

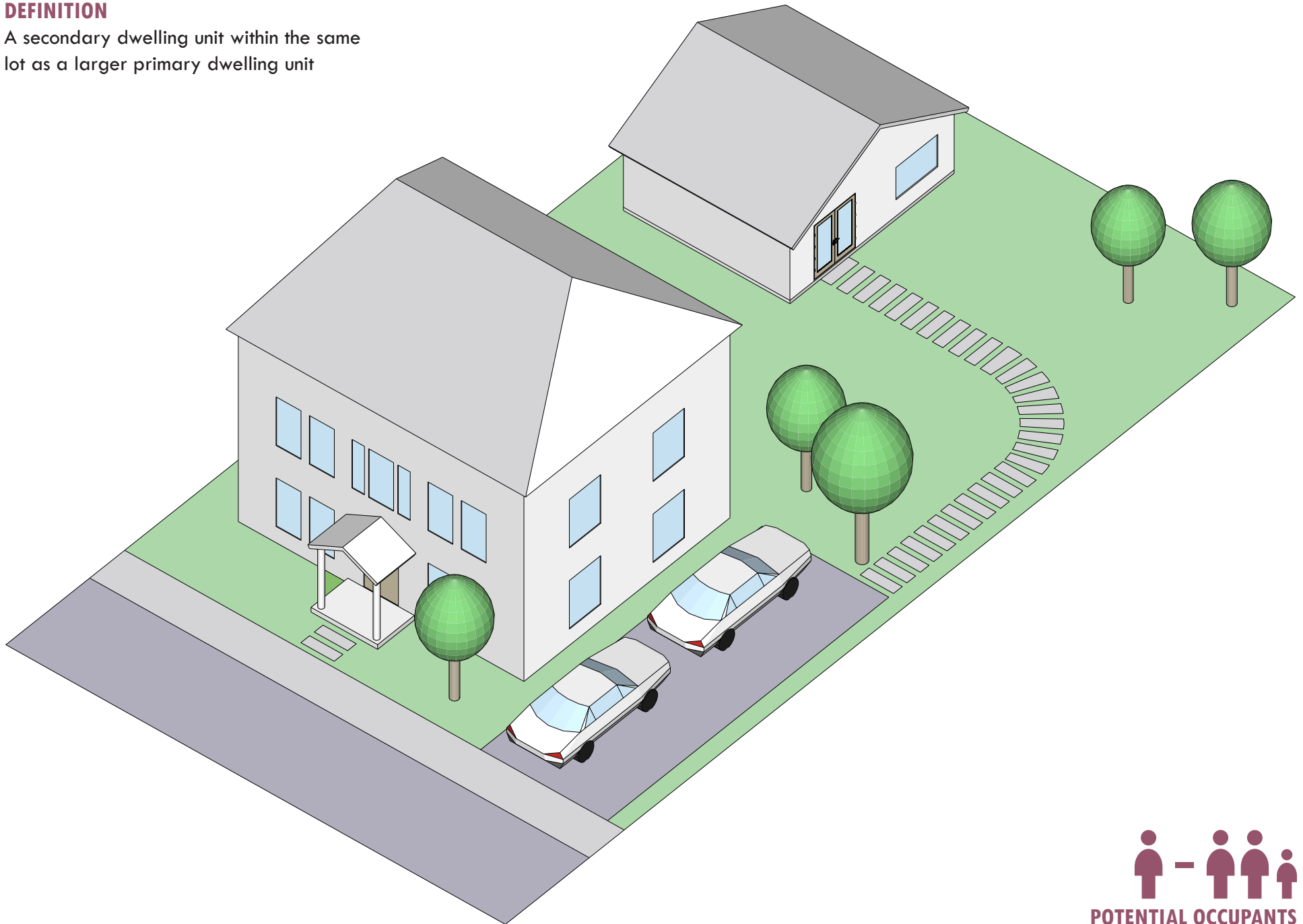


DETACHED ACCESSORY DWELLING UNIT

Photo via [Accessory Dwellings](#)

DEFINITION

A secondary dwelling unit within the same lot as a larger primary dwelling unit



POTENTIAL OCCUPANTS

One-to three-person households



Photo via [Hammer and Hand](#)



Photo via [TD Custom Construction](#)



Photo via [Building an ADU](#)

OVERVIEW + HISTORY

Accessory Dwelling Units (ADUs), commonly known as “granny flats,” “carriage houses,” or “in-law apartments,” were prevalent before World War II throughout American towns and cities, serving as an attached or detached secondary dwelling for in-laws, smaller households, and house workers. Following the end of WWII and the move towards single-family, low-density suburbanization and increased zoning restrictions, ADUs lost popularity or were zoned out of existence. Beginning in the 1970s, a handful of municipalities began to write ADUs back into zoning. Currently, ADUs are built and lived-in legally and illegally, especially in urban areas with high housing demand. Certain cities and towns have begun to see ADUs are solution to high housing costs that prevent younger households from purchasing a house and empty nesters from downsizing their living arrangements.

Per building code regulations, for an ADU to serve as a household’s main living area, there must be a bathroom, kitchen, and bedroom that is independent from the primary dwelling unit. ADUs come in four main types: carve-out or conversion of an existing living area within the primary dwelling unit, finishing an existing basement or attic within the primary dwelling unit, adding to an existing structure such as a garage, and building a new free-standing structure on site. This report focuses on the latter. Nationally, Oregon and California are at the forefront of creating flexible zoning and incentives to increase the supply of ADUs.

FOUND IN

Massachusetts

Barnstable, MA
Cambridge, MA
Lexington, MA
Newton, MA
Orleans, MA
Wellfleet, MA

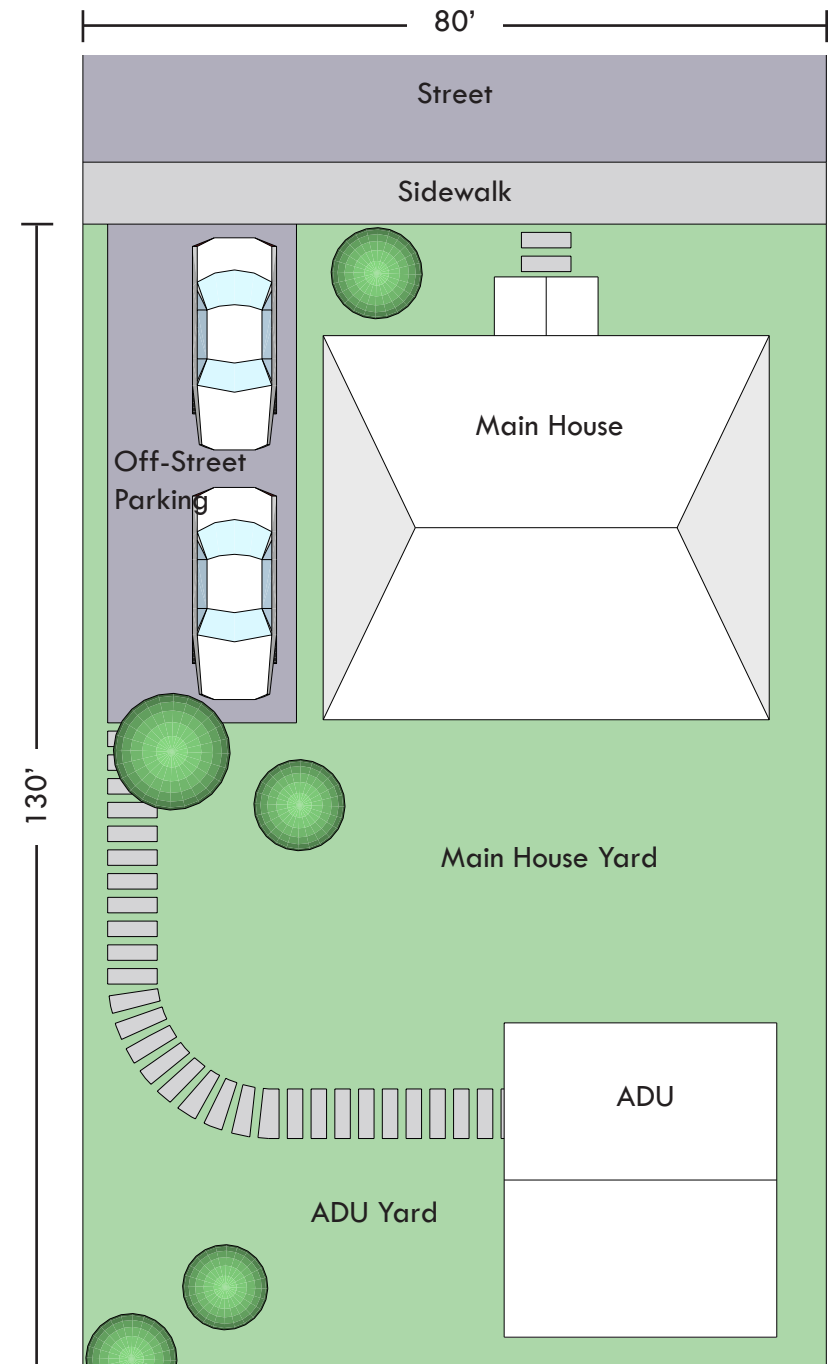
Nationwide

Austin, TX
Boulder, CO
Los Angeles, CA
Minneapolis, MN
Portland, OR
Santa Cruz, CA

GENERAL LAYOUT

Total SF	250 - 1,200 sf or 30% - 40% of primary DU
Lot Size	10,000 sf (approx. 1/4 acre), but depends on town's ADU zoning
Setbacks	6' - 10' from primary DU Respects other zoning setbacks
Unit Size	<p>Kitchen W: 8' L: 12'</p> <p>Bathroom W: 5' L: 8'</p> <p>Living Room W: 12' L: 18'</p> <p>Bedroom (can be lofted) W: 12' L: 18'</p>

SIT PLAN LAYOUT

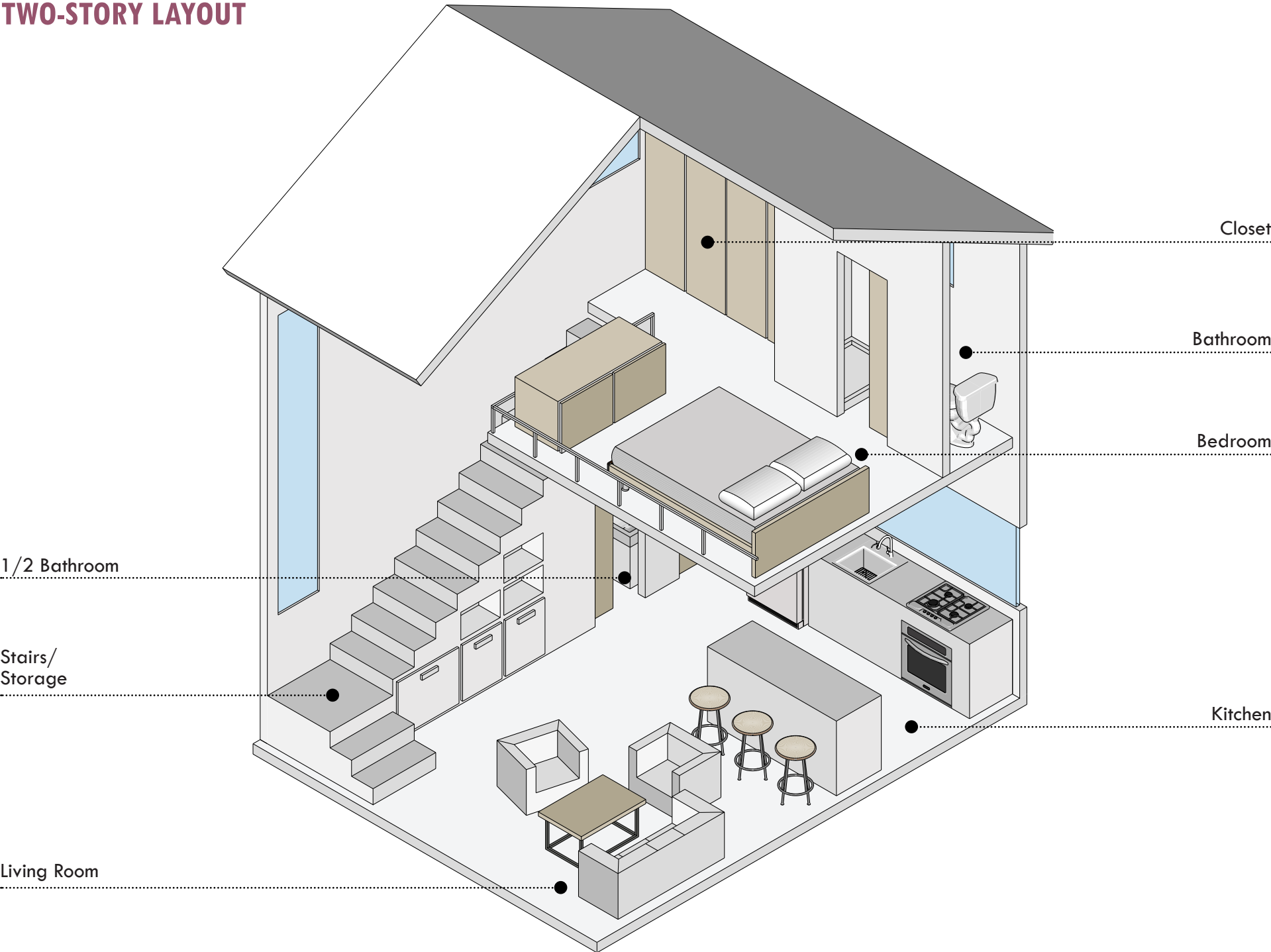


TWO-STORY LAYOUT

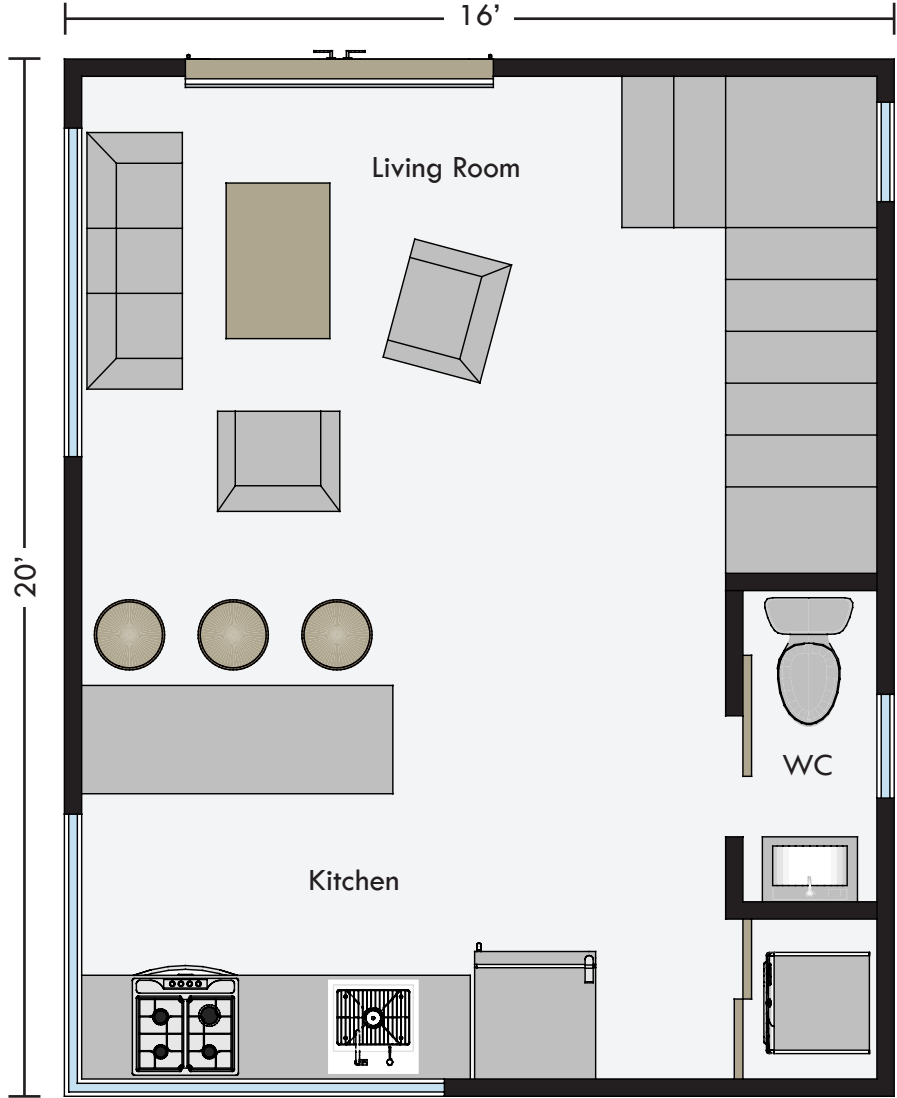


Photo via [Propel Studio](#)

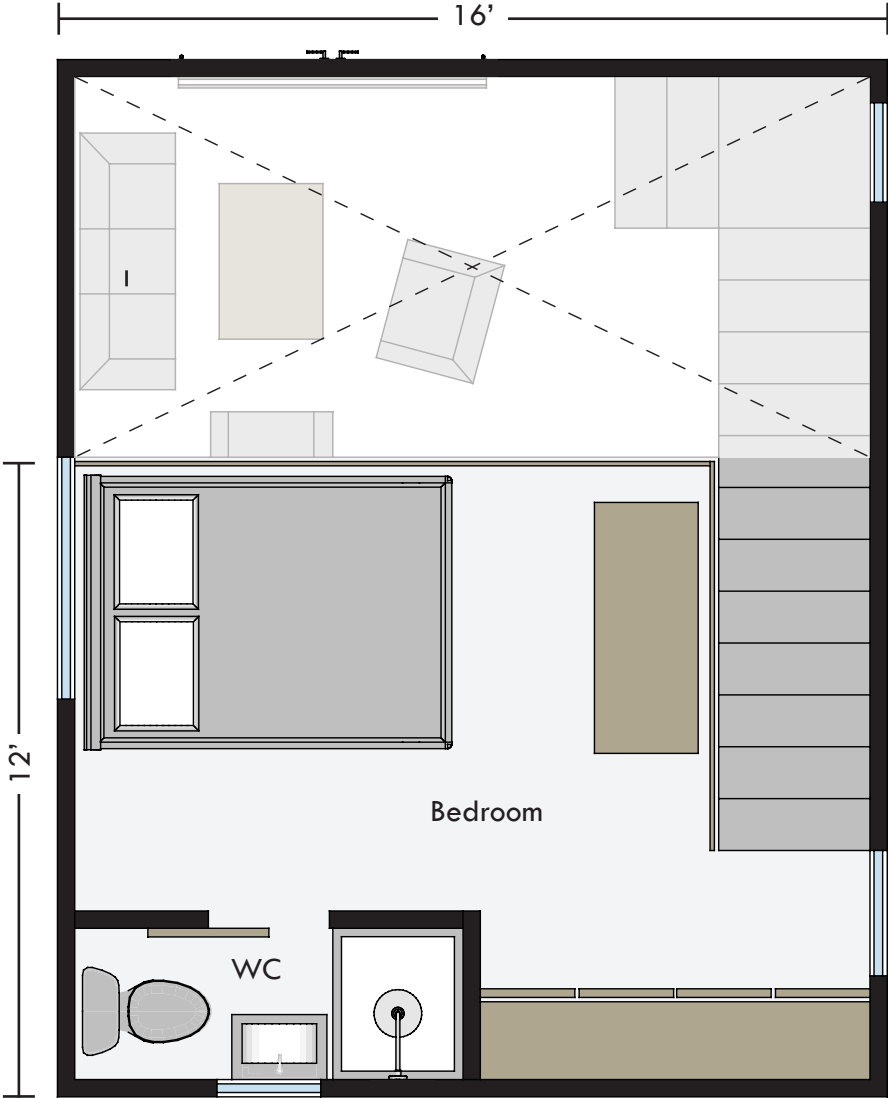
TWO-STORY LAYOUT



TWO-STORY LAYOUT



FIRST FLOOR



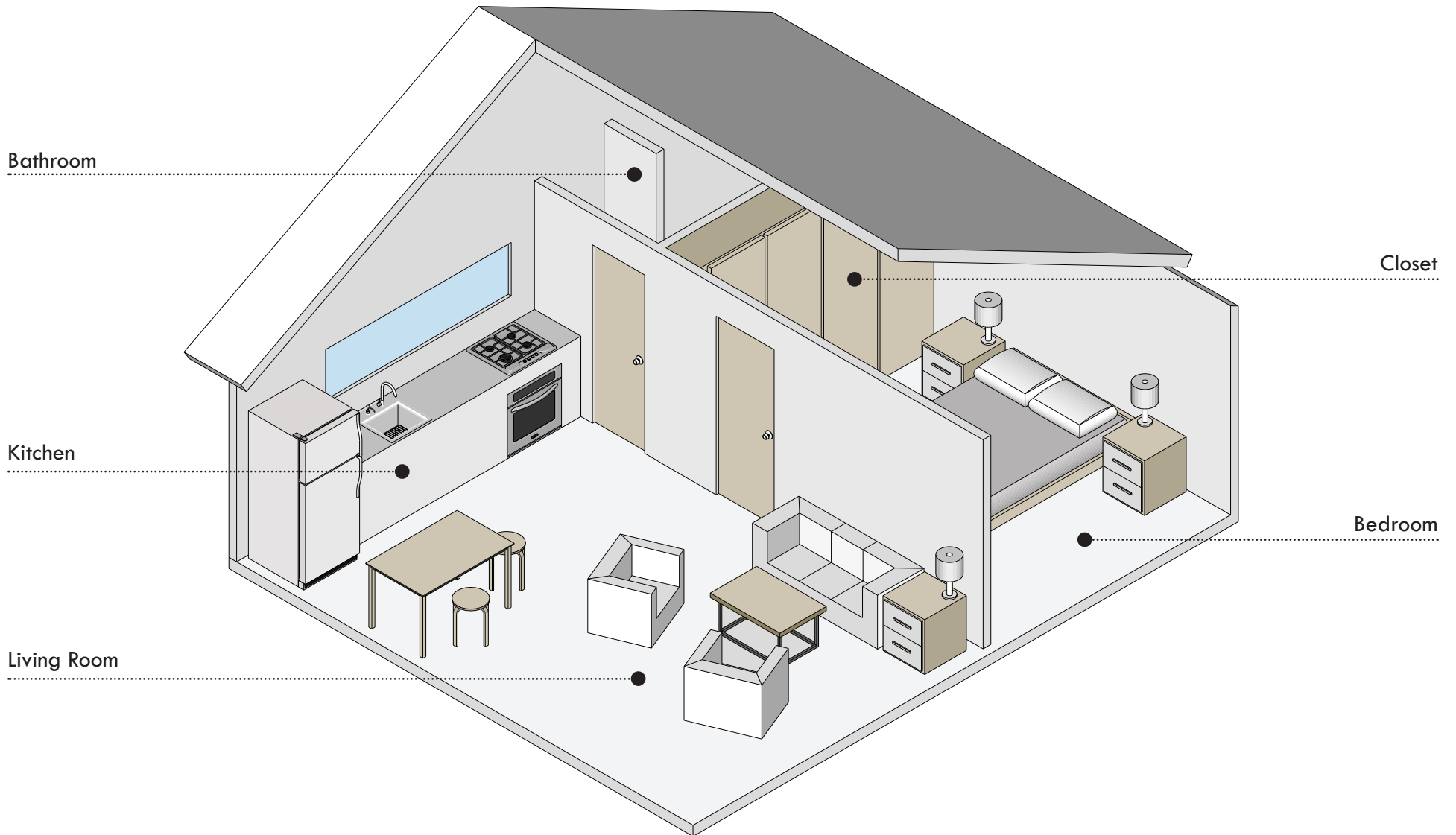
SECOND FLOOR

ONE-STORY LAYOUT



Photo via [Hammer and Hand](#)

ONE-STORY LAYOUT



ONE-STORY LAYOUT



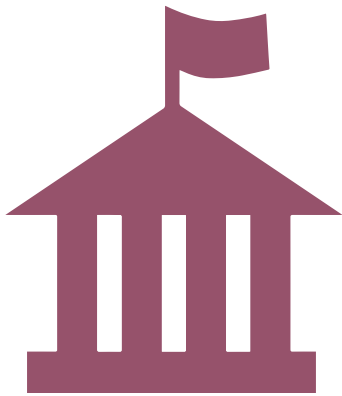


Photo via [Jack Barnes Architect](#)

BARRIERS

There are several barriers to building the supply of detached accessory dwelling units, including regulatory, infrastructural, fiscal, financial, and educational. The main regulatory barriers are zoning bylaws that completely ban or are highly restrictive of ADUs, as well as code compliance. Fiscal barriers include permitting fees and the capacity of the town's water and sewer system. Homeowners interested in building an ADU can find it difficult to finance the permitting and construction, limiting the number of households able to take advantage of ADU bylaws. Finally, neighbors and community members may be fearful of ADU impacts on schools, traffic, and neighborhood character. Many communities have overcome these barriers to adopt ADU-friendly policies.

BARRIERS BY STAKEHOLDER



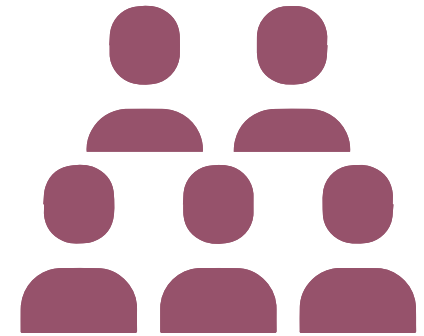
TOWN OFFICIALS

- Zoning Bylaws
- Permitting Fees
- Water + Sewer Constraints
- Building Code
- Health Code
- Fire Safety



HOMEOWNERS

- Zoning Bylaws
- Permitting Fees
- High Construction Costs
- Inadequate Building Experience
- Lack of Lending Programs
- Tax Increases



COMMUNITY CONCERNS

- Neighborhood Character
- School Capacity
- Traffic

BARRIERS FOR TOWN OFFICIALS

ZONING + INFRASTRUCTURE

Approving an ADU bylaw, pricing permitting fees, managing water and sewer connections, and ensuring units abide by building codes are some of the greatest challenges facing town officials interested in ADUs.

Fees for construction permits, as well as sewer and water connections, should be responsive to the smaller size of ADUs compared to typical single-family houses.



ZONING

The first hurdle communities have to overcome to become ADU-friendly is adding an ADU bylaw to the zoning, or amending existing ADU bylaws that may be too restrictive. In the Commonwealth, this process is more challenging due to Town Meeting form of governance employed in many smaller communities, which requires a 2/3rds majority for approval of any zoning change. Town officials will find that building pro-ADU coalitions and educating concerned community members is essential for approving progressive ADU bylaws.



WATER + SEWER

By design, ADUs are not a great burden on a town's existing water and sewer capacity due to their small size and their occupancy limits. In most cases, the primary dwelling unit and the ADU may use a common water supply following a review from the proper inspection authority. Similarly, ADUs can use a common sewer line without additional fees as long as they abide by the maximum allowed connections. In California, detached ADUs require separate utility connections for water, gas, and sewer, as it can be more difficult for them to tap into the existing primary dwelling unit's connections.



CODES

Like any other dwelling structure, ADUs need to meet all the codes required by law. Building codes include the International Building Code as well as any state and local building requirements. Health and fire codes also need to be met, although specific requirements may be waived depending on the number of ADU occupants. Usually, two means of egress are required, as well as a sprinkler system and smoke and carbon monoxide alarms.



FEES

Building and connection fees for ADUs should befit the small size and low impact of the typology. In many cases, permit fees are attached to the estimated costs of construction or to the ADU's square footage. Utility connection fees are usually charged only if the ADU can be shown to have a significant impact on the existing utility connections. In Portland, OR, water service charges are only necessary when the size of the existing water or sewer line needs to be changed. In Berkeley, CA, ADUs are not considered new residential units for the purposes of calculating water and sewer fees.

PROJECT PARTNER TOWNS: ZONING

Current zoning in the 5 project partner towns varies in how it regulates ADUs. The chart below provides an analysis of the restrictions homeowners face when seeking a permit for an ADU. Stoughton has the most restrictive zoning bylaw which disallows ADUs entirely. The bylaws in Foxborough, Medfield, Medway, and Sherborn require a special permit for building an ADU, and only allow one ADU per lot. Only Medfield allows building an ADU for non-family members, but restricts ADUs to houses built prior to 1938, limiting the number of homeowners that can add an ADU.

	FOXBOROUGH	MEDFIELD	MEDWAY	SHERBORN	STOUGHTON
Zoning	Accessory Apartments	Accessory Dwelling Unit	Accessory Family Dwelling unit	Accessory Apartments	NA
Year Updated	2014	2014	2016	2018	NA
Forbids ADUs					X
Special Permit	X ¹	X	X	X	
1 ADU per Lot	X	X	X	X	
Off-Street Parking Required	X ²	X ⁴	X		
Restricted to Family Members	X	X	X ⁷		
Owner Occupancy Required	X	X	X	X	
Matching Exterior to Primary DU	X	X	X		
Must Be Attached	X	X			
Size Restrictions	X ³	X ⁵	X ⁸	X ¹⁰	
Yard Dimension Requirements	X				
Year Built Restrictions		X ⁶		X ¹¹	
Max. Bedroom Restrictions			X ⁹	X ¹²	
	¹ Allowed by right in R-15 and GB, allowed by special permit in R-40 and NB ² Adequate parking for 2 vehicles ³ 850 sf	⁴ 1 per bedroom ⁵ Max. 10% of existing floor area ⁶ Must have been built prior to 1938	⁷ Or caregiver ⁸ 800sf ⁹ 1 max.	¹⁰ 1,200sf or 30% of primary DU ground floor area ¹¹ Must have been built prior to 2018 ¹² Up to 3 people	

ZONING CAN LIMIT HOMEOWNERS' ABILITY TO ADD AN ADU THROUGH REQUIREMENTS FOR PERMITTING, OFF-STREET PARKING, SETBACKS, OCCUPANCY BY FAMILY MEMBERS, HOMEOWNER OCCUPANCY, AND THE SIZE OF LOTS AND AGE OF HOUSES THAT CAN HAVE AN ADU.

**PROGRESSIVE DADU BYLAWS
TEND TO LIMIT RESTRICTIONS ON
FAMILY RELATIONS, RENTAL
OPPORTUNITIES, PARKING
REQUIREMENTS,
AND
HOMEOWNER OCCUPANCY.**

PROGRESSIVE DADU ZONING BYLAWS + ORDINANCES

	NEWTON, MA	NORTHAMPTON, MA	LEXINGTON, MA	READING, MA	AUSTIN, TX	PORTLAND, OR	CALIFORNIA
Zoning	Accessory Apartments	Accessory Apartments	Accessory Apartments	Accessory Apartments	Accessory Dwelling Units	Accessory Dwelling Units	AB 2299 + SB1069
Year Updated	2017	1999	2016	2017	2015	2016	2016
By Right or Special Permit	Special Permit	Special Permit	Special Permit	Special Permit	By Right	By Right	By Right
ADU Size (sf)	250-1,200 or 40% of primary DU (whichever is lower)	900	1,000	1,000 or 33% of primary DU (whichever is lower)	1,100 or FAR of 0.15 (whichever is lower)	800 or 75% of primary DU (whichever is lower)	1,200 or 30% of primary DU (whichever is lower)
Setbacks (ft)	6 from primary DU, meet zoning requirements	Same as primary unit		Same as primary unit	10 from primary structure	40 from front lot line	
Height (ft)	22 w/ pitched roof, or 18				30	20	
Floors	1.5				2		
Parking	No additional parking	1 additional parking space	No additional parking	1 additional parking space	1 additional parking space	No additional parking	
Design	Exterior must be in keeping with primary unit + neighborhood		SPGA will determine exterior appearance compatibility with primary DU + neighborhood			Exterior must be the same or visually match primary unit	
Building Code		Must conform to all applicable health, building, + other codes				Regulated by state building code	
Utilities				Must be connected to public water and sanitary sewer systems		Separate water service, connect to existing sanitary system	
Homeowner Occupancy	Homeowner must occupy one unit		Homeowner must occupy one unit, can be absent for up to 2 years	Homeowner must occupy one unit			
ADU Occupancy	Total allowed for a household	Max. 3 in ADU	Max. 2 bedrooms	Max. 3 in ADU Max. 2 bedrooms		Total allowed for a household	
Rental	Min. 30 days				Short-term rental for 30 days per year	Allowed for short-term rental	
Re-Sale	Notify Commissioner of Inspectional Services	Notarized letter to Building Commissioner					
Additional Regulations	Principal unit must have been built 4 years prior	Cannot be enlarged				Septic tank must be decommissioned if it's 10 ft from ADU	Allowed for existing + new buildings

BARRIERS FOR HOMEOWNERS

Restrictive zoning, high permitting fees, lack of financing, and potential tax increases are some of the greatest hurdles that homeowners have to overcome when adding an ADU. In addition to zoning restrictions and permitting fees, financing an ADU can be difficult for homeowners, as most banks and lending agencies do not provide loans for ADUs, requiring homeowners paying high out-of-pocket costs. Homeowners may have to spend anywhere from \$90,000 for an internal ADU to \$200,000 for a detached unit.¹ In addition, the costs of contracting out architecture and labor can be high. Furthermore, homeowners may see their taxes rise if their entire property is reassessed.

Some municipalities offer forgivable loans or grants to homeowners seeking to build ADUs. The ADU Loan Program of Santa Cruz, CA, provides loans of up to \$100,000 at an interest rate of 4.5% to homeowners building an ADU through the Santa Cruz Credit Union. To qualify for the loan, the homeowner agrees to rent out the unit to households with an income of less than 80% of the AMI for at least 15 years. In Portland, OR, several banks and credit unions offer home equity loans for ADU construction. The Portland Housing Bureau is piloting an \$80,000 loan with no interest for homeowners willing to convert their basements to a dwelling unit in exchange for prohibiting their use as short term rentals.

To address concerns and questions related to designing and building an ADU, the City of Portland, OR, has online resources for homeowners, including sample site and building plans, as well as contact information for City agencies that can help with the process. Californian cities such as Santa Cruz, San Francisco, and Los Angeles, have also added toolkits for interested homeowners that explain ADU permitting, financing, design, and development processes. Small design and construction firms specializing in ADUs are another resource. To limit additional taxes for homeowners with an ADU, tax laws can categorize ADUs as property improvements rather than as an additional housing unit. In Oregon, the Department of Revenue issued a State-wide ruling that assesses ADUs for their value added (improvement), and not as a rezoned property (ADU overlay).

FINANCING AN ADU



MORTGAGE

Possible only when an ADU is being constructed at the same time that the primary house is being built or purchased.



HOME EQUITY

'Second mortgage' available after homeowner has built enough equity into primary house.



PERSONAL FUNDS

Personal line of credit (high interest, reserved for good credit scores + income) or cash on hand from savings or income.



GOVERNMENT ASSISTANCE

ADU financing for deed-restricted affordable units.

COMMUNITY CONCERNS

Neighboring homeowners and other community members may be fearful of how ADU-friendly policies can affect the value of their homes, the character of their neighborhood, public infrastructure capacity, traffic, and school capacity. It is important for town officials and ADU proponents to conduct outreach and educate community members in order to address real concerns and correct misconceptions. There is no conclusive evidence that ADUs negatively affect property values, on the contrary, ADUs can increase surrounding property values.¹ Zoning bylaws can also be crafted to ensure the design of ADUs is in keeping with the surrounding neighborhood, the ADU size and setbacks are appropriate, and the ADU occupancy regulated through the number of allowed bedrooms or occupancy size limits.

The small size and limited occupancy of ADUs makes their impact on public infrastructure minimal, especially when compared to large single-family homes or multifamily dwellings.² This also holds true for increased traffic from ADUs. To mitigate traffic and infrastructure concerns, towns and community groups could negotiate a Community Benefits Agreement (CBA) with homeowners building ADU units to alleviate any infrastructure constraints. However, given the minimal impact of this housing typology and the high building cost they pose for homeowners, such a strategy may not be necessary. In Berkeley, CA, city officials base ADU permitting on the neighborhood's accessibility to public transit and the capacity of public infrastructure in order to mitigate negative impacts. Finally, ADUs impact on schools is minimal, as ADUs are overwhelmingly occupied by households without school-age children.³

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- 1 Chapple, Karen. Studying the Benefits of Accessory Dwelling Units. UC Berkeley. <https://frameworks.ced.berkeley.edu/2011/accessory-dwelling-units/>
City of Reno. Accessory Dwelling Units, Neighborhood Advisory Board Presentation. <https://www.reno.gov/home/showdocument?id=73423>
Hulse, Travis M. Use of Accessory Dwelling Units as a Housing Strategy: A Case Study of Lawrence, Kansas. University of Nebraska - Lincoln. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1038&context=arch_crp_theses
ULI. Accessory Dwelling Units: Friendly Density or Neighborhood Foe? <https://triangle.uli.org/news/adus/>
 - 2 The impact on public infrastructure of 100 ADUs with two-person occupancy is less than or equal to the impact of 10 single-family homes with 5 household members per unit or a 12 unit multifamily building with 4 household members in each unit.
 - 3 Garcia, David. ADU Update: Early Lessons and Impacts of California's State and Local Policy Changes. UC Berkeley. http://turnercenter.berkeley.edu/uploads/ADU_Update_Brief_December_2017_.pdf



Photo via [Accessory Dwellings](#)

**SUCCESSFUL DADU BYLAWS REQUIRE
ONGOING COMMUNICATION
AND COMPROMISE
WITH CONCERNED COMMUNITY
MEMBERS, AS WELL AS
SUPPORT FOR INTERESTED
HOMEOWNERS.**

ACCESSORY APARTMENT NEWTON, MA

BASIC FACTS

POPULATION	88,994 (2017 ACS)
HOUSEHOLDS	30,898 (2012-16 ACS)
ZONING:	ADUs allowed for all single- and two-family detached houses by special permit
SIZE:	250 - 1,200 sf or 40% of primary DU
BUILDING HEIGHT:	22' (pitched roof) or 18'
FLOORS:	1.5
SETBACKS:	6' from primary DU
PARKING:	No additional parking required
DESIGN:	Must be in keeping with primary dwelling unit + neighborhood
OCCUPANCY:	Homeowner occupy in one unit
RENT:	Min. 30 days

OVERVIEW

In 2017, the City of Newton passed one of the most progressive accessory dwelling unit (ADU) bylaws in the Commonwealth. It allows attached ADUs by right and detached ADUs by special permit in all single and two-family lots. Newton had first allowed ADUs in 1991, but virtually none were built due to the restrictiveness of the ordinance. The previous ordinance tied ADUs to lot sizes that were larger than what was common in the city, and as a result only homeowners with large lots were allowed to build ADUs. As a result, eligible homeowners tended to be wealthier individuals who were not inclined to build ADUs. City officials were also aware that anywhere from 600 to 1,000 illegal ADUs were scattered around the community, posing serious health and fire risks.

SUCCESS FACTORS

According to interviewed City staff, one of the main factors of success was the interest of City Council members, who were willing to work together in order to pass a new ordinance. The City also engaged with supporters to build a coalition that would reach out to the City Council and the media. The coalition included the Council on Aging, which was interested in the ordinance's connection to aging in place; environmental groups supportive of ADUs as a smart growth strategy; and housing advocates interested in increasing the city's housing supply. Additionally, the City carried out public meetings to identify other supporters that were willing to speak in support during public hearings.

The City also had to compromise with opposing factions in order to get the ordinance approved. Compromises included requiring a special permit for detached accessory dwelling units, allowing the maximum ADU size to be 1,000 square feet instead of 900 square feet to satisfy seniors who wanted a larger unit to move into, and limiting the total number of people in the primary and accessory units to that allowed in the primary dwelling unit (one family and 3 unrelated individuals) to avoid overcrowding.

REGULATIONS

Despite the improved ADU ordinance, the City of Newton believes the number of ADUs will not dramatically increase for a number of reasons. First, the cost of building an ADU is high, ranging from an estimated \$90,000 for an internal unit to \$200,000 for an external unit, according to Newton's building commissioner. The high investment, coupled with the lack of available financing, will disincentivize many homeowners from building a unit. Additionally, the ordinance restricts ADUs from being used as a short-term rental unit for less than 30 days, limiting homeowners who may be interested in generating rental income from the ADU. Maneuvering the special permitting process for a detached ADU may also deter households from going through the lengthy, costly process. Finally, many homeowners will find the construction process overwhelming, especially those with little to no background in design and development. This is confirmed by building data: In the year following the passing of the ordinance, only 6 applications for ADUs were filed.

ACCESSORY APARTMENT LEXINGTON, MA

BASIC FACTS

POPULATION	32,936 (2012-16 ACS)
HOUSEHOLDS	11,602 (2012-16 ACS)
ZONING:	ADUs allowed for all single-family houses
by	special permit
SIZE:	Max. 1,000 sf
BUILDING HEIGHT:	25'-30' depending on district
BEDROOMS:	2
SETBACKS:	6' from primary DU
PARKING:	No additional parking required
DESIGN:	SPGA determines if exterior appearance is compatible with primary DU and neighboring dwellings
OCCUPANT:	Homeowner must occupy one unit, can be absent and rent both units for up to 2 years

OVERVIEW

The Town of Lexington passed its current accessory apartment bylaw in Spring of 2016 through Town Meeting. Prior to the most recent iteration, Lexington had a 15-year-old accessory apartment bylaw with lot and occupancy requirements that made it unusable by most homeowners. Following a year of community engagement and bylaw design, the Planning Board successfully proposed a new ADU bylaw that was approved at Town Meeting.

SUCCESS FACTORS

A year prior to introducing the bylaw, the Planning Board held an informal, open-ended community forum on residential policy. Community members freely commented on the challenges, opportunities, and successes of the existing residential zoning, as well as on what other towns were doing. The main themes that surfaced from the forum were the homogenous housing supply, lack of options for empty nesters, and absence of housing for younger households. Later that year, the Planning Board held a second forum where they showcased possible changes to the zoning that would address the main concerns of community members. Some of the proposed changes included two-family houses, ADUs, modified height of structures, and neighborhood conservation districts.

The Planning Board presented the proposed residential zoning changes as a package in the 2016 Spring Town Meeting. Although some of the amendments, including two-family housing, were voted down, the accessory apartments bylaw passed.

REGULATIONS

Although Lexington's accessory apartment bylaw is one of the most permissive in the Commonwealth, the Town has not seen an overwhelming number of applications since its approval. Since 2016, a total of 11 units have been permitted. Anecdotal evidence suggests that these units are being built for family members, especially younger residents moving back to Lexington after completing their post-secondary studies.

ACCESSORY DWELLING UNIT PORTLAND, OR

BASIC FACTS

POPULATION	647,805 (2017 ACS)
HOUSEHOLDS	256,432 (2012-16 ACS)
ZONING:	ADUs allowed in all Residential, Commercial, and Central Employment Zones
SIZE:	75% of living area or 800 sf
BUILDING HEIGHT:	20'
SETBACKS:	40'
PARKING:	No additional parking required
DESIGN:	Must match primary dwelling unit
BUILDING CODE:	Abide by state building code
UTILITIES:	Can connect to existing systems or have a separate connection for an additional fee

OVERVIEW

The City of Portland is often hailed as a national leader for accessory dwelling units, and has over 20 years of iterative ADU regulations. The primary objective of ADUs in Portland is to make more efficient use of the existing housing stock and provide a greater mix of housing options, while maintaining overall neighborhood character. In Portland, ADUs can take the form of an existing space conversion (garage, accessory structure, space within a house), an attached addition to an existing building, or a new detached building. Partly due to their progressive regulations, the City has permitted over 2,000 ADUs since 2010.

SUCCESS FACTORS

Portland's first ADU reforms for minimum square footage and owner occupancy requirements were enacted in 1997, but it took further reforms for homeowners to take advantage of the regulations. In 2004, the City allowed ADUs to be built citywide, including in converted garages, and eliminated on-site parking requirements. Then, the City waived system development charges (SDC) for ADUs, which are usually charged for any new construction. After removal of the SDC fees, the number of ADU permits doubled from 2010 to 2014. In 2014, ADUs were officially allowed to function as short-term rentals (STRs). The City Commissioner is now pushing to limit the number of STRs by requiring homeowners building an ADU for STR purpose to pay the SDC fee. Lastly, in 2015 the City once again relaxed the design and setback standards to further incentivize homeowners to add ADUs.

REGULATIONS

Despite Portland's relatively relaxed ADU requirements, the City still has control over a variety of aspects. A detached ADU cannot cover more than 15% of the total lot size and must be set back 40 feet from the front lot line. This ensures that ADUs remain a secondary structure to the main house, both in size and placing. ADUs taller than 15 feet must have exterior finishes, roof, and windows that visually match those of the primary house. Moreover, the total number of residents that can live in both the primary and secondary units is limited to the total allowed for a household.¹

OCCUPANCY

Despite fears of ADUs being used as STRs, anecdotal evidence and data show that most are used for housing family or long-term renters. According to a 2014 survey, 70% of ADUs in Portland are owner-occupied, and only 4% are used as STRs.² In 2016, following increased deregulation of ADUs, there were approximately 1,359 ADUs in the city, of which about 200, or 15%, were used as STRs.³

1 Defined as one or more persons related by blood, marriage, domestic partnership, legal adoption or guardianship, plus no more 5 additional persons

2 Office of Policy Development and Research. *Accessory Dwelling Units*. U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/casestudies/study-09082016.html>

3 Will short term rentals actually reduce long term housing in granny flats? Accessory Dwellings. <https://accessorydwellings.org/2016/04/04/adustr/>