costs somewhere around \$200,000.<sup>2</sup> The total building cost depends on various "hard costs"—like local labor and construction materials, and "soft costs"—like permitting fees, architecture services, and land use attorney fees, which could make up 20 to 30 percent of the total development costs (Emrath and Walter 2018).<sup>3</sup>

## History of ADUs

Detached ADUs, what many people think of when they think of ADUs, were relatively common in single-family homes built in the early twentieth century. Following World War II, increasingly restrictive zoning policies, private disinvestment from urban centers, white flight, federal subsidies, and an increasing dependence on the automobile for transportation encouraged suburbanization and low-

density residential development. Although local governments effectively banned new ADUs through the 1960s, residents in cities experiencing population booms met the demand for workforce housing partly through illegal ADU construction. During World War II, for example, San Francisco built around 25,000 illegal secondary units (HUD 2008). From a legal perspective, the tide turned slowly. As urban planning movements like smart growth (focused on building cities, towns, and neighborhoods that are economically prosperous, socially equitable, and environmentally sustainable) and new urbanism (focused on walkable blocks and streets, housing and shopping in close proximity, and accessible public spaces) emerged in the late 20th century, many cities began embracing urban infill projects and allowing ADUs (HUD 2008).

Since the early 2000s, ADUs have become increasingly popular as a policy solution for housing needs caused by changing demographics in metropolitan regions (Been, Gross, and Infranca 2014). The combination of shrinking household sizes, additional single-person households, and the growing elderly population has raised concerns about housing availability—especially given limited new housing construction in many metro regions. These demographic shifts not only create a housing mismatch, but exacerbate a housing shortage that is already at crisis levels in many metro regions (Been, Gross, and Infranca 2014). The problem of housing affordability—already significant in the national capital region—is likely to only worsen without further action. For example, Amazon’s HQ2 is expected to increase Alexandria’s housing shortage; recent estimates predict that 13,600 additional housing units are needed to accommodate household growth from 2015 to 2030 (Turner et al. 2019).<sup>4</sup>

## Current State of Development

Many cities across the country have successfully enacted ADU laws, but the mere presence of a policy does not guarantee the construction of units. The number of ADUs that get built varies, partly based on regulatory restrictiveness. Nevertheless, even in the cities with the most flexible regulations and the highest rates of ADU development, ADUs only account for about 1 percent of the total housing stock. Table 1 documents several examples of regions with ADU regulations, selected based on their proximity to Alexandria, their comparability to Alexandria, or their high rates of ADU development.

TABLE 1

## Number of Accessory Dwelling Units (ADUs) and Regulation Components in Selected Cities and Counties

	Arlington County, VA	Bloomington, MN	Boulder, CO	Fairfax County, VA <sup>a</sup>	Los Angeles, CA	Montgomery County, MD	Portland, OR	San Francisco, CA	Seattle, WA	Washington, DC
# of ADUs built/ permits issued	45 permits, 2009–20	2 permits, 2009–20	230 built, 1983–2018	177 permits, 1986–2020	7,052 permits, 2013–18	133 built, 2013–18	4,047 permits, 1995–2019	210 permits, 2015–18	2,597 permits, 1996–2020	75 permits, 2016–20 <sup>b</sup>
ADUs as a share of total housing units	0.04%	0.00%	0.51%	0.04%	0.48%	0.12%	1.43%	0.05%	0.75%	0.02%
<b>Regulation components</b>										
By-right development	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Minimum lot size	No	No	Yes	Yes, for detached	No	No	No	No	Yes	No
Owner occupancy requirement	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes
Parking requirements	No <sup>c</sup>	No	Yes	Yes <sup>d</sup>	Yes	Yes	No	No	No	No
Short-term rentals allowance	Yes	Yes	No	No	Under interpreta tion	No	Yes	No	Yes	Yes

**Sources:** For Arlington County, VA: David Whitehead, “Why Has Arlington Only Legalized 20 Accessory Dwellings in 8 Years?” Greater Greater Washington, October 5, 2017, <https://ggwash.org/view/65059/only-20-accessory-dwelling-units-legalized-in-8-years-in-arlington-virginia-new-rules-could-mean-more>; “Zoning Ordinance,” January 25, 2020. For Bloomington, MN: “Code of Ordinances,” accessed November 23, 2020. For Boulder, CO: “Municipal Code.” For Fairfax County, VA: “Zoning Ordinance, Article 8: Special Permits,” 2019; “zMOD Follow-Up Discussion Handout for Land Use Policy Committee Meeting,” February 4, 2020. For Los Angeles, CA: Dan Bertolet and Nisma Gabobe, “LA ADU Story: How a State Law Sent Granny Flats Off the Chart,” Sightline Institute, April 5, 2019, <https://www.sightline.org/2019/04/05/la-adu-story-how-a-state-law-sent-granny-flats-off-the-charts/>; “Ordinance No. 186481,” December 19, 2019. For Montgomery County, MD: Rebecca Tan, “Officials Call It a Common-Sense Zoning Change. These Homeowners Say It’s a ‘Betrayal,’” *Washington Post*, July 22, 2019, [https://www.washingtonpost.com/local/md-politics/officials-say-its-a-common-sense-zoning-change-these-homeowners-say-its-a-betrayal/2019/07/22/5eb48724-a295-11e9-b732-41a79c2551bf\\_story.html](https://www.washingtonpost.com/local/md-politics/officials-say-its-a-common-sense-zoning-change-these-homeowners-say-its-a-betrayal/2019/07/22/5eb48724-a295-11e9-b732-41a79c2551bf_story.html); “Ordinance No.: 19-06,” December 31, 2019; Jane P. Lyons, “Stimulating Accessory Apartment Development,” Montgomery County Council, 2018. For Portland, OR: Kol Peterson, “ADU Permit Trends in Portland in 2017 and 2018,” Accessory Dwellings, January 14, 2019, <https://accessorydwellings.org/2019/01/14/adu-permit-trends-in-portland-in-2017-and-2018/>; Rebecca Esau, “Program Guide: Accessory Dwelling Units,” Bureau of Development Services, March 15, 2019. For San Francisco, CA: Budget and Legislative Analyst’s Office, “Policy Analysis Report,” January 31, 2019; “Accessory Dwelling Units (ADU) Program for Multi-Unit Buildings,” Planning Department, accessed November 23, 2020; For Seattle, WA: “Permit Information,” January 10, 2020; “Accessory Dwelling Unit,” Department of Construction & Inspections, accessed November 23, 2020. For Washington, DC: *Accessory Dwelling Units*, “Zoning Handbook,” accessed November 23, 2020.

**Notes:** <sup>a</sup> Accessory dwelling units are currently allowed only in single-family detached homes in Fairfax County with special permit approval by the Board of Zoning Appeals and require an occupant of either the main house or the accessory unit to be over the age of 55 or a person with a disability. <sup>b</sup> Washington, DC, issued 151 permits during this period, roughly half of which were canceled or expired. <sup>c</sup> Parking for ADUs is required if the site has no off-street parking and on-street parking is in high demand. <sup>d</sup> Based on the determination of the Fairfax County Board of Zoning Appeals.

# Community Engagement and Feedback

To understand community preferences around the design of an ADU regulation, the Urban research team and the City of Alexandria engaged with community members. Because of the COVID-19 pandemic, all community meetings and presentations for this study were held remotely. To collect feedback from residents, we posted two online presentations and administered two short surveys after each presentation that contained open-ended requests for feedback about the development of a potential ADU regulation. The City also administered one survey after a virtual community meeting that included more direct, multiple-choice questions. The feedback from these surveys is summarized here, and then interwoven in more detail in the sections below on recommendations.

The first presentation gave an overview of ADUs, and the post-presentation survey requested high-level feedback from residents on the topic. We received 240 responses. Residents raised eight key issues:

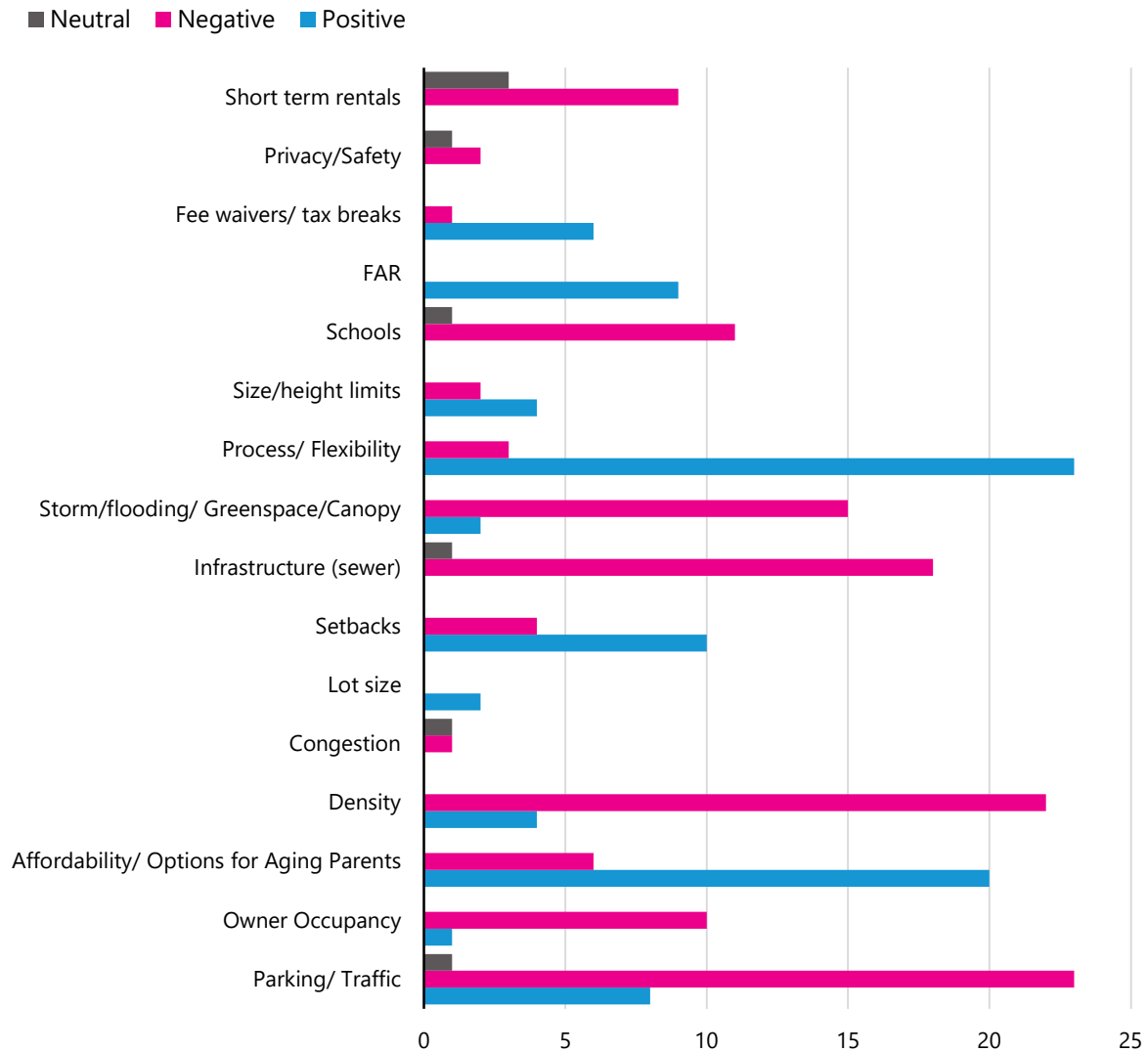
- ADU policies in other jurisdictions
- density
- environmental impacts
- expanded housing options
- neighborhood impact
- setbacks
- size limits and floor-area ratio requirements
- traffic and parking

Based on this feedback, we prepared a second presentation that helped answer some questions residents raised in the first feedback form. The second presentation also went into more depth about the specific components of a potential ADU regulation and summarized the feedback heard after the first presentation. Feedback after this second presentation is summarized in figure 5, which shows the sentiment of responses by topic. In the figure, “positive” means the respondent felt positively about ADUs in relation to the topic listed, and “negative” means that the respondent felt negatively about the topic or the ways in which ADUs will affect that item. For instance, someone who would like the ADU regulation to be flexible is considered positive on the process/flexibility topic; someone who would like a full review before an ADU is developed is considered negative. Similarly, someone who feels positively about density and the ability of ADUs to increase density is considered positive on the density issue, while someone who feels negatively about density and about ADUs increasing density is considered negative.

Finally, the City and the Urban research team conducted a virtual community meeting, where they presented a draft ADU regulation and answered questions and comments about the proposal. Sixty-one residents attended this virtual meeting, and 107 questions were asked. After releasing the draft recommendations, the City administered a final questionnaire that included more specific, multiple-choice questions about the regulation. Generally, residents were positive about allowing ADUs in Alexandria and supported the proposal as written (figure 6).

FIGURE 5

# Survey Comments by Topic and Sentiment



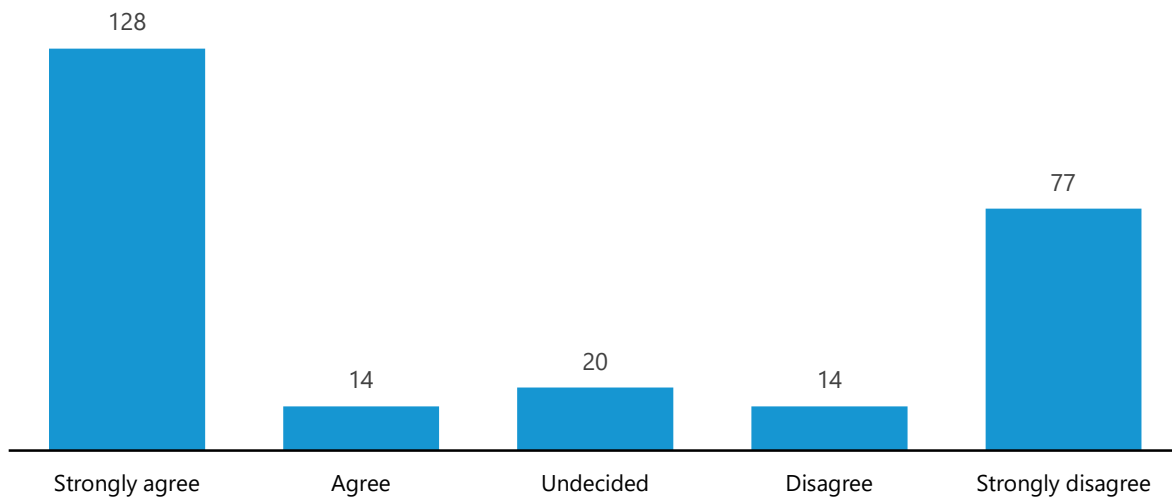
**Source:** Authors' analysis of survey feedback.

**Note:** FAR = floor-to-area ratio.



FIGURE 6

Responses to Survey 3, Question 1: "I Support Allowing ADUs in Alexandria"



Source: Urban Institute analysis of survey data.

The results of the remaining third survey questions can be found in appendix B. Residents generally supported an occupancy requirement (59 percent for and 18 percent against); were split on whether to allow short-term rentals, with slightly more residents opposing them (35 percent for allowing them and 44 percent for prohibiting them); were split on whether to require off-street parking, with more residents opposing off-street parking requirements (49 percent, compared with 36 percent for requiring them), were split on the proposed setback requirements of one foot unless a window faces a neighbor's property, in which case the setback would be three feet (54 percent felt this was appropriate while 47 percent felt it was inappropriate); generally supported the proposed height limits of 20 feet or the height of the main house, whichever is less ( 61 percent felt this was appropriate and 39 percent felt it was inappropriate), and generally supported excluding portions of detached ADUs similar to the way the City currently excludes detached garages and sheds (61 percent felt this was necessary and 39 percent felt it was unnecessary).

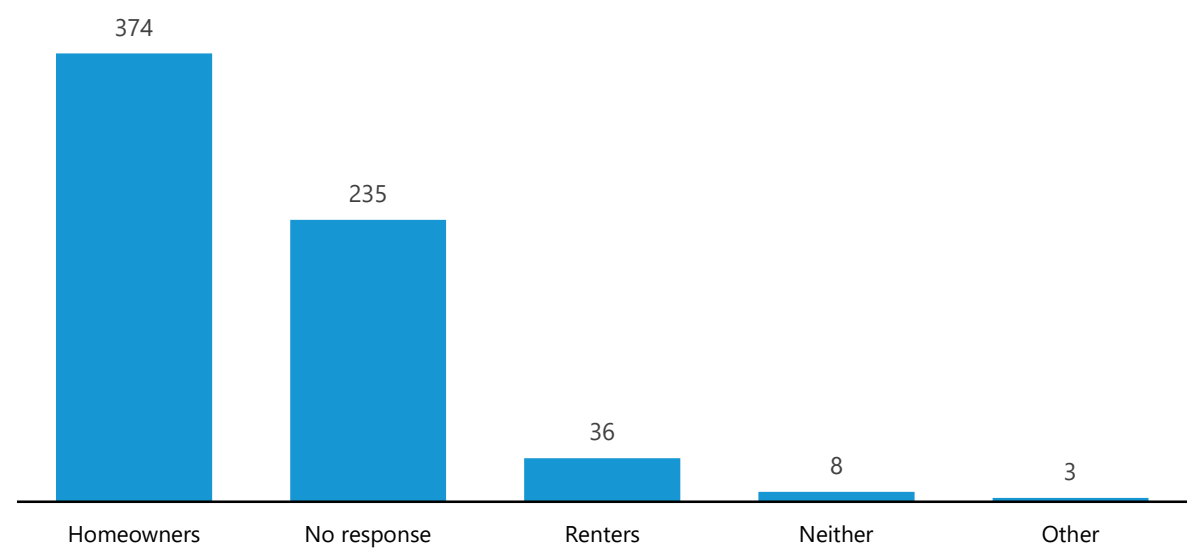
Most residents said they would be most comfortable having ADUs within a house in their neighborhood (48 percent), but many also felt comfortable with a detached structure (31 percent) or one above a garage (21 percent). Resident who said they were interested in constructing an ADU (51 percent) said they would be most likely to build a new detached structure (21 percent), followed by one within the existing home (16 percent) and one above a current garage or other structure (14 percent).

While this feedback is useful for designing a regulation with resident preferences in mind, it should be noted that most of the respondents to all the surveys were homeowners, thus skewing the results toward higher-income residents (figure 11). Additionally, only 3 percent of responses came from 22311, the lowest-income zip code, while 18 percent of responses came from 22301, the highest-income zip code (figure 12). A fully representative survey of residents was beyond the scope of this study but would be needed to accurately represent the full set of opinions and preferences for ADUs. We recommend



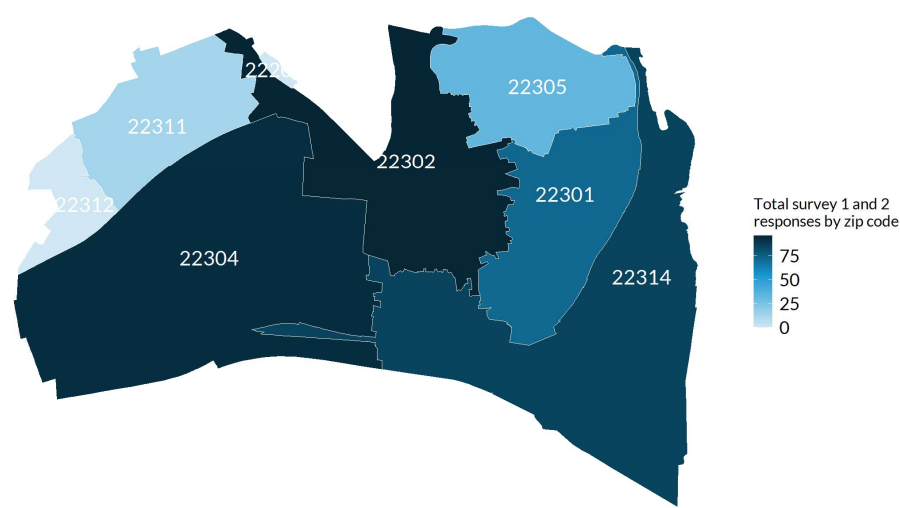
this approach for larger policy changes. We also recommend that the city take into account equity implications for both current residents and future residents when designing this and other regulations; since such regulations are partly about addressing the needs of future residents, asking only residents their views is inherently limited.

**FIGURE 11**  
**Survey Responses by Tenure**



Source: Urban Institute analysis of survey data.

**FIGURE 12**  
**Responses by Zip Code**



Source: Urban Institute analysis of survey data.

## Evidence and Recommendations

Even though many cities allow for ADUs, specific regulations and other barriers often make it difficult for ADUs to be built. Cities can design ADU laws and incentives so that development is feasible while also considering the preferences of current residents. Below are evidence and recommendations for various components of an ADU regulation for the City of Alexandria.

### CONDITIONAL OR DISCRETIONARY REVIEW PROCESSES

Conditional or discretionary review processes are reviews that require a homeowner interested in building an ADU on their property to apply for permission to build; they do not guarantee their right to do so. Depending on local regulations, this process can involve neighborhood hearings, written justifications, and public weigh-in, and it can drastically impede ADU development. These can be intimidating and expensive, particularly for first-time developers who are usually homeowners; they can be forced to spend anywhere from \$1,000 to \$30,000 for site plans, land-use attorneys, and fees without guaranteed approval. These logistics also add time and uncertainty to the process (Peterson 2018).

If attaining a permit is too burdensome, such as by requiring reviews with a zoning board, potential ADU homeowners can become discouraged. All the cities listed in table 1 that have had 200 or more ADUs developed within their boundaries have by-right development rules for ADUs, which creates a faster, more predictable process for approvals. By-right development makes it easier for housing supply to be aligned with the demand in a city, and that can in turn reduce rents overall (National Multifamily Housing Council 2019).

Even before permitting can begin, homeowners need to know whether an ADU is allowed on their property and familiarize themselves with the rules, such as setbacks or minimum lot sizes. In Los Angeles, a [tool called Cover](#) was developed so that homeowners could determine in a matter of minutes whether their property was eligible for constructing ADUs. Seattle recently developed a similar tool called [ADUniverse](#). Having city workers available to help citizens easily determine the eligibility of their property, or tools like Cover, can make the process more efficient and ensure that the intended outcomes from the ADU policy are met.

Alexandria residents who mentioned the permitting process during our community engagement were mostly supportive of a flexible process (23 compared with 3 who requested more extensive reviews). Supporters of by-right development wanted the zoning process to be as flexible as possible and to be paired with resources on financing options, tax incentives, and waived infrastructure fees. Questions arose about whether the process should differ for interior ADUs versus external ADUs. Opponents noted they wanted ADUs to require zoning approval for each application “to ensure the unit does not destroy the look and feel of a neighborhood,” according to one commenter, though this was not the majority point of view.

**We recommend that the city adopt a “by-right” process for ADU development that reduces uncertainty for the homeowners, reduces cost, and streamlines the process for development. We also**

recommend that the City **make the initial review process for determining whether an ADU is allowed on a property as quick and easy as possible.**

#### OWNER OCCUPANCY REQUIREMENTS

Some cities require the owner of a property with an ADU to either live in the ADU or the main dwelling. This provision is usually promoted as a way to prevent speculation, limit absentee landlordism, and maintain the lot's appearance. It also often includes bylaws about family composition allowed on the lot.

Among the feedback forms we examined, 10 Alexandria residents requested that the city implement owner occupancy requirements, while 1 requested that the city not impose such restrictions. In the final survey, 59 percent of residents supported an owner occupancy requirement. Many of those who wanted an occupancy requirement referenced fears of homes and their associated ADUs becoming investment properties only owned by trusts or LLCs. They feared that not requiring occupancy would encourage speculative investment rather than long-term housing provision and defeat the regulatory goal of expanding housing options. Again, survey responses were skewed toward homeowners in higher-income zip codes. Very few responses came from renters in lower-income zip codes.

While encouraging ADU development by present and involved local homeowners is a policy priority, owner occupancy restrictions have not achieved this goal in other cities, and fears of speculative investment in ADUs did not materialize. One neighborhood in Portland that required owner occupancy had fewer owners who lived on the property (35 percent) than the rest of the city (90 percent). The policy was difficult to enforce and later overturned as it counterintuitively made the permitting process difficult and discouraged development by first-time homeowner-developers (Peterson 2018).

Owner occupancy requirements also restrict ADU development because lenders are less prone to loan against properties with deed restrictions of this sort and because owners are not allowed to move off the property without selling (Peterson 2018).

Given the likelihood that such a requirement would place undue burden on ADU development and drastically stifle overall production, **we recommend that the city not impose an owner occupancy requirement** on ADUs, particularly since owner occupancy requirements are hard to enforce and often ineffective at getting owners to live on the property. If the City must enact a residency requirement because of resident concerns, we recommend that these restrictions be as flexible as possible.

#### OFF-STREET PARKING REQUIREMENTS

While parking is a highly contentious issue in most cities, prior research has shown that most ADUs do not create parking challenges in the affected neighborhoods, and requiring them for ADUs can make development overly burdensome and expensive. Parking requirements impede ADU development for several reasons. On many lots, building an additional parking spot is either impossible or highly undesirable; building parking spaces can cost the homeowner \$3,000–\$5,000 per spot, excluding curb cuts. Even if it is possible to get parking requirements waived, the extensive review and permitting

process to ease restrictions is burdensome to new developers, who are typically just homeowners (Peterson 2018).

A survey of Bay Area residents showed that of the people who had at least one secondary unit on their block, almost two-thirds reported that there was no negative impact from the presence of that unit. While the most prevalent complaint from the remaining one-third of respondents was increased parking congestion in the block, the authors also found that ADU tenants were disproportionately likely to own no car at all (Chapple et al. 2012). Moreover, studies have found that in Portland and Vancouver, ADUs did not increase traffic congestion (Peterson 2018).

In the first two feedback forms, we heard from 23 Alexandria residents who were concerned about parking and congestion issues, 8 who felt positive about parking in the context of ADUs, and 1 who was neutral. On the final survey, residents slightly preferred no parking requirement: 49 percent of respondents were against requiring off-street parking and 36 percent in support of it. Residents concerned about parking issues tended to say that the city already struggled with parking shortages (especially in West End) and that narrow streets were not designed for street parking. Those who felt that the city should not require off-street parking for ADUs noted that such requirements are regressive and that a better solution might be to limit the number of parking permits per property to the amount of curb space in front of the property.

Based on the prior research showing that ADUs are unlikely to create increased parking congestion, and because of the high burden that parking requirements place on ADU developers, **we recommend that the city not impose an off-street parking requirement.** Such a requirement would be overly burdensome and likely lead to inequities, since the added cost plus larger lot size needed to fulfill this requirement would likely only be possible for higher-income homeowners. If the city must require parking, it should do so only for lots that are far from transit and in areas that already have a lack of street parking.

## SETBACKS

Setback standards for ADUs generally range from 1 foot to 20 feet, depending on the city. Setback standards from 10 to 20 feet often limit ADU development in neighborhoods that are most in need of infill construction: areas with walkable, smaller lots near transit. Portland has developed a tiered approach where setbacks vary based on ADU height; the maximum height for a detached ADU is 20 feet when located outside the required setbacks for the zone, and 15 feet when it is within the required setbacks for the zone. To protect the privacy of neighbors, windows and doors are only allowed on sides of the ADU that are further than five feet from the property line (Peterson 2018). It is also important to compare setback requirements for all current and historic detached structures (such as garages) for easy ADU conversion.

In the final survey, 54 percent felt that the proposed setback requirements were appropriate (one foot if there is no window facing the neighbor's property and three feet if there is). In the first two community feedback forms, 10 responses were supportive of small setbacks for ADUs, and 4 wanted stricter setback requirements. Two residents recommended the same setbacks as current garage

requirements while requesting that the City ensure that foundations can support two-story structures if an ADU goes above a garage. Two noted that a minimum five-foot setback is not sufficient (for rear and side yards). Another thought the setback should be determined by whether there were windows facing the outside lots or less than five feet if they faced a vacant lot or if they had a fence.

**We recommend that the city adopt a tiered approach to setbacks**, whereby single-story detached ADUs are allowed to have smaller, less restrictive setbacks (for example, around 2 feet) than larger, two-story units (of, say, 5 to 10 feet). We also recommend that the City implement regulations around window placements on ADUs to maintain the privacy of nearby homes, and that the City allow for the conversion of existing structures, like garages, into ADUs at their current setbacks.

### SIZE AND HEIGHT LIMITS

Many ADU laws require that they cannot be larger than a certain size and/or a certain height, either proportional to the size of the home or a definitive size for all ADUs in the city. Size limits can ensure that the ADU is accessory to the main home. Size limit regulations can also be helpful for increasing the supply of small, affordable housing.

However, restrictions based on the size of the main dwelling can unintentionally lock less-wealthy homeowners out of the market or force developers with smaller homes to build 300–400-square foot ADUs, which are too small for most renters. While 600 square feet is a common size cap, 800–1,000 square feet for detached ADUs is seen as the area needed to fill the two-bedroom rental gaps in many cities (Peterson 2018).

In the feedback forms, some residents requested size limits that ensure that ADUs are smaller than the main dwelling. Four residents recommended not having tight restrictions on lot size requirements and/or tying permitting to a size limit set by square feet rather than a percentage of home size, since the latter makes the policy regressive. They also generally supported excluding portions of detached ADUs similar to the way the City excludes detached garages and sheds (61 percent felt this was necessary and 39 percent felt it was unnecessary).

**We recommend that the city impose size limits on ADUs** that ensure the ADUs are not too large (and therefore less likely to be affordable) but also do not overly restrict the size of the ADU for homeowners with smaller homes. For instance, the city could place a maximum limit on ADUs of 600 or 750 square feet for smaller homes (owners could still build a smaller one if they wish), and a size maximum for larger homes based on the proportion of the home size to ensure that the ADUs are accessory to the main home without locking lower-income homeowners out of the market. For height, the city could allow ADUs up to two stories or the height of the main home, whichever is less.

### MINIMUM LOT SIZES

Many cities only allow ADUs on lots of a certain minimum size. These rules invariably lock out lower-income homeowners from the ADU market and may only allow for ADUs in areas with less demand. Survey respondents who mentioned lot sizes were all in favor of no minimum lot size requirement.

Some cities have created laws that allow for smaller minimum lot sizes in denser neighborhoods, such as Hillsborough, North Carolina, where the lot size must be twice that of the zoning district's minimum requirement. However, rules like this make deciding whether an ADU is allowed on a lot even more complicated, and therefore decrease the likelihood that it will be built. Therefore, **we recommend that the city not place any minimum lot size restrictions** on the development of ADUs.

#### HOOKUP AND DEVELOPMENT FEES

For first-time developers, impact fees, sewer and water hookup fees, and development fees can add unforeseen costs to a project—anywhere from \$10,000 to \$60,000 (Peterson 2018). Cities like Los Angeles, Portland, and San Francisco have spurred development by waiving impact and hookup fees altogether. Removing prohibitive fees proves that a city is committed to addressing its housing crisis. In some cases, fee waivers can also be easier and quicker to pass than additional zoning regulations. Another way to reduce utility fees is to allow ADUs to share sewer and water lines with the primary home, if the system can handle it.

Survey respondents expressed strong concerns about extra water runoff from additional impermeable surfaces, creating additional flooding problems. One commenter recommended placing additional impermeable surface restrictions by neighborhood, depending on flooding history. However, some noted that homeowners already pay for stormwater infrastructure and should not have to pay twice. Another commenter recommended the city incentivize or provide credits if ADUs use solar power.

Given Alexandria's infrastructure challenges and concerns from residents about flooding and sewage capacity, **we recommend that the city further research the possibility of waiving impact fees.**

#### SHORT-TERM RENTALS

One of the most contentious ADU policy debates is whether to allow them to house short-term rentals (STRs). Because ADUs are frequently tied to city and municipal goals for housing supply and affordability, STRs are often banned or highly regulated since they are seen to not help address these issues. This restricts one of the unique and most appealing characteristics of an ADU for homeowners: its flexibility. Additionally, most ADUs are used as long-term rentals (LTRs) even if STRs are allowed; a 2018 point-in-time study in Portland found that around 74 percent of ADUs were being used as LTRs or residences for a family member or friend and only 32 percent were being used as STRs (Gebhardt, Gilden, and Kidron 2018). The flexibility of temporarily using an ADU as a short-term rental is a huge draw for developers who may need additional income after housing a family member or friend for free or in between long-term rentals (Palmeri 2014). Peterson (2018) argues that banning STRs would not substantially increase the number of LTRs provided by ADUs anyway because it would likely decrease the overall development of ADUs and because most ADUs are used as STRs only briefly before being converted into LTRs. Additionally, many full single-family homes allow STRs, so disallowing them in ADUs will not drastically affect the overall short-term rental numbers in a city.

If a city decides to restrict short-term rentals, there are alternatives to outright bans and ways to incentivize long-term rentals. While Los Angeles and Santa Cruz banned STRs, Portland decided to

waive fees for all ADUs except those registered to short-term rental landlords. Los Angeles and San Francisco put caps on the number of days a year that a unit can be used as an STR (120 and 90, respectively). Cities can also monitor the use of ADUs and enforce an STR regulation later on if such rentals are deemed a problem. Finally, it is important to compare the ADU regulations to regulations for other residential housing forms to ensure that ADUs are not unfairly targeted.

Survey respondents were concerned that allowing short-term rentals encourages speculative investment from non-resident businesses and poor accountability for property maintenance, and it does not support the city's goal of improving housing affordability because STRs "drive up rents and deplete the housing stock." These comments came both from general ADU opponents and from supporters who wanted ADUs to help boost long-term housing supply. In total, nine respondents requested bans on short-term rentals in ADUs and three were neutral about them. In the final feedback form, respondents were split on whether to allow short-term rentals: slightly more residents opposed them (44 percent, compared with 35 percent for allowing them). Of the cities and counties in our sample in table 1, Arlington, Bloomington, Portland, Seattle, and Washington, DC, all allow STRs in ADUs.

Since STRs are already allowed on other properties in the city without restriction, and since they can be a tool needed to help finance ADUs, **we recommend that the city not add any additional restrictions on STRs beyond what is restricted in other homes.** While some proponents of the use of ADUs for increased housing options were concerned that allowing STRs would not increase the stock of long-term rental housing, banning STRs may have that impact anyway since it would drastically limit the options for recouping early costs of development. The research shows, moreover, that even if STRs are allowed, most ADUs are rented as LTRs anyway. If the City decides that it must regulate STRs in ADUs, we recommend that it finds a compromise, such as limiting them to a certain number of days per year or using incentive programs to limit their use.

## FINANCING

While good zoning regulation can lay the groundwork for ADU development, financing is by far the biggest hurdle for first-time and low- and moderate-income homeowners. Depending on the style of ADU built, financing the construction of such units can pose an insurmountable barrier to homeowners who have no experience or capital for development investments. Costing anywhere from \$20,000 to \$400,000, ADU construction usually requires homeowners find a special line of credit or financing. But most banks do not have products that suit such needs. The current tools available to homeowners who need capital for ADU construction are home equity lines of credit and cash-out refinances. Both may be infeasible for many middle- and lower-income homeowners who have little equity in their homes.

- **Home equity lines of credit, or HELOCs,** leverage homeowners' existing equity. A homeowner must have at least 10 percent equity in their home, after which they can get a loan for an amount above that 10 percent threshold. However, HELOCs consider only the current value of a home, not the future value including the ADU, and thus may be too small to cover construction costs. Another downside of HELOCs is they are often variable-rate mortgages, and they require high credit scores to access.



- **Cash-out refinances** also allow borrowers to tap into the equity of their home—again, based on the current value, not the future value of the home with the ADU. Cash-out refinances require the homeowner to have at least 15 percent equity in the property. This is a higher threshold than HELOCs, but cash-out refinances have fixed, amortized interest rates, which is a benefit.

Renovation financing that accounts for the value of the home including the ADU (after construction) would be a great option for homeowners, but it is rarely offered by banks in areas where ADUs are not already common. Some people also rely on savings, loans from their 401(k) accounts, loans from family and friends, or credit cards and other unsecured loans. Another option is construction loans, but they have higher interest rate and often only make sense if the property is going to be sold or refinanced upon completion. While such products may work for some households, the need for more standard and innovative financing options from banks and government lenders still stands.<sup>5</sup>

Some cities have tried to fill this gap by creating unique ADU construction financing programs and partnerships. Los Angeles began an [ADU Accelerator Program](#) that provides \$10,000 to homeowners who rent their accessory unit for three years. Incentives for ADU production can also be tied to affordability and equity concerns; Los Angeles partnered with developers and CDFIs to help finance and build ADUs for those who agree to rent to people using housing choice vouchers.<sup>6</sup> The City of Napa provides a forgivable loan if the unit is rented to someone with low income.<sup>7</sup> In Washington, DC, the United Planning Organization and the Coalition for Smarter Growth stepped in to help low-income homeowners develop ADUs with a pilot that offers funding, a homeowner's ADU manual, how-to guides, and policy reports for local governments.<sup>8</sup> Researchers at New York University (NYU) also recommended considering a revolving loan fund that targets homeowners to fill the gap that is left due to the difficulty of accessing capital through banks (Been, Gross, and Infranca 2014).

The researchers at NYU also suggest considering an amnesty program that waives fees temporarily for illegal units to encourage upgrades so the units meet certain health and safety requirements (Been, Gross, and Infranca, 2014). While this may impose greater costs on the owners of these units, upgrading could raise the resale value based on the appraisal process.

As mentioned above, cities can also consider waiving impact fees, which make development of particularly more modest ADUs more difficult to complete, as the fees can mean a larger percentage of the cost relative to more expensive ADUs. In fact, ADUs increase density in neighborhoods and therefore cost the city less to service than infrastructure expansion for suburban construction,<sup>9</sup> so the higher density can help recoup some costs of waiving the fees. Among survey respondents, six were supportive of fee waivers and tax incentives for ADU development, while one was opposed to such programs.

Finally, cities can partner with developers or nonprofits to share costs and revenues with homeowners. A startup in Portland called Dweller purchases and installs premade ADUs in backyards and splits the rent revenue with the homeowner.<sup>10</sup>

Therefore, **we recommend that the City look into innovative financing mechanisms and partnerships** to ensure that homeowners of all income levels are able to benefit from developing their own ADU.

## AFFORDABILITY INCENTIVES AND REQUIREMENTS

The extent to which ADUs affect the overall supply and affordability of housing in a city depends on the degree of demand for such units and the ease of creation—both elements determined in part by the zoning code and planning departments' partnership with local social and financing organizations. However, prior research suggests that ADUs offer promise for improving affordability and supply at a critical segment of the market (Been, Gross, and Infranca 2014; Gebhardt, Gilden, and Kidron 2018; Maaoui 2018; Wegmann and Chapple 2012).

ADUs have frequently been viewed as a more affordable alternative to traditional multifamily rental units. Given their high cost to construct for homeowners, most ADUs rent at a high rate per square foot, but their smaller size means total monthly rent levels are lower than larger apartments (Been, Gross, and Infranca 2014). Additionally, homeowners often rent them to family or friends at a below-market rate (Maaoui 2018). However, even when rented to strangers, one study found that ADUs rented for 6 percent less than non-secondary units (Wegmann and Chapple 2012). According to a study in Oregon, 13 percent of ADUs were rented for no money, and 7 percent were rented for \$500 or less (DEQ 2014). Another study in Alberta, Canada, found that 25 percent of ADUs were rented for less than \$500 (Gebhardt, Gilden, and Kidron 2018). This is comparable, and often exceeds, common inclusionary zoning affordability goals of 10–30 percent of units rented at affordable rates. Consequently, ADUs are considered a form of naturally occurring affordable housing.

Some cities have taken extra measures to provide housing to the lowest-income renters. For example, a nonprofit in LA, the Backyard Homes Project, offers financing, building design, and construction support in exchange for a pledge to house Section 8 voucher holders.<sup>11</sup> The nonprofit received 130 applications for the 10 units it helped build.

While incentivizing ADU development for very low-income renters may seem intuitively beneficial, income restrictions can be counterproductive. Housing advocates in DC's ADU zoning design process recognized that an affordability requirement would have “killed the market” for building ADUs, given the level of effort involved in meeting affordability standards.<sup>12</sup> Kol Peterson, a prominent ADU advocate, stated that because there are already so many financial and regulatory barriers for first-time ADU developers, affordability standards should be incentivized or subsidized rather than mandated.<sup>13</sup> Therefore, **we recommend that the city look into programs that incentivize rather than require affordability** to increase the supply of affordable rental units in the city.

## COMMUNITY ENGAGEMENT

Finally, it is important for cities to meaningfully engage the community in the policymaking process, particularly people who may benefit from a greater supply of affordable housing options and those who are prone to oppose new development in their neighborhood.

Unfortunately, those likely to benefit from renting ADUs are unlikely to participate in these discussions because (1) they may not yet be residents of the city, and (2) an ADU regulation has no immediate impact unless they happen to rent an ADU somewhere down the line (as opposed to homeowners who could either benefit from building an ADU or those who fear immediate impacts on

their neighborhood from their development). Therefore, it is important to keep in mind that there are likely voices not heard in these discussions from people who would support ADUs, and we recommend that the city **consider both resident input and equity implications** in the design and implementation of an ADU regulation.

## Conclusion

If implemented appropriately, a regulation allowing for ADUs in Alexandria could have community benefits while maintaining the character of the city. Alexandria is predicted to need an additional 13,600 housing units to accommodate household growth from 2015 to 2030, and most of those units need to be affordable to middle- and low-income households (Turner et al. 2019). ADUs could help Alexandria mitigate this housing shortage by increasing housing supply for renters, addressing a mismatch in the size and configuration of available units, and creating an additional revenue stream for homeowners without requiring families or developers to take on land assembly and new construction burdens.

## Appendix A. Prior Research on ADUs

Prior research on ADUs suggests that the units can offer benefits to homeowners, aging residents, college-age residents, and people with disabilities.

### IMPACTS ON HOMEOWNERS

ADUs offer benefits to homeowners by helping them build wealth and subsidize their mortgages (Been, Gross, and Infranca 2014). While ADUs are not an effective way to turn a profit quickly, they can be a lucrative longer-term investment. In *Backdoor Revolution*, Kol Peterson says that “In talking to more than two hundred ADU owners, I’ve never met anyone who had financial regrets about building their ADU.” Studies of ADUs in Canada have actually found that they increase the value of surrounding homes (Davidoff, Pavlov, and Somerville 2019).

### AGING RESIDENTS

ADUs offer benefits to cities seeking to improve housing options for aging residents. American land use policies since World War II have promoted single-family detached homes in the suburbs, which has resulted in poor access to services and limited the ability of families to alter or expand single family homes to support caregiving of elders (Liebig, Koenig, and Pynoos 2006). ADUs can help solve this problem by allowing for multigenerational housing in single-family homes, which is often a preferred care alternative to board-and-care homes, continuing-care retirement communities, or nursing homes (Liebig, Koenig, and Pynoos 2006). In addition, intergenerational co-residence can be a solution to the growing lack of affordable housing for both younger and older households (Liebig, Koenig, and Pynoos 2006). Grandparents in the home can share parenting responsibilities and ease tensions between parents and their children, decrease involvement in delinquent activities, reduce depressive episodes, and improve children’s academic performance (Uhlenberg 2000).

Additionally, sprawl and auto-centric development have negative impacts on older adults, which ADUs could help mitigate. AARP lists expensive commutes, increased social isolation, higher infrastructure costs, greater dependency on automobiles for mobility and independence, and more financial vulnerability as a few of sprawl's negative social and physical consequences (Arigoni 2018). The Census predicts that by 2030 one in five of all US residents will be at least 65 years old, and ADUs give older adults with excess space in their homes the ability to age in place and remain connected to their neighborhood (Census 2018). It also provides an additional income stream for cost-burdened older homeowners. More than 30 percent of all older households are cost burdened, and that number increases to 45 percent for those still paying off a mortgage.<sup>14</sup> This has led many ADU policies, like those in Portland, Seattle, Minneapolis, and DC, to be championed by AARP and other elderly advocate groups. And a recent study in Portland found that over 15 percent of ADUs were occupied by adults ages 55 and older (Gebhardt, Gilden, and Kidron 2018).

### MILLENNIALS

ADUs may help mitigate demographic trends emerging among millennials. Alexandria faces a growing population of single-person households. More young adults are waiting longer to transition into home ownership and adulthood than before, many continuing to live with their parents (Blazheski 2016; Fry 2016). Compared with other jurisdictions in the DC metro region, Alexandria has one of the lowest average household sizes and one of the largest shares of single-person households).<sup>15</sup> Such households require less space than a two-person household, increasing the need for denser housing stock. ADUs provide a private, rentable living space for these individuals (elders, adult children, single renters, etc.).

### PEOPLE WITH DISABILITIES

The ability to customize ADUs has also made them an attractive housing options for people with disabilities. Assisted living facilities can range from \$5,000 to \$7,000 a month (Petrovski 2010). ADUs allow people with disabilities to live autonomously yet close to family, friends, or caretakers in the main unit. In Bethesda, Maryland, all licensing and operation fees are waived if the ADU is being used by someone with a disability (Masters 2019).

### ENVIRONMENTAL IMPACTS

From an environmental perspective, ADUs can offer carbon savings due to their small size, overall home energy efficiency improvements, and role in neighborhood densification. According to the US Department of Housing and Urban Development, ADU construction has an inherently smaller carbon footprint than single-family or even multifamily units because their smaller size requires less lumber and other carbon-producing materials.<sup>16</sup> America's housing size has increased dramatically over the past 30 years while household sizes have dropped, leading to less efficient per-person benefits from heating and cooling emissions (HUD 2015). Reducing a home's footprint by 50 percent can lead to a 36 percent reduction in lifecycle greenhouse gas emissions (Carlin 2014; DEQ 2010), and increasing the number of residents who use an existing home's heating and cooling reduces energy waste (Geffner 2018; Palmeri 2014).

ADUs further reduce emissions by gently densifying neighborhoods, thereby increasing the customer base for nearby small businesses and public transit. These two effects reduce the total miles driven per household (Kim and Brownstone 2010). Portland also reported that ADU residents owned fewer cars than other residents.<sup>17</sup>

In terms of stormwater runoff, three of the five types of ADUs (basement, internal carve-out, and above-garage ADUs) do not increase existing building footprints and thus do not affect a lot's overall impervious surface area. However, areas concerned with stormwater management can apply total lot coverage limits to reduce the possibility of ADUs contributing to flooding.

### IMPACTS ON HISTORICAL DISTRICTS

Some residents may be concerned about the impacts of ADUs on historical districts. However, before the application of widespread zoning restrictions in the 1960s and 1970s, it was common for large houses to have smaller units on their lot or attached for intergenerational uses or servants' quarters (Evans 2018). Consequently, many historic districts already feature foundations or facilities for ADUs.

### APPRAISING ADUS

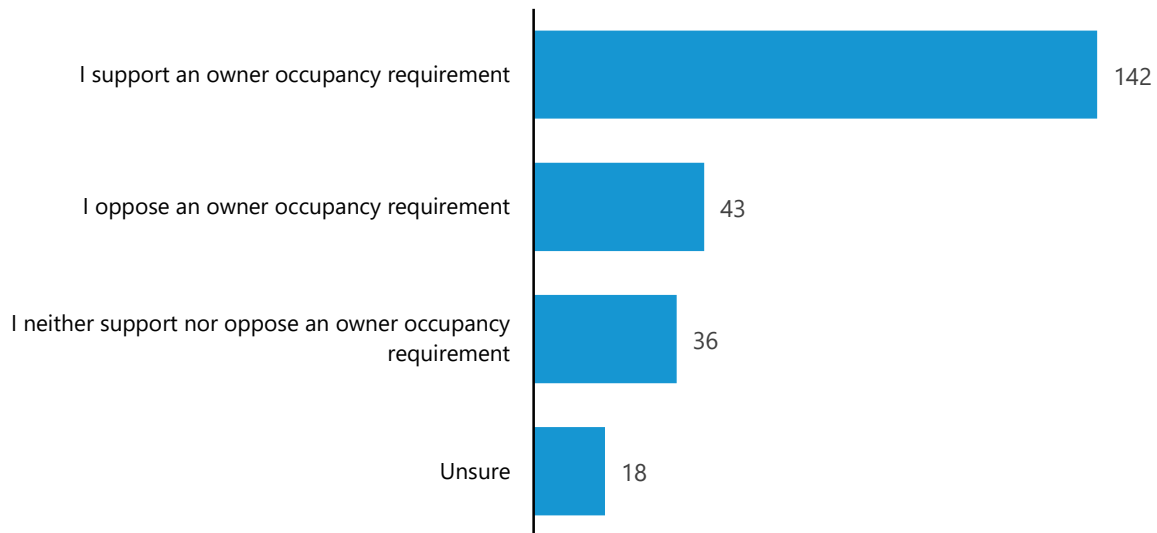
One challenge with ADUs is that they can be hard to appraise because they often do not consider the income that ADUs can generate. Brown and Watkins (2012) test an income-based approach to valuation and find that for 14 properties with ADUs in Portland, Oregon, an income capitalization approach yielded valuations significantly higher than actual sale prices, by 7.2 percent or 9.8 percent on average, depending on the formula used. ADUs also contributed on average 25 percent or 34 percent of each property's appraised value, depending on the formula used. The authors argue that valuation by income can increase appraiser insight as ADUs become common.

## Appendix B. Additional Survey Results

Below are the results of questions 4 through 13 of the final survey. Questions 2 and 3 were demographic questions about zip code and homeownership status.

FIGURE B.1

**Responses to Survey 3, Question 4: For properties with an ADU, staff proposes requiring the property owner to reside in either the main house or ADU. The following best describes my preferences for an owner occupancy requirement.**

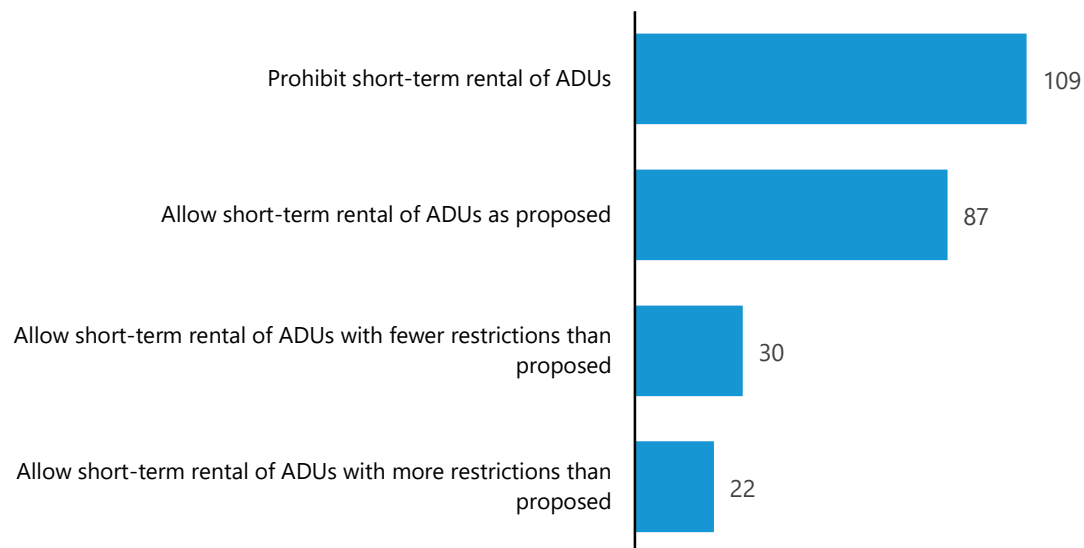


Source: Urban Institute analysis of survey data.

Notes: 239 people responded to this question, and 16 skipped it.

FIGURE B.2

**Responses to Survey 3, Question 5: Staff proposes allowing short-term rental (AirBnBs, etc.) of ADUs. Under this proposal, only one short-term rental would be permitted in either the ADU or main house. I think the City should:**

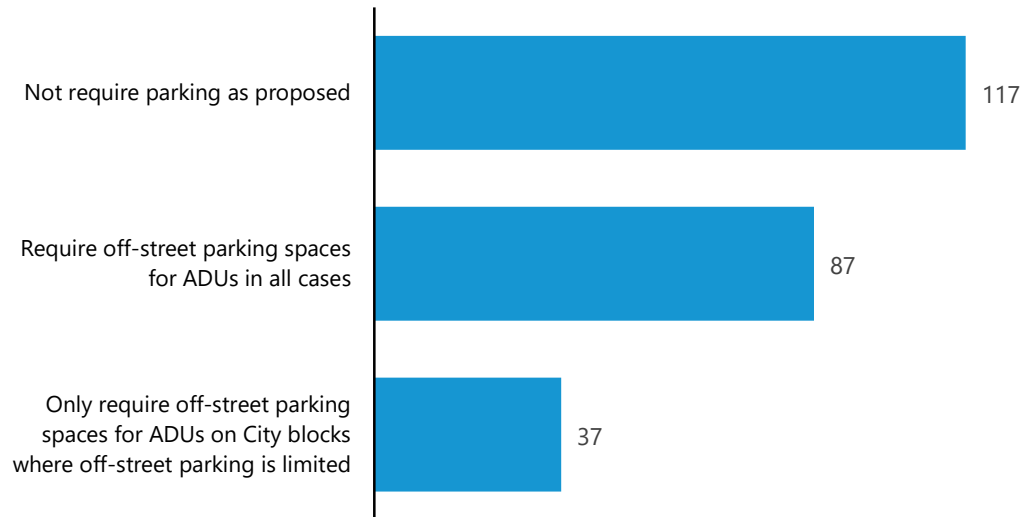


Source: Urban Institute analysis of survey data.

Notes: 248 people responded to this question, and 7 skipped it.

FIGURE B.3

**Responses to Survey 3, Question 6: Staff proposes no off-street parking requirements for ADUs. I think the City should:**



**Source:** Urban Institute analysis of survey data.

**Notes:** 241 people responded to this question and 14 skipped.

FIGURE B.4

**Responses to Survey 3, Question 7: Staff proposes one-foot setbacks for ADUs unless there are windows that face a neighbor's property. In those cases, the required setback would be three feet. I think this setback is:**



**Source:** Urban Institute analysis of survey data.

**Notes:** 241 people responded to this question and 14 skipped.



FIGURE B.5

**Response to Survey 3, Question 8: Staff proposes limiting the height of an ADU to 20 feet, or the height of the main house, whichever is less. In terms of neighborhood compatibility, I think this height limit would be:**



Source: Urban Institute analysis of survey data.

Notes: 240 people responded to this question, and 15 skipped it.

FIGURE B.6

**Responses to Survey 3, Question 9: Staff proposes a maximum size limit based on one-third of the existing house or 750 square feet, whichever is larger. I find this size limit to be:**



Source: Urban Institute analysis of survey data.

Notes: 241 people responded to this question, and 14 skipped it.

FIGURE B.7

**Responses to Survey 3, Question 10: Staff proposes excluding portions of detached ADUs similar to the way the City currently excludes detached garages and sheds. I find this proposal to be:**

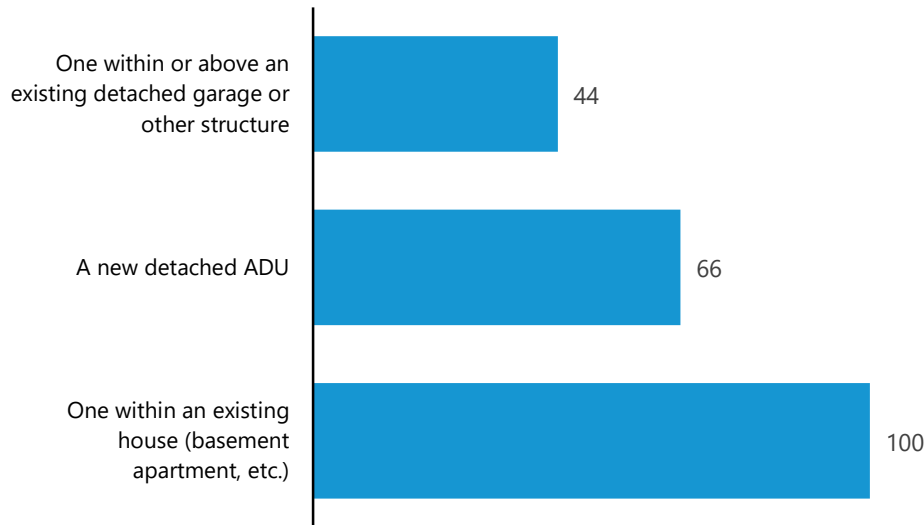


Source: Urban Institute analysis of survey data.

Notes: 202 people responded to this question, and 53 skipped it.

FIGURE B.8

Responses to Survey 3, Question 11: What type of ADU would you be most comfortable having in your neighborhood?

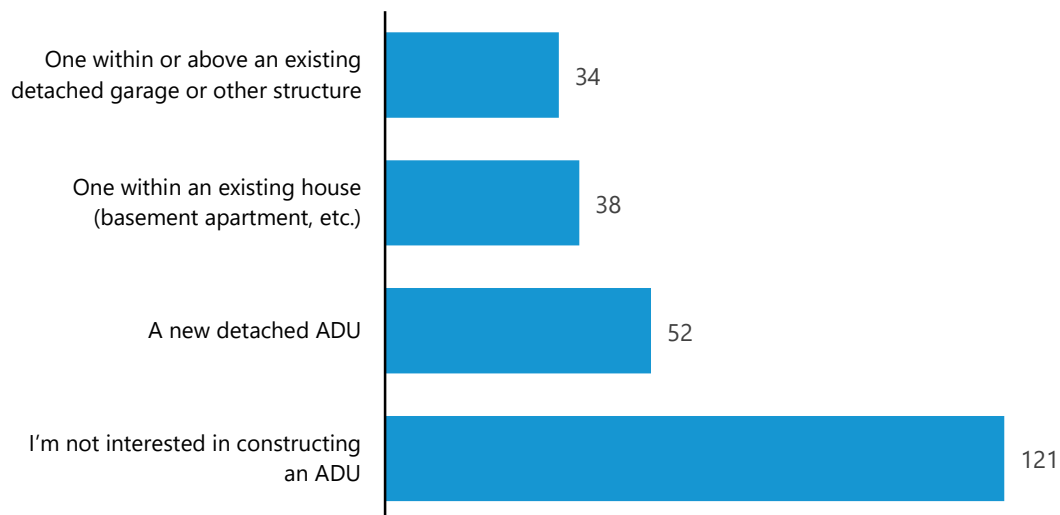


Source: Urban Institute analysis of survey data.

Notes: 210 people responded to this question, and 45 skipped it.

FIGURE B.9

Responses to Survey 3, Question 12: If you were to construct an ADU, which type would you construct?



Source: Urban Institute analysis of survey data.

Notes: 245 people responded to this question, and 10 skipped it.

# Notes

- <sup>1</sup> Jennifer Baum Lagdameo, “7 Smart ADU and Additions that Cost as Little as \$18k,” Dwell, April 2, 2020, <https://www.dwell.com/article/cost-of-building-backyard-adu-addition-f85c50f7>
- <sup>2</sup> Kol Peterson, “Calculating the Costs of Building an ADU,” BuildinganADU, accessed October 16, 2020, <https://www.buildinganadu.com/cost-of-building-an-adu>.
- <sup>3</sup> For a more complete overview of prior research on ADUs, see appendix A.
- <sup>4</sup> See also Leah Hendey, Margery Austin Turner, Peter Tatian, Bhargavi Ganesh , Sarah Stochak, and Yipeng Su, “What HQ2 Could Mean for the Washington Region’s Housing Market, in 7 Charts,” Urban Institute, October 23, 2018, <https://apps.urban.org/features/amazon-hq2-washington-housing-charts/>.
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- <sup>6</sup> Jared Brey, “New Project Aims to Finance Backyard Homes for Section 8 Tenants in Los Angeles,” Next City, May 7, 2019, <https://nextcity.org/daily/entry/new-project-aims-to-finance-backyard-homes-for-section-8-tenants-in-los-ang>.
- <sup>7</sup> “Junior Unit Initiative Program,” City of Napa, accessed November 20, 2020, <https://www.cityofnapa.org/747/Junior-Unit-Initiative-Program>.
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- <sup>10</sup> Laura Bliss, “Portland’s ‘Granny Flats’ Get an Affordable Boost,” CityLab, March 12, 2018, <https://www.bloomberg.com/news/articles/2018-03-12/in-portland-granny-flats-and-adus-get-affordable-boost>.
- <sup>11</sup> “The Backyard Homes Project: An Affordable Housing Initiative,” LA Más, accessed November 20, 2020, <https://www.mas.la/affordable-adus>.
- <sup>12</sup> Author interview with DC housing advocate, January 9, 2019.
- <sup>13</sup> Author interview with Kol Peterson, January 16, 2019.
- <sup>14</sup> Jennifer Molinsky and Whitney Airgood-Obrycki, “Older Adults Increasingly Face Housing Affordability Challenges,” *Housing Perspectives* (blog), Joint Center for Housing Studies of Harvard University, September 21, 2018, <https://www.jchs.harvard.edu/blog/older-adults-increasingly-face-housing-affordability-challenges>.
- <sup>15</sup> “Demographics—Households,” City of Alexandria, accessed November 18, 2020, <https://www.alexandriava.gov/planning/statistics/default.aspx?id=106273>.
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- <sup>17</sup> Martin John Brown, “Are ADUs Green Housing?” Accessory Dwellings, July 9, 2014, <https://accessorydwellings.org/2014/07/09/are-adus-green-housing/>.

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