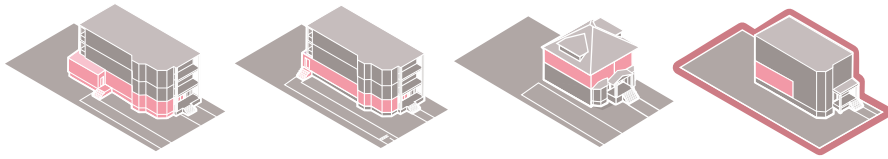


# SMALLER LOTS

*Smaller lots are those where your existing house takes up most of the yard. There may not even be a driveway on the side.*

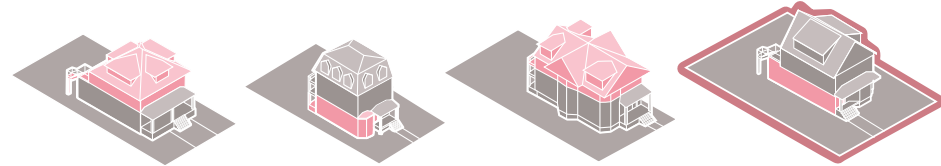




## SPLIT YOUR UNIT

41

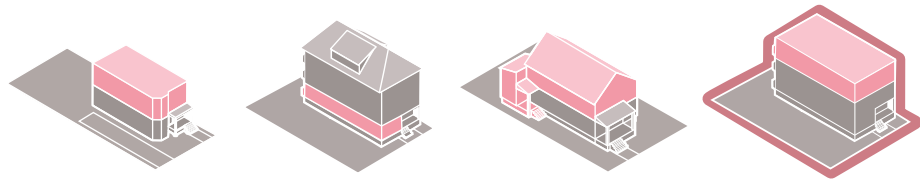
*My lot is small, there is limited space in my home to add an ADU, and I only need a studio or one-bedroom ADU.*



## CONVERT YOUR ATTIC

47

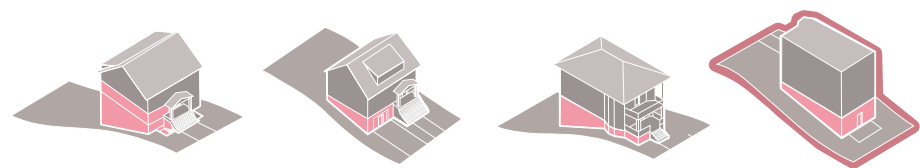
*I have a home with an unfinished attic. I may add an ADU with just one or two bedrooms.*



## ADD ANOTHER FLOOR

55

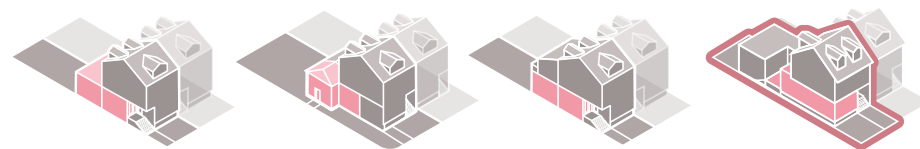
*My lot is small, my home is short, and I want to add an ADU with at least two bedrooms.*



## CONVERT YOUR BASEMENT

61

*I have an unfinished basement that has room for an ADU with good-sized windows on at least one side, and my property is not in a flood-prone area.*



## EXTEND INTO THE REAR YARD

67

*My lot is small, with little to no space on the sides, but has a deep backyard.*



# SPLIT YOUR UNIT

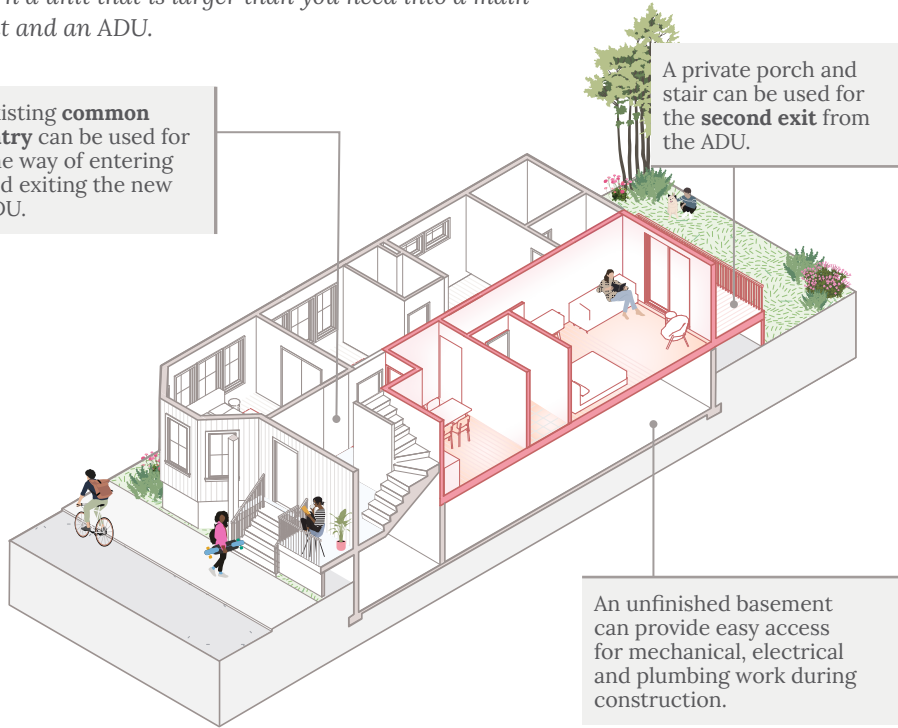


Turn a unit that is larger than you need into a main unit and an ADU.

Existing **common entry** can be used for one way of entering and exiting the new ADU.

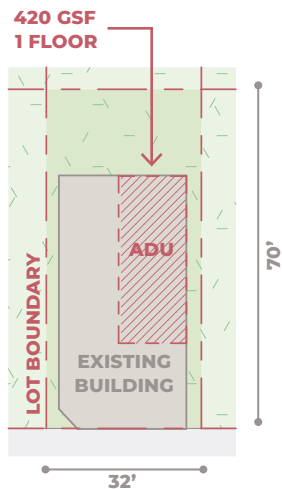
A private porch and stair can be used for the **second exit** from the ADU.

An unfinished basement can provide easy access for mechanical, electrical and plumbing work during construction.

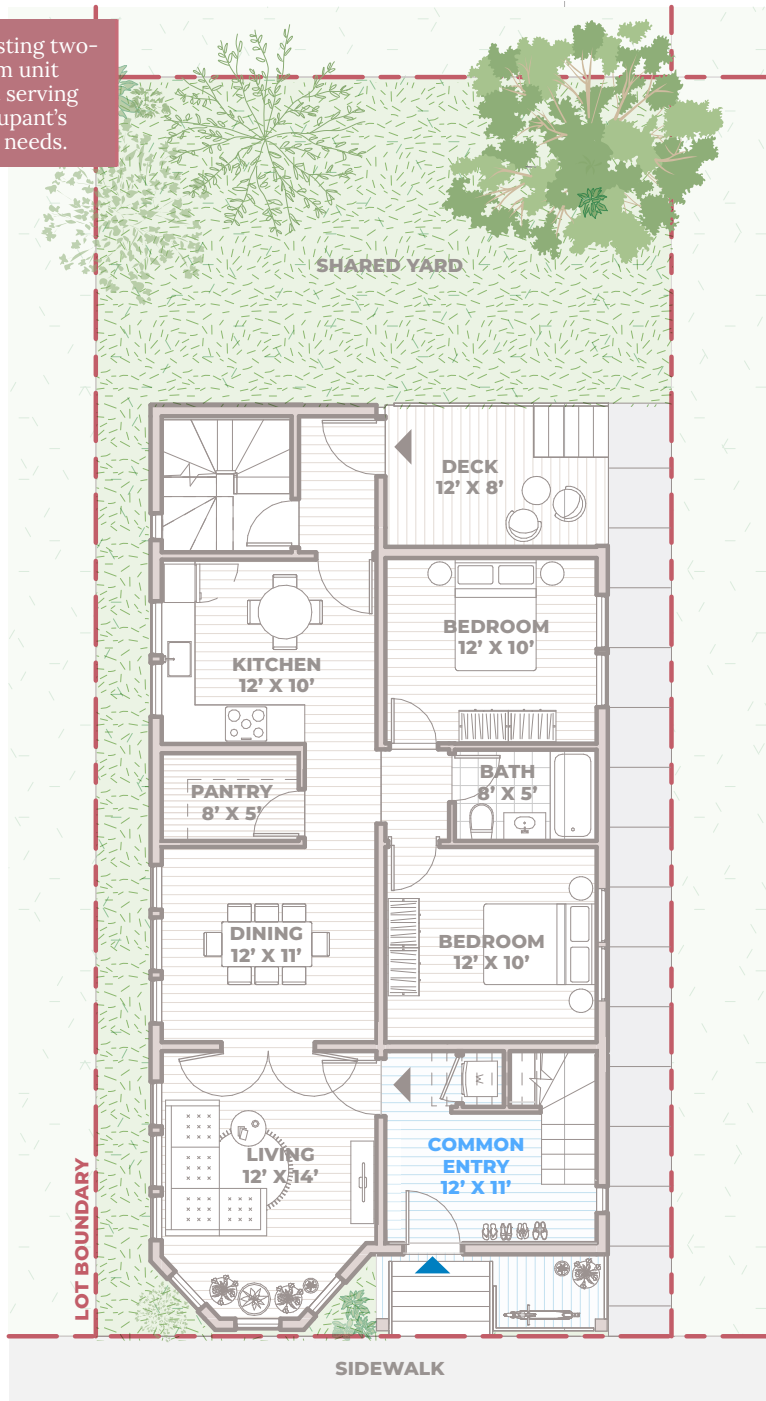


If your unit is too large for your household now, you can split it, converting the extra space into an ADU. A two- or three-bedroom unit can become two smaller units: a one-bedroom unit and a studio ADU for instance. The ADU could be used to host a family member with more privacy, be rented out for income, or be home to a live-in caregiver. This scheme is designed to work well with the typical two- and three-unit houses found throughout Boston, which usually have one two- or three-bedroom unit on each floor.

If the building features an unfinished basement and the new ADU is on the first floor, plumbing and electrical updates can be done in the basement without disturbing units above the ADU.

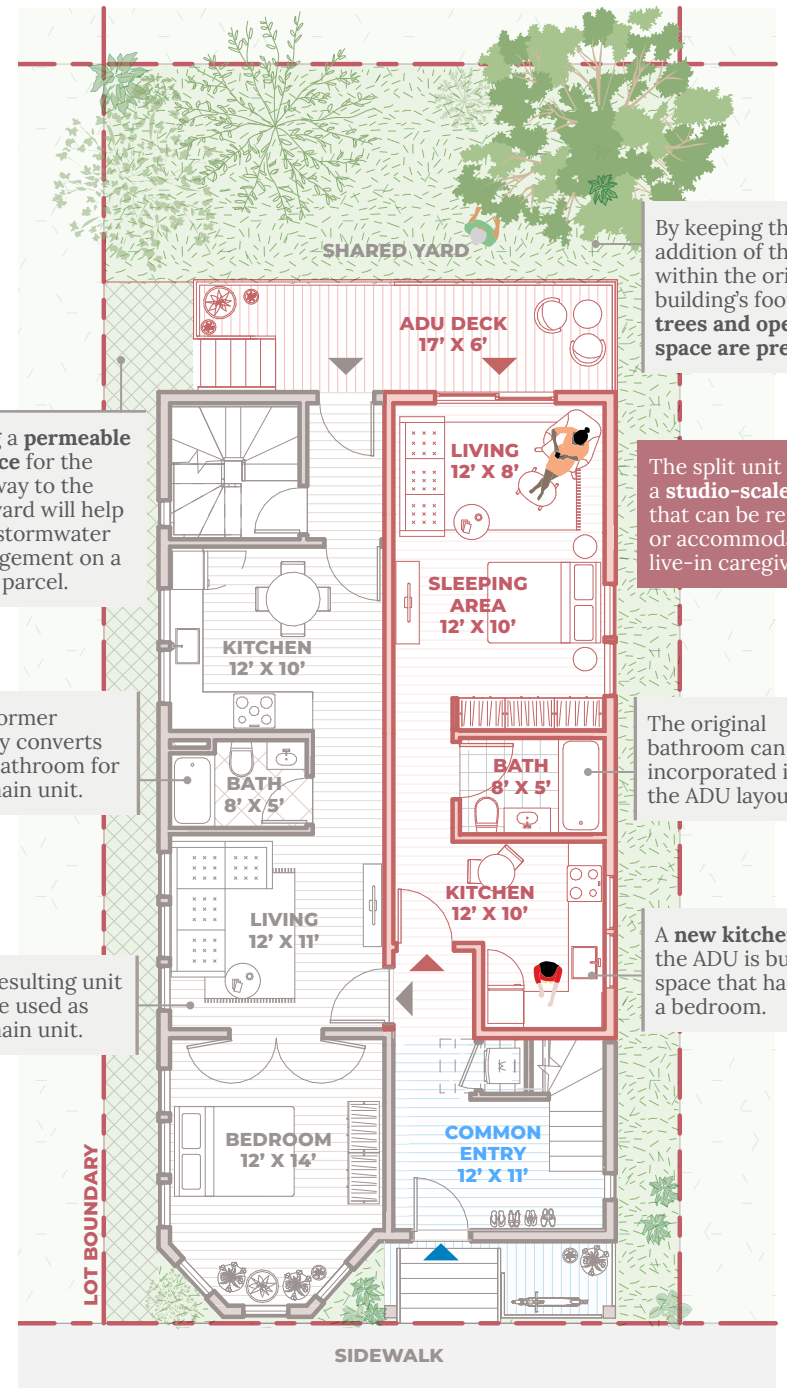


The existing two-bedroom unit was not serving the occupant's current needs.



ORIGINAL FLOOR PLAN WITH 2 BEDROOM UNIT

3/32" = 1'-0"



Using a permeable surface for the walkway to the backyard will help with stormwater management on a small parcel.

The former pantry converts to a bathroom for the main unit.

The resulting unit can be used as the main unit.

By keeping the addition of the ADU within the original building's footprint, trees and open space are preserved.

The split unit now has a studio-scale ADU that can be rented out or accommodate a live-in caregiver.

The original bathroom can be incorporated into the ADU layout.

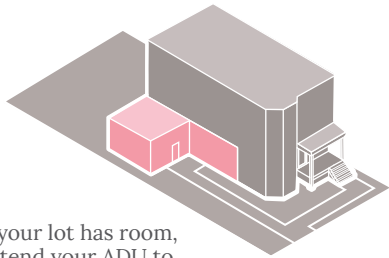
A new kitchen for the ADU is built in space that had been a bedroom.

FLOOR PLAN OF 1 BEDROOM UNIT WITH STUDIO ADU

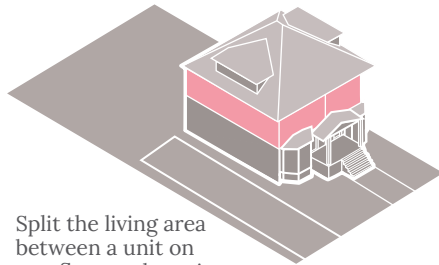
3/32" = 1'-0"



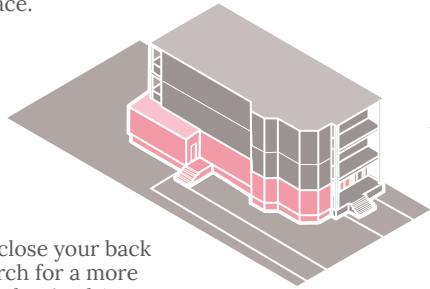
# MORE WAYS TO SPLIT YOUR UNIT



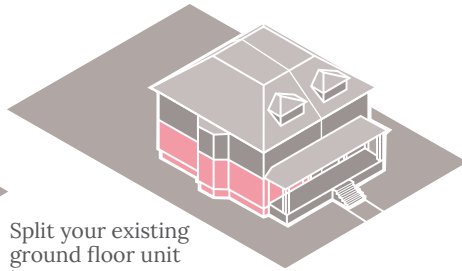
If your lot has room, extend your ADU to the side for additional space.



Split the living area between a unit on one floor and a unit above.



Enclose your back porch for a more ample-sized ADU.



Split your existing ground floor unit into two.

**Different versions of this ADU can be adapted to fit your specific building and lot.** If you have ample space in the backyard, you could accommodate a larger ADU by enclosing the back porch, therefore increasing the available area for the new unit. Alternatively, if you have a larger side yard, you might consider adding a side extension on the first floor, which would provide additional room for a one- or two-bedroom ADU.

The example used for the book illustrates an ADU designed for a typical two- or three-unit house. The concept of splitting your unit can also be applied to other types of buildings. For wider building types, for example, splitting your unit to create an ADU could yield a more spacious design for your ADU. In these cases you could also choose to create a different entrance on the front for the new unit. There are many examples of side-by-side duplexes in Boston that can serve as an inspiration.

The Split Your Unit design shown on the previous spreads is designed to work well with classic stacked duplex and triplex buildings like this example found in Boston's Allston neighborhood.



An existing semi-detached home could also split their living space between a unit on the first floor and a unit on the second floor. In most cases, this would require the addition of a second means of egress for the second floor unit, similar to this historic example found in Somerville.



If your home is wider than usual, like this precedent in Mattapan, then you may consider splitting it and providing a separate entry door for the ADU.



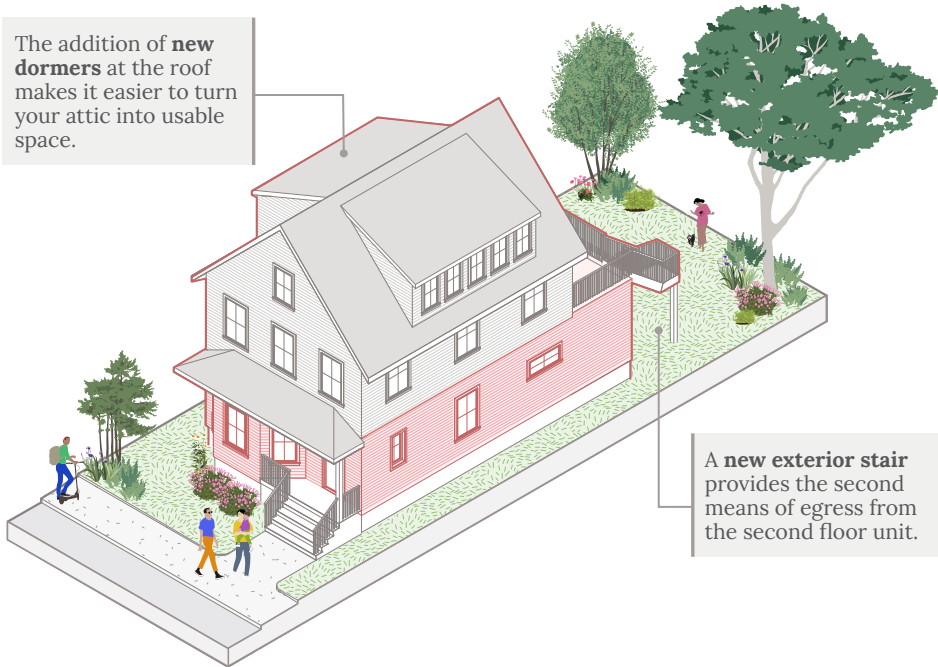


# CONVERT YOUR ATTIC



Design interventions like new dormers and new stairs can turn your attic from storage space into a new ADU, or expand your main unit so you can turn the ground floor into an ADU.

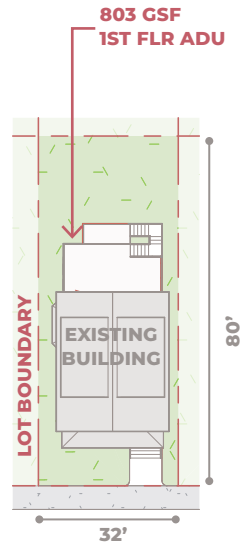
The addition of **new dormers** at the roof makes it easier to turn your attic into usable space.



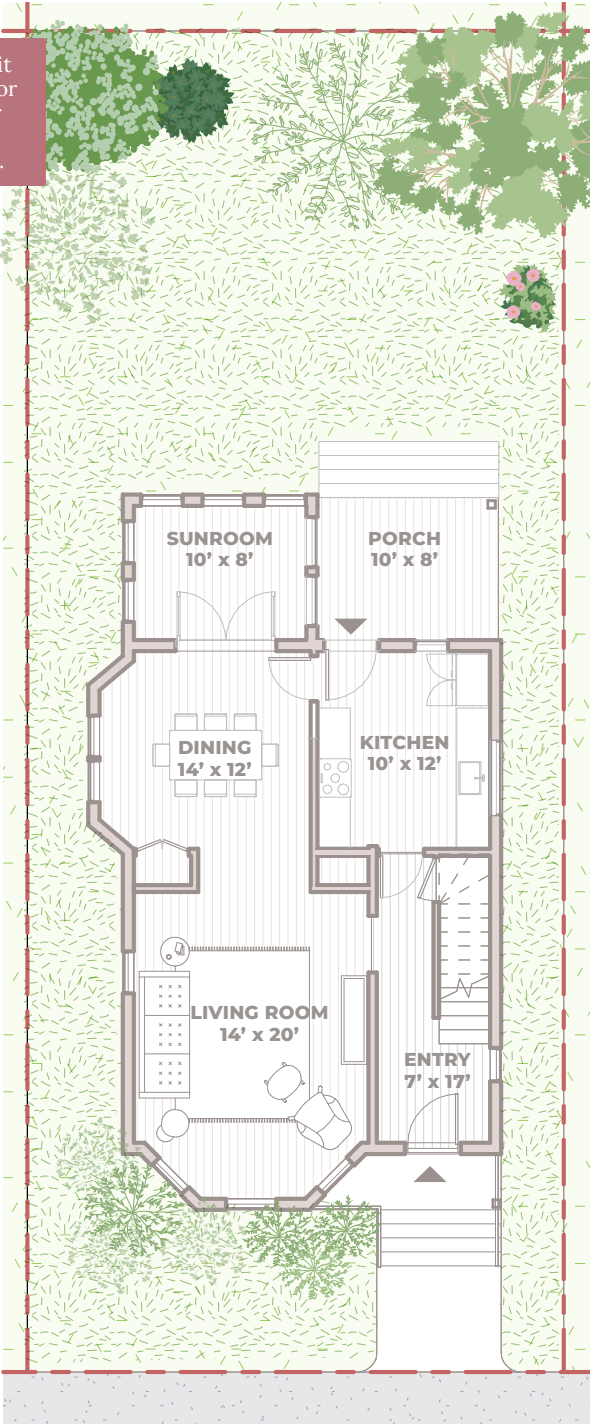
A **new exterior stair** provides the second means of egress from the second floor unit.

If you have an unfinished attic, you can convert it into livable space, which allows you to create an **internal ADU**. In this example, the attic space is added to the main unit, and the first floor is converted into the ADU.

Dormers are designed to preserve the original building's peak roofline, while also creating new living space and windows on the top floor. All units, including the ADU, share a common entrance and have access to shared utilities in the basement. Typically, a second stair will be needed to provide a second means of egress from the upper unit.



The existing unit is now too big for the homeowner and the attic is underutilized.



ORIGINAL FIRST FLOOR PLAN — SINGLE UNIT HOME

3/32" = 1'-0"

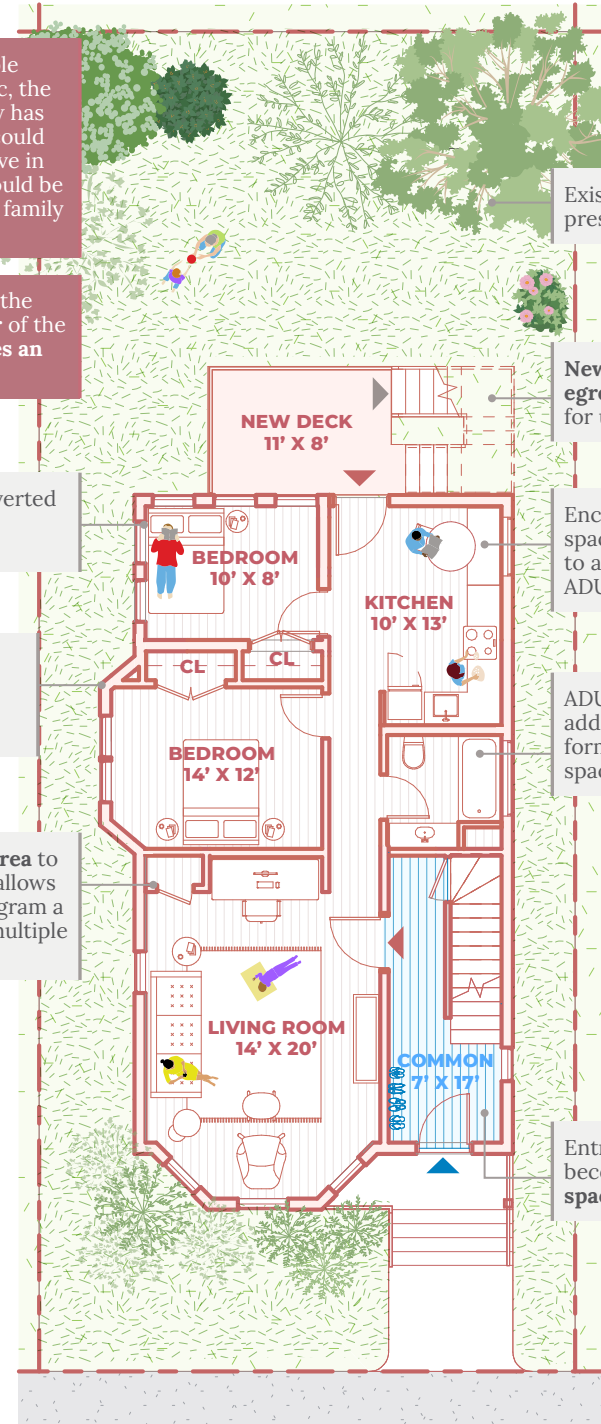
By creating livable space in the attic, the homeowner now has two units. One could be for them to live in and the other could be for a tenant or a family member.

In this example, the **whole first floor** of the building becomes an ADU.

Sunroom is converted to second ADU bedroom.

Dining room is converted to a bedroom in the ADU.

Adding a **work area** to the living room allows residents to program a large room for multiple uses.



Existing trees are preserved.

New exterior egress stair added for upper unit.

Enclosed porch space can be used to accommodate ADU kitchen.

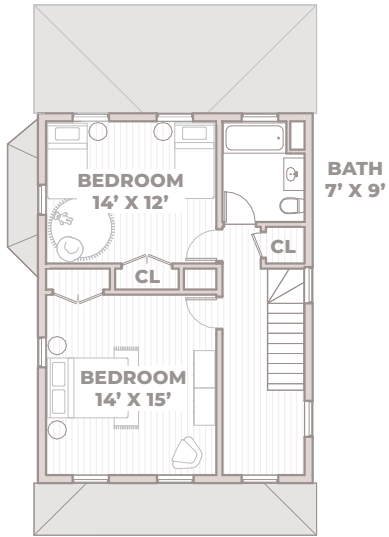
ADU bathroom added in part of former kitchen space.

Entry hall becomes common space.

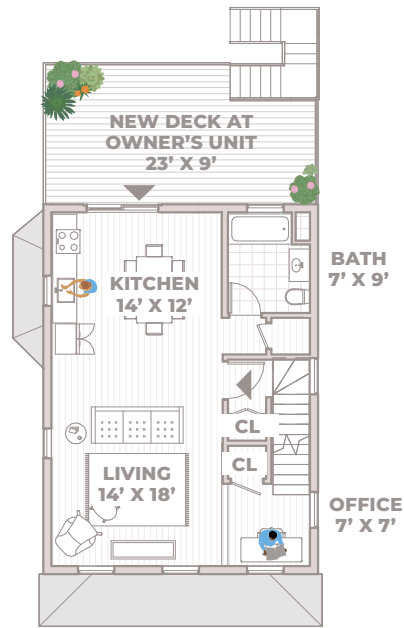
FIRST FLOOR PLAN CONVERTED TO ADU

3/32" = 1'-0"



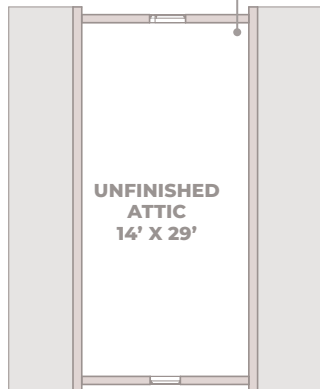


SECOND FLOOR ORIGINAL FLOOR PLAN



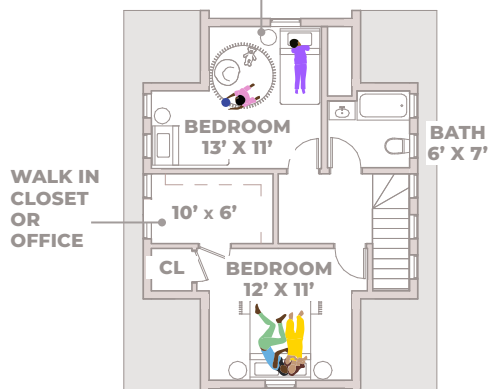
SECOND FLOOR REVISED (MAIN UNIT)

The unfinished attic was underutilized storage space.



THIRD FLOOR ORIGINAL FLOOR PLAN

The homeowner now has a two-story unit with two bedrooms and two bathrooms above an ADU.



THIRD FLOOR REVISED (MAIN UNIT)

1/16" = 1'-0"



New dormers added to create additional light and headroom for the third floor living space.

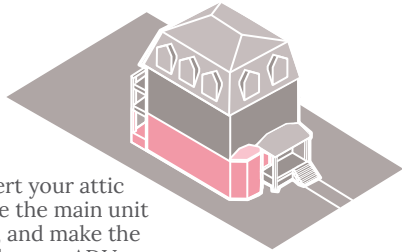
Stairs between levels 2 and 3 are internal to the owner's unit.

Basement can be common space or designated to a specific unit.

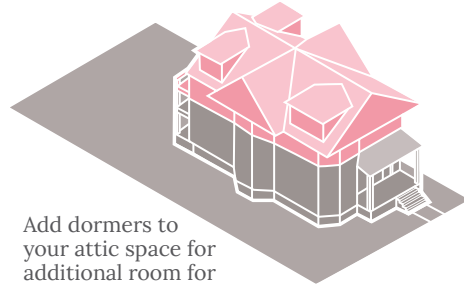
Front hall becomes common entry.



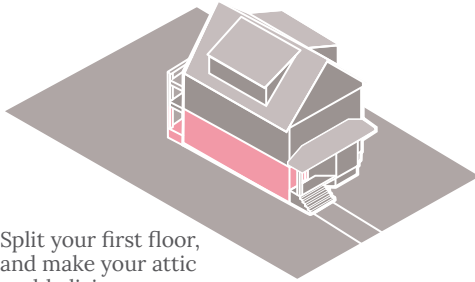
# MORE WAYS TO CONVERT YOUR ATTIC



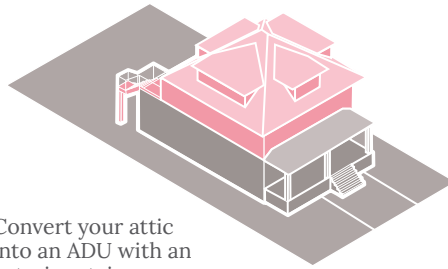
Convert your attic to give the main unit room, and make the first floor an ADU.



Add dormers to your attic space for additional room for an ADU.



Split your first floor, and make your attic usable living space.



Convert your attic into an ADU with an exterior stair.

**The design shown on the previous spreads illustrates the ADU on the first floor and the main unit above. Alternatively, you could convert your attic into an ADU while keeping the original first and second floors as the main unit.** To implement this, your architect would need to design in two means of egress from the attic that are separate from the stair within the first and second floor main unit.

There are several ways to alter your home's roof or add dormers that can increase habitable space and access to natural light. Additionally, depending on local zoning regulations and the maximum allowable height, you might be able to convert your attic from a half-story (pitched roof) into a full story with a flat roof. This would significantly increase the space available for an ADU on the top floor.

This house in Allston has existing, gabled dormers.



Shed dormers, like these in Jamaica Plain, are also common features in Boston, and can be added to some homes to convert an attic to an ADU.

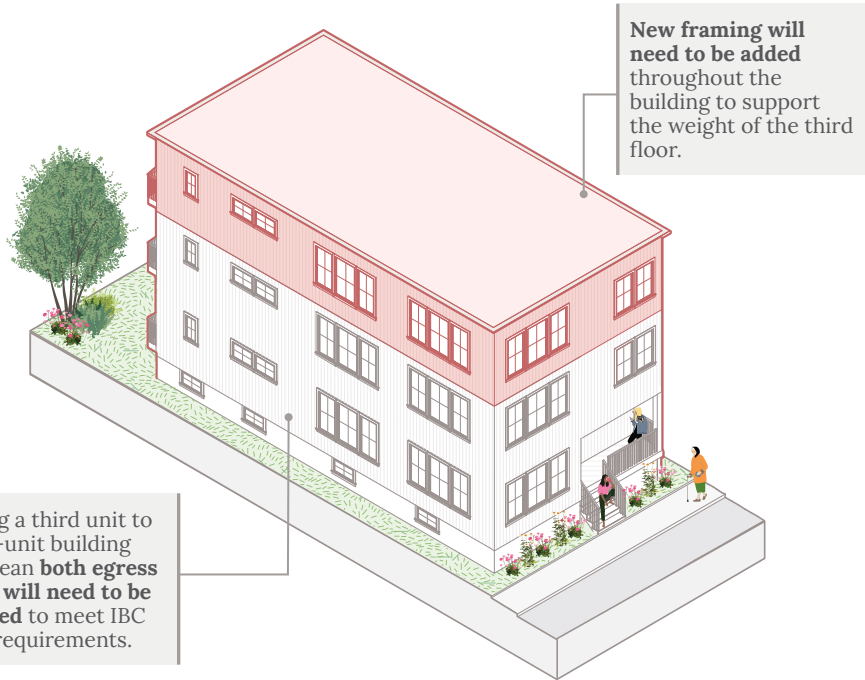




# ADD ANOTHER FLOOR



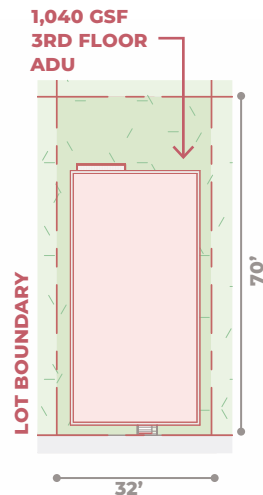
If your building is shorter than the maximum zoning height, you might be able to add an additional floor to create space for an ADU.



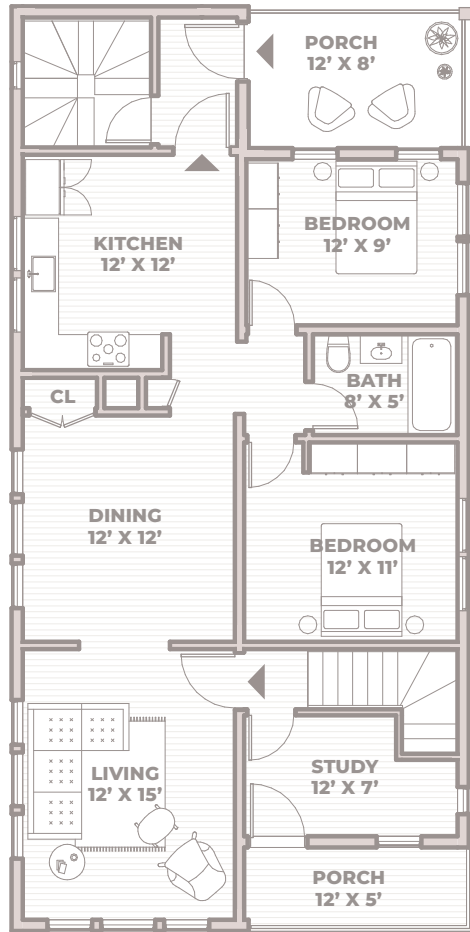
**If your building is shorter than those around it, you may be able to add another floor or floors.**

This kind of addition may be best suited to projects where there are plans to renovate the entire house as you will need to run structural, plumbing and electrical systems down through the rest of the building from the new floor.

Adding a floor will typically mean that your architect will need to follow the commercial building code, which is required for buildings with three or more units. The change from residential to commercial code will trigger bringing all egress routes (stairs) up to the current commercial code and adding sprinklers throughout the building.

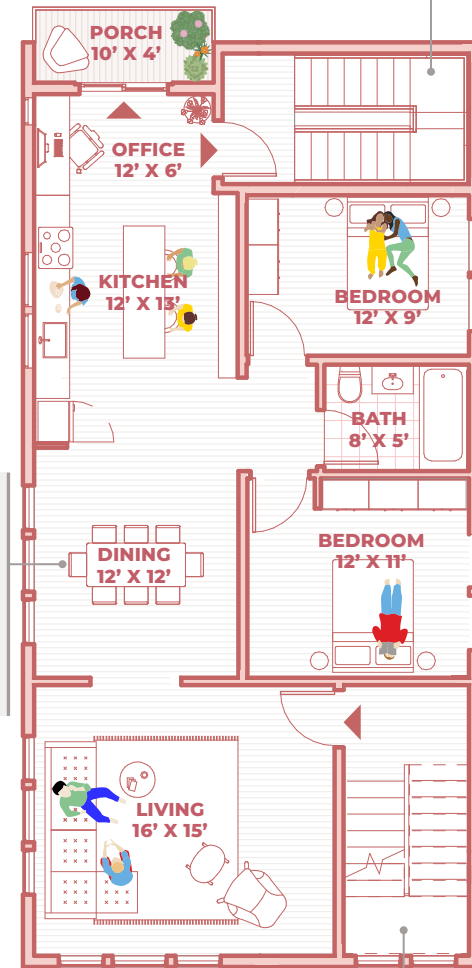


The building is **shorter than the maximum zoning height**, and the owner is interested in adding an additional floor to create space for an ADU.



SECOND FLOOR — ORIGINAL FLOOR PLAN

3/32" = 1'-0"



Adding an entire floor is an opportunity to create an ADU with two or three bedrooms that can serve a larger household.

Two new egress stairs will be required for all units in a three-unit building with substantial new construction.

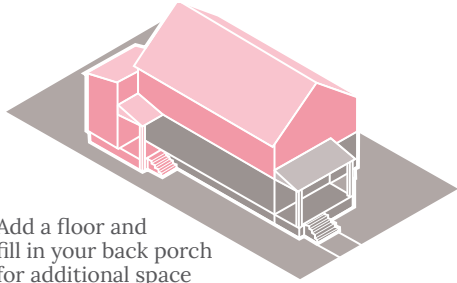
If the building has three units, egress stairs will need to be brought up to current building code requirements at all levels.

3/32" = 1'-0"

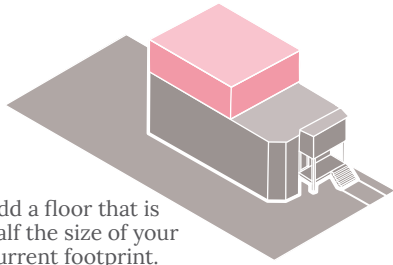
SECOND AND THIRD FLOOR WITH THIRD FLOOR ADU



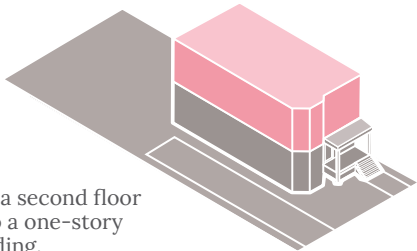
# MORE WAYS TO ADD A FLOOR



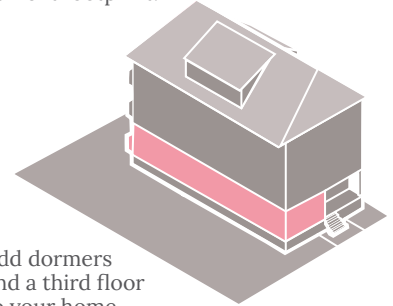
Add a floor and fill in your back porch for additional space for the ADU.



Add a floor that is half the size of your current footprint.



Add a second floor onto a one-story building.



Add dormers and a third floor to your home.

**The design shown on the previous spread illustrates how adding a third floor to a two-story building can create additional space.** A similar approach can be applied to other buildings; for instance, you could add a second floor to a one-story building or an extra floor to a 2.5-story building, depending on the configuration of the units and means of egress. The example in this book shows how adding an additional floor with a flat roof can be done. However, you can also add a floor with a pitched roof and potentially include dormers. In some cases, a pitched roof might be a better option to stay within zoning rules for maximum building height or to blend in with the architectural style of your neighborhood.

If you have a one-unit building and you are adding a floor to include an ADU, you would end up with a total of two units and would be below the three-unit threshold which would require your architect to follow the commercial building code.

This house in Jamaica Plain is one floor shorter than the surrounding context. It could be a good candidate for adding another floor.



One-story homes similar to this one in Allston are rare in Boston, but are ideal candidates for adding a floor or floors.



This Cambridge home, that was originally a single unit, has an addition and a new third floor that expand the building's living space.





# CONVERT YOUR BASEMENT

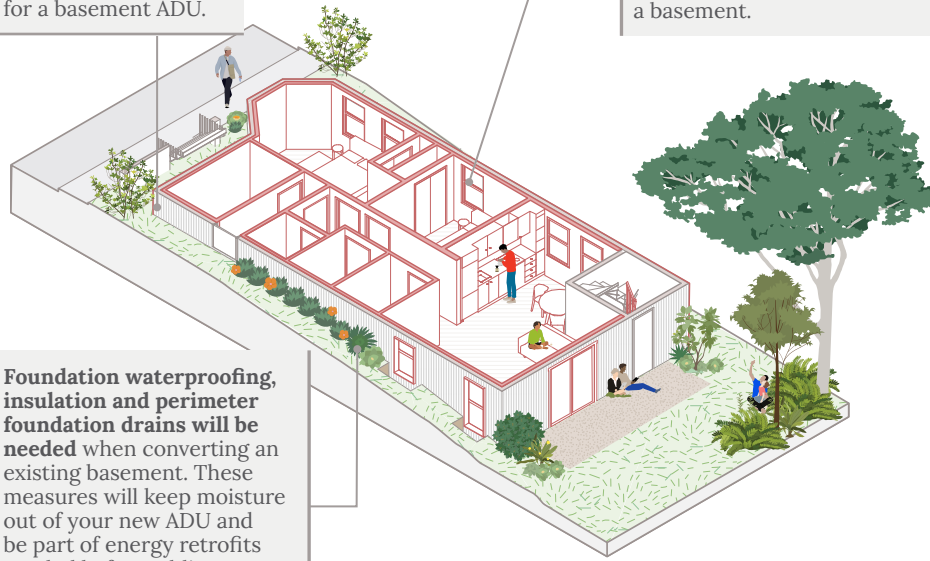


Is your basement partially above ground and underutilized? Turn it into an ADU.

If your home is on a sloping site, it could be a great candidate for a basement ADU.

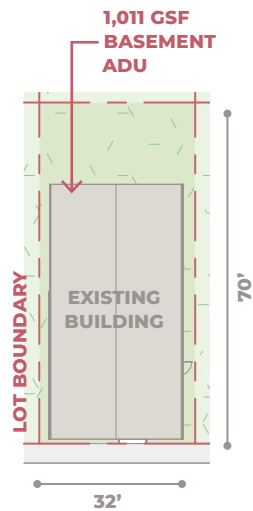
Window wells and windows sized for egress are needed for any bedrooms located in a basement.

Foundation waterproofing, insulation and perimeter foundation drains will be needed when converting an existing basement. These measures will keep moisture out of your new ADU and be part of energy retrofits needed before adding heating and cooling systems.

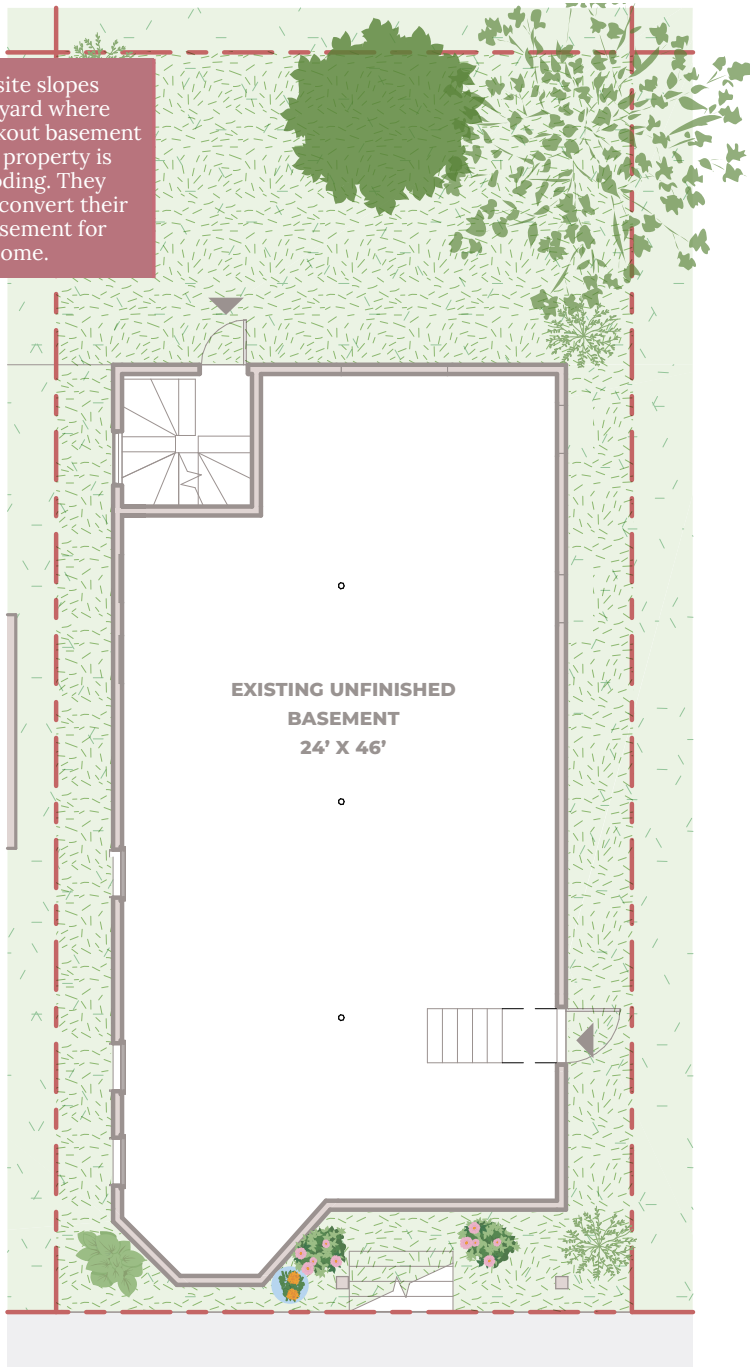


Many homes in Boston are located on sloped sites or built on elevated foundations. That means their existing basements have tall ceilings and the ability to add and expand windows. These basements have the potential to be converted into an ADU that can host a family member with more privacy, be rented out for income, or accommodate live-in care.

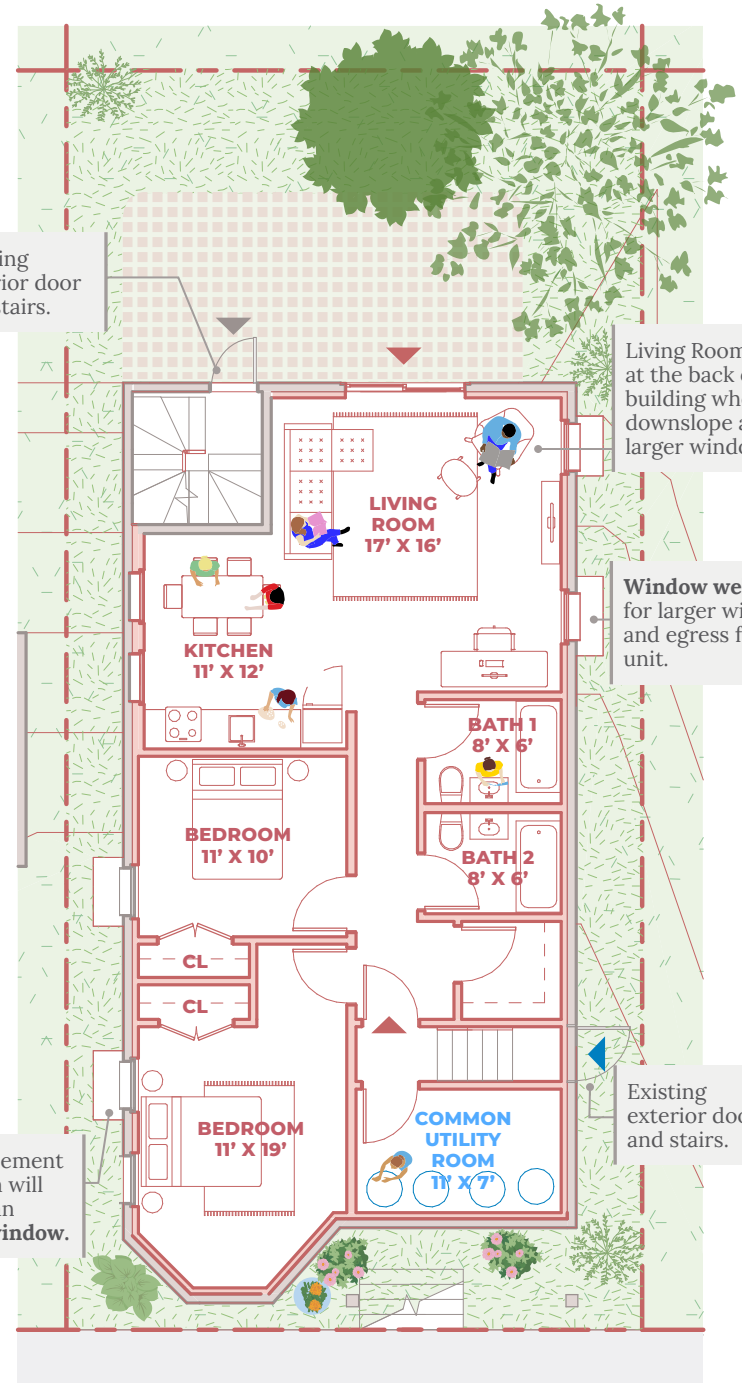
If you are considering converting your basement into an ADU, check if you have room for at least seven feet and six inches of clear space between the floor and ceiling. Building code will also require egress windows from all bedrooms located in a basement apartment. This type of ADU is not possible in any area vulnerable to flooding, such as within the Coastal Flood Resiliency Overlay.



This owner's site slopes down to backyard where there is a walkout basement door, and the property is safe from flooding. They would like to convert their unfinished basement for additional income.



ORIGINAL FIRST FLOOR PLAN — UNFINISHED CELLAR 3/32" = 1'-0"



Existing exterior door and stairs.

Living Room located at the back of the building where the downslope allows for larger windows.

Window wells allow for larger windows and egress from unit.

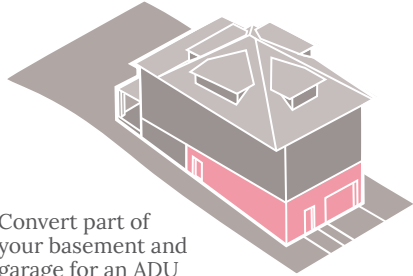
Existing exterior door and stairs.

Each basement bedroom will require an egress window.

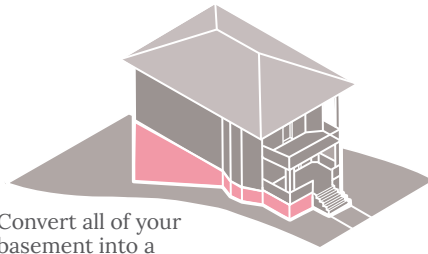
3/32" = 1'-0" BASEMENT FLOOR PLAN WITH ADU



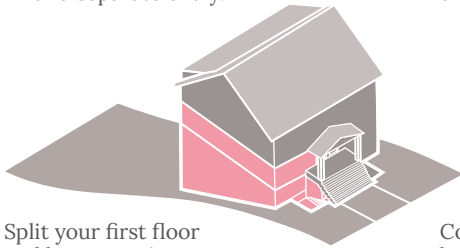
# MORE WAYS TO CONVERT YOUR BASEMENT



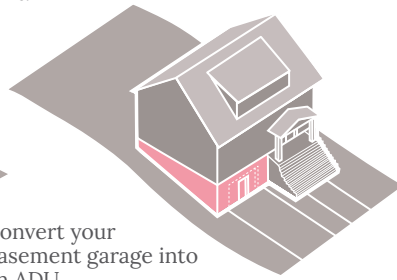
Convert part of your basement and garage for an ADU with a separate entry.



Convert all of your basement into a bottom floor unit.



Split your first floor and basement into one two-story unit.



Convert your basement garage into an ADU.

**This approach to adding an ADU can be customized to fit your building and lot.** In the example shown on the previous pages, the lot slopes downward from the front to the rear. Therefore, the living area is placed on the side of the basement that gets more natural light. If your lot slopes in the opposite direction, you may want to design the ADU with the living area on the side that faces the front of the lot to maximize natural light. This way, you can ensure that the most light-filled space is positioned where it will be most beneficial.

If you need to use space in the basement for storage or utilities, you can use a portion of the basement for the ADU and keep a portion for other uses. The key concepts will remain the same: you will need to ensure building code-required floor-to-ceiling height, provide code-required egress, update the exterior walls and site drainage to keep moisture out of the basement and upgrade the exterior walls and floor to meet existing energy codes.

At this house in Mission Hill, access to the basement has been incorporated at the front of the house.



This home, located on a sloping site in Somerville, has added large windows to the above grade portion of its basement facade.



Bedroom basement windows that are partially below grade will require windows wells like the one in this image.

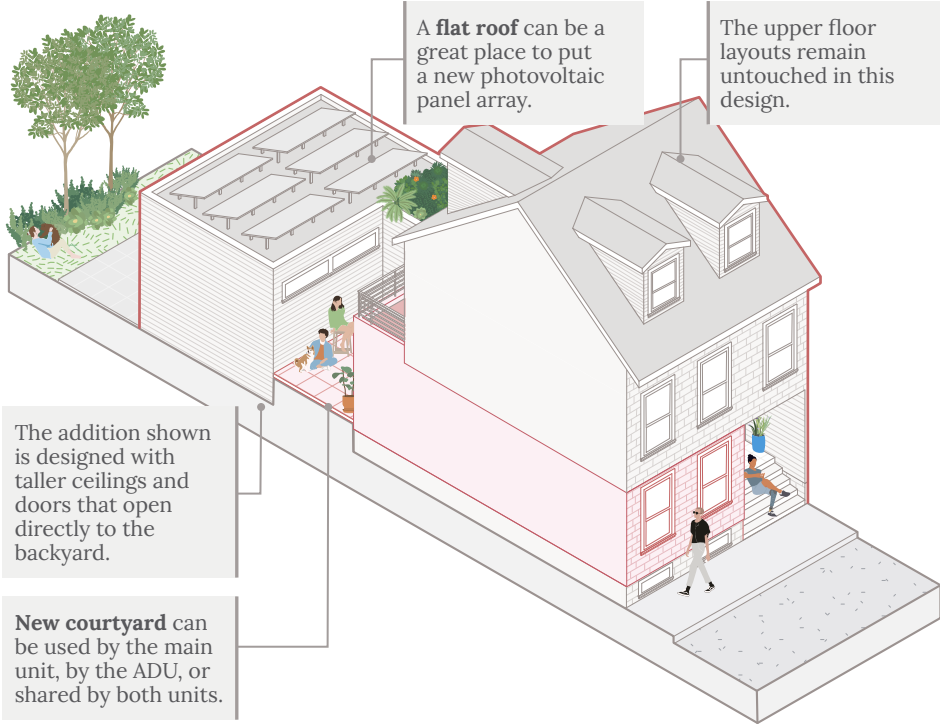




# EXTEND INTO THE REAR YARD

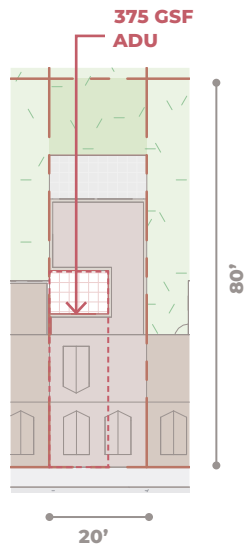


Do you have extra space in your backyard? Extend your rowhouse to the rear to create space for an ADU.



Even very small parcels can fit an ADU. This design shows the addition of a studio apartment ADU on the first floor. By keeping the access to the ADU close to the front door, the existing stair can be used just for the owner's unit.

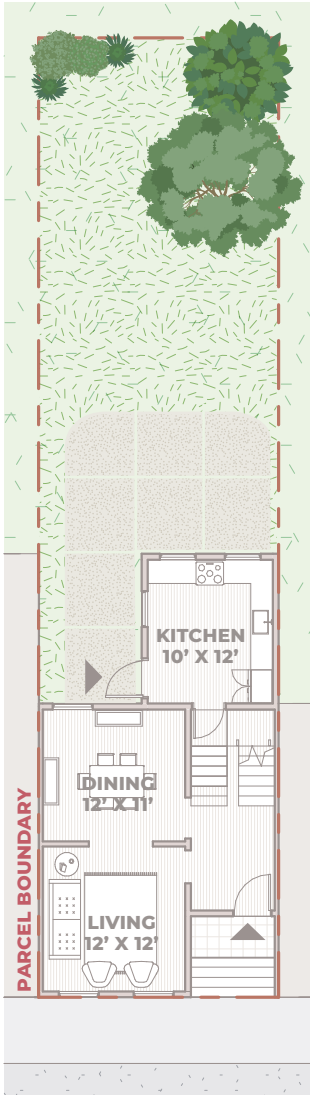
This ADU shows an addition in the backyard that lets the homeowner move the main unit's kitchen and living room into the addition in order to accommodate their new ADU. The new courtyard created between the addition and the ADU can be shared or be reserved for use by either just the ADU or just the main unit.



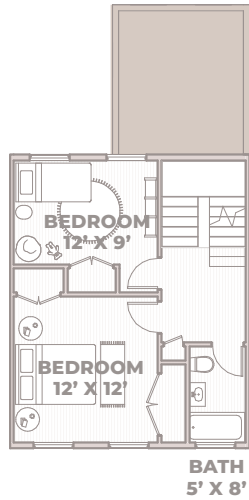


The owner has extra space in their backyard, and is looking to add a small unit in their home for a family member.

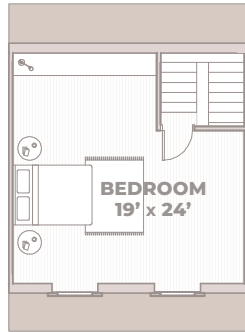
When designing an ADU for a rowhouse, check the zoning code for specific constraints on party walls.



EXISTING FIRST FLOOR

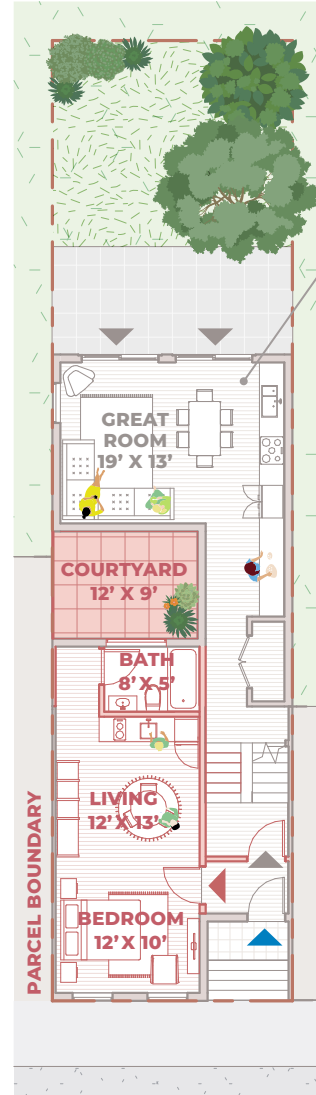


SECOND FLOOR

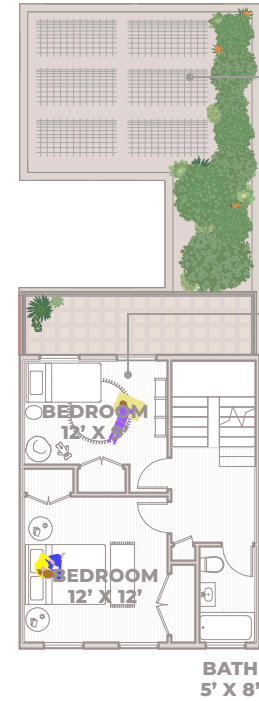


THIRD FLOOR

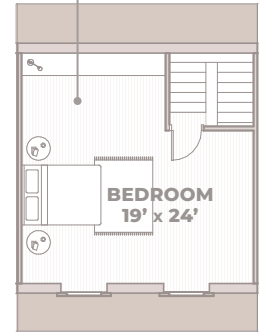
1/16" = 1'-0"



FIRST FLOOR WITH ADU



SECOND FLOOR



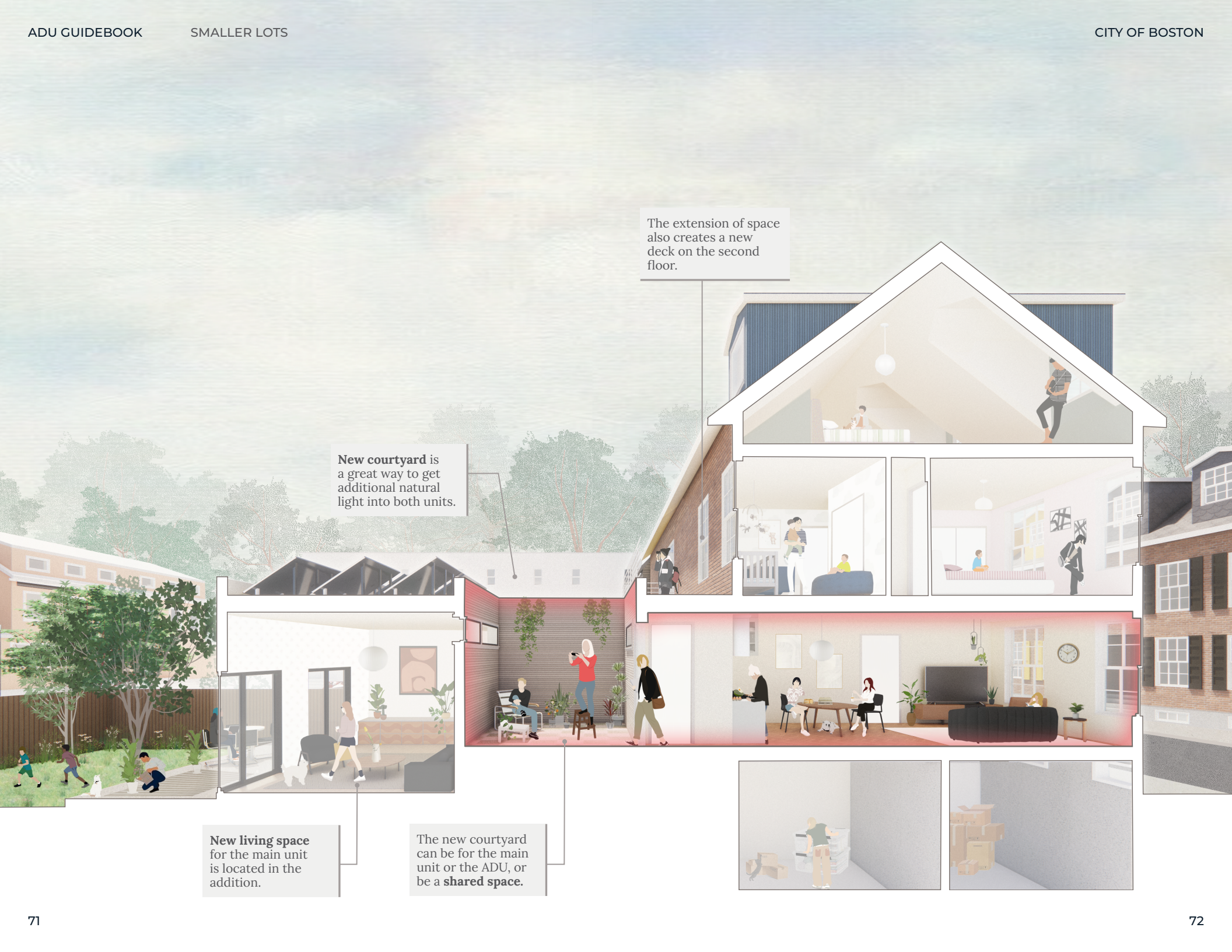
THIRD FLOOR

1/16" = 1'-0"

The new addition moves the main unit living space and kitchen into an addition that can open up to the backyard. By locating the ADU next to the front hall, the existing stair can become part of the main unit.

The new roof could host photovoltaic panels, a green roof or a roof deck.

The layouts for the 2nd and 3rd floor rooms stay the same.



The extension of space also creates a new deck on the second floor.

New courtyard is a great way to get additional natural light into both units.

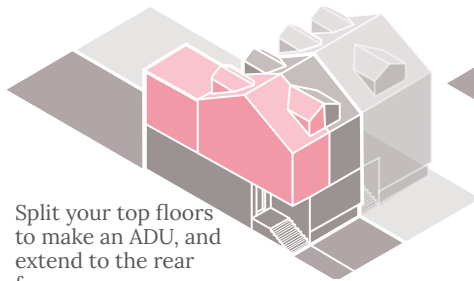
New living space for the main unit is located in the addition.

The new courtyard can be for the main unit or the ADU, or be a shared space.

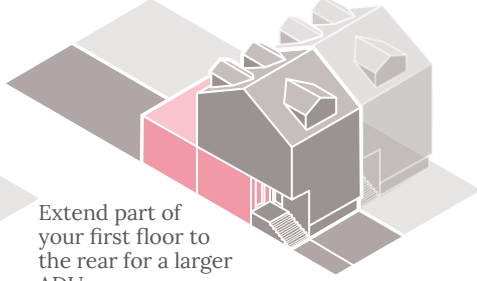




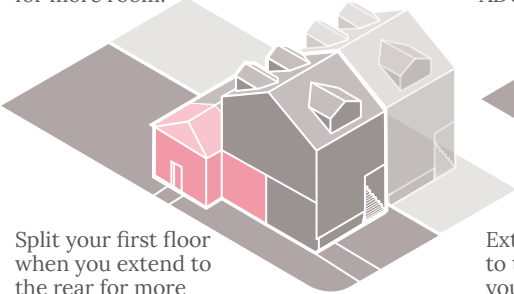
# MORE WAYS TO EXTEND INTO THE REAR YARD



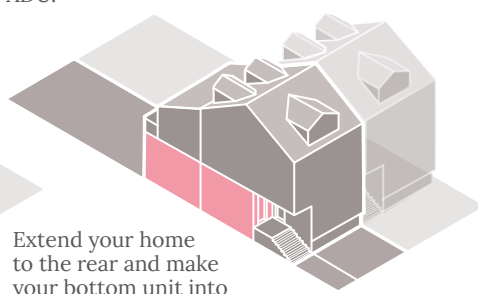
Split your top floors to make an ADU, and extend to the rear for more room.



Extend part of your first floor to the rear for a larger ADU.



Split your first floor when you extend to the rear for more space.



Extend your home to the rear and make your bottom unit into an ADU.

**For rowhouses and other homes with very small side yards, extending towards the backyard is often the best way to add space for an ADU.** You can arrange this space in a few different ways. For example, one option is to place the ADU towards the front of the building, which keeps the ADU close to the entrance and allows the existing stair to be incorporated into the main unit. Adding a new courtyard can give the ADU some outdoor space and extra natural light. Alternatively, you could make the existing stair into a common space or throughway. This would allow your architect to position the ADU towards the back of the building, on an upper floor, or in the basement.

If your rowhouse is on a corner lot, you may have more design flexibility. You could place the ADU entrance on the side of the lot, separate from the main unit's entrance. If you have a corner lot, talk to your architect about different design options and where to best place the entrances to the new unit.

These rowhouses in Mission Hill feature deep backyards and walk out basements – site conditions that could make adding an ADU possible.



Wooden rowhouses and semi-detached houses like this Jamaica Plain example may not have existing fire walls. Review with your architect what the design implications may be if that is the case.



Some rowhouses, such as this example in Mission Hill, do have side yards, side access and light and air easements, which can mean other opportunities for adding additional windows or a separate entrance for an ADU.

