# WHY AN ADU GUIDEBOOK?

This guidebook presents a vision for the Boston community to address their housing needs through Accessory Dwelling Units (ADUs). The ADU designs presented in the book provide incremental, neighborhoodscale housing that will bring more accessible and lowercost options to multigenerational families, one- and two-person households, young adults, seniors, and others. These small-scale housing solutions can fit into the existing design of Boston neighborhoods and maximize beauty and functionality for ADU residents and neighbors alike. Bringing these ideas to life will require effort from the City, the community, and professionals in design, engineering, and construction. It will require zoning reform to see ADUs built in any significant number. Ideally, this guidebook, by providing realistic approaches to ADU design in Boston, can inform that public discussion.

This guidebook provides design inspiration to help owners of small residential properties understand what kind of ADU could be right for them and their property, and what they must consider in order to move forward in the design process. To do this, the book provides realistically buildable ADU designs that are paired with common home types present in Boston. In some cases, the guidebook shows options to modify these designs to meet more specific needs a household may have, such as wheelchair accessibility.



An accessory building that could provide space for an ADU.

Every property and existing building is unique, of course, and each property owner has their own design goals. There is no way for the City to match every property with a specific ADU design within a single book. Nonetheless, the guidebook is a useful starting point when learning about ADU design that could be appropriate for your case.

This guidebook does not provide pre-approved plans that can be built on any property in Boston. Proposals for ADU projects inspired by this guidebook's designs will be subject to the same review process required to obtain a building permit. Homeowners pursuing an ADU on their property will need to work with their design professionals and the Zoning Board of Appeal to obtain the approvals necessary for a building permit. This book provides guidance for all involved in the development, review, and approval of ADU proposals.

The Accessory Dwelling Unit Guidebook was developed by the City of Boston Planning Department, with consultation by the Mayor's Office of Housing, the Inspectional Services Department, other key City departments, and with a team of consulting architects and planners. All designs shown in the book were developed by Neighbor Architects.







Detached

Attached

Internal

# WHAT IS AN ACCESSORY DWELLING UNIT?

An Accessory Dwelling Unit (ADU) is a separate, smaller dwelling unit that can be added to a residential property. ADUs can be created by repurposing existing living space, creating new living space from unused areas of the existing home (like a basement or attic), building an addition to an existing home, converting an existing garage, barn or similar, or building a new smaller building on a lot. Often called "granny flats," or "in-law apartments," ADUs are sometimes used to support multigenerational families or to provide smaller homes that meet specific needs.

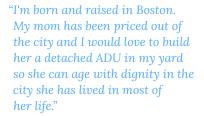
ADUs can be classified by their physical relationship to the primary unit or units, with ADUs described as:

- **Detached**: a building on its own, with its own entrance
- Attached: a building that is adjacent to the main building, or a major addition, typically with its own entrance
- Internal: a unit that is inside the main building, maybe with a small addition. The entrance is typically located off of a shared entry hall.

Bostonians historically built small accessory homes to facilitate aging in place, multigenerational living, generating extra household income, and making the best use of their space. Though many Boston neighborhoods have a history of building ADUs, the practice dropped off in the 20th century due to government policy, including zoning, that made it difficult to add accessory homes to small-scale properties. In recent years, more and more residents have shown an interest in building new ADUs, and the City of Boston has responded through policy, financial assistance, and legal reform.

"I'd like to build dormers in my attic so my aging parents can live with me, and help with future childcare needs."

MICHAEL · ROXBURY



VERONICA · HYDE PARK

"We want to create an ADU in the basement for students in the family to have their own place."

**GERRY** • ALLSTON-BRIGHTON

# WHAT IS REQUIRED OF AN ADU?

The Boston Zoning Code defines an accessory dwelling unit as a self-contained, non-transient dwelling unit with its own separate entrance on the same lot as another main residential structure. The minimum requirements of any independent housing unit, including an ADU, are specified by the Building Code and Fire Code, which regulate matters of life and safety. For more information on the applicable regulations, see "ADU Regulations and Guidelines" on page 149.

### An ADU must have:

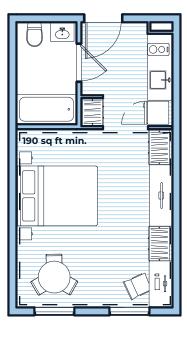
- A full bathroom and kitchen,
- Living areas that meet minimum size regulations,
- · Adequate light and ventilation,
- Safe exit routes that are compliant with life safety regulations,
- A design that enables Fire Department access in case of emergency,
- · Access to electric and water shut-off valves, and
- In some cases, sprinkler systems in all or part of the building.

ADUs with three or more units will need to adhere to IBC, the International Building Code, which outlines dimensional and programmatic requirements for Efficiency Dwelling Units.



An Efficiency Dwelling Unit for one occupant is required to have a full bathroom, full kitchen and requires a room that is a minimum of 190 square feet. This equates to a unit that will be somewhere around 330 square feet. For each additional occupant, 100 more square feet are required.

Unless it is located in a fully sprinklered building, the ADU will also be required to have two means of egress.



### MANY REASONS TO BUILD AN ADU

# WHY ADUS?

Accessory Dwelling Units allow homeowners to utilize their property to its fullest potential and support a household as it changes over the years. Between 2010 and 2030, Boston's population age 60 or older will have increased by 60%. Boston leads the country in economic insecurity, mainly driven by the high cost of housing. ADUs can expand lower-cost housing options, empower residents to build wealth, provide attainable housing options for seniors and young people, and foster diverse, multi-generational living spaces in Boston.

Some common reasons that homeowners choose to build ADUs are:

- To age in place,
- To provide housing and care for a family member,
- To downsize from their existing home,
- To generate extra income with a rental unit (either the ADU or their existing home),
- To house a young adult or recent graduate getting started in their career, and
- To provide more space for family or friends to visit.

The City's goal is to create a permitting pathway for most owner-occupied properties to add an ADU. Adding an ADU increases housing diversity and supply, while also:

- Preserving existing neighborhood patterns such as yards and overall look and feel,
- Protecting green spaces which are vital for stormwater absorption, and
- Preserving mature trees to ensure long-term environmental health.



Aging in place



Provide housing and care for a family member



Downsize from an existing home



Generate extra income with a rental unit



House a young adult or recent graduate getting started in their career



Provide more space for family or friends to visit

# HOW TO USE THIS GUIDEBOOK

The following section of this guidebook presents 12 ADU designs that are relevant to existing residential properties across Boston. Building an ADU will involve five phases: learning about ADUs, planning your property's ADU with design and construction professionals, permitting that ADU design through the City, building the ADU with a contractor, and moving in. To learn more about this process, see "How to Build Your ADU" on page 143. This guidebook intends to make the learning phase quicker and easier, and to help move you into the planning phase earlier.

Not every design will be directly applicable to every lot in Boston, but each will provide a useful way of thinking about ADU development at your property. This guidebook will help you visualize the possibilities for ADUs and provide helpful tips and ideas, backed by architectural expertise.

Making the most of this guidebook will involve the following steps:

- 1. Think through your ADU Goals.
  - a. How big of an ADU are you interested in building? How many bedrooms and other rooms do you need in your ADU?
    - i. Studio
    - ii. 2 rooms (bedroom + living area)
    - iii. 3 rooms
    - iv. More than 3 rooms

- b. What type of ADU are you interested in?
  - i. Detached: a building on its own
  - ii. Attached: a building with its own entrance that is adjacent to the main building, or a major addition
  - iii. Internal: a unit that is inside the main building, maybe with a small addition
- 2. **Assess your existing property conditions.** Consider your property and the available space that could be used as an ADU by answering these questions:
  - a. How much space do you have on your lot for an ADU?
    - i. Small my existing house takes up most of the yard
    - ii. Medium I have a driveway on one side (or a yard as big as a driveway)
    - iii. Large There's a lot to mow in the front, side, and rear!
  - b. Do you have an unused basement or attic space?
  - c. Do you have a back yard or side yard?
  - d. Do you have an existing garage or accessory structure?
  - e. Are you downsizing? Could some of your existing living space be converted to an ADU?
  - f. Do you plan to renovate your own living space when creating your ADU?
  - g. Will the ADU be used to age in place?
- 3. Look through potential designs. Review the designs in this book. Note the ADU designs that are most relevant to your situation based on the questions above and go to each design's section for more information, tips and inspiration. Refer to "CHOOSE YOUR OWN ADUVENTURE" on page 35.
  - a. When reviewing these designs, ignore specific design details like color or materials, and instead focus on the layout of the home and the lot, and how it compares to your own.
  - b. For each design, consider the options that you have to modify the design to address your priorities (such as accessibility, changes to the main unit,



An aerial view of Roslindale.

"We have an ancient small two-bedroom house and an ADU would dramatically expand our flexibility."

**SCOTT** · ROSLINDALE

- sustainability, etc.).
- For each design, consider what you like and do not like.
- d. Do not hesitate to explore the other ADU designs to think through other approaches to ADUs. Pay special attention to ADU designs for smaller lots, as they could work for medium and larger lots too.
- 4. Prepare for the design process. When considering an ADU project, there are some steps you can take on your own to prepare even ahead of hiring an architect. These steps will help you make prudent design decisions, prepare you for financing ADU construction if needed, and make the City permitting process simpler. These steps include:
  - a. Talk to a contractor to understand the scale of

- potential costs on your project.
- b. Determine how big of a project you can afford, based on your own finances.
- c. Get a survey. You will need a survey or plot plan, which is a precise drawing that shows the legal boundaries of your property and the location of any structures on it.
- d. Address physical hazards. If your home is older, you may encounter hazardous materials during construction such as asbestos and lead paint. Be sure to discuss and prepare for safe testing and removal of these materials with your builder.

5. Talk to an architect. Engage an architect to discuss your goals and priorities for an ADU, and present your preferred ADU design as well as aspects from other designs that you also like. Discuss what you might like to modify, and decide what elements are most important.



A Dorchester residential street.

"We have lived here in Ashmont for 39 years. The lot size is over 7,000 sf and one block from the Red Line. I would like to build an ADU so that I may age-in-place (my wife and I are 72), and so that my daughter and son-in-law could be prepared to assist us."

**BARRY** · DORCHESTER

# **KEY ICONS**

This guidebook uses icons that can help readers quickly understand features of each ADU design. The icons and their meanings are as follows:





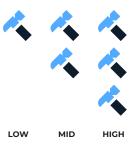




INTERNAL

### **ADU Type**

This icon describes whether the ADU is **detached** from the existing main building (a building on its own), is **attached** to the existing main building (a building that is adjacent to the main building, or a major addition and with its own entrance), or is **internal** to the existing main building (a unit that is inside the main building, maybe with a small addition, and typically sharing the same doors to the outside).



## Complexity

The hammer icons rate the complexity of the project as Low Complexity (one hammer), Mid Complexity (two hammers), and High Complexity (three hammers). As complexity increases, the cost of design, engineering, and construction are likely to increase. The true cost and complexity of your project will be determined by working with the architect and builder enlisted to design and build your ADU.





# **Building Code**

This icon shows whether the given ADU design must use the International Residential Code (IRC) or International Building Code (IBC). IRC applies to homes with one or two units only, and IBC applies to homes with three or more units. Building code is concerned with the life safety of a building itself. In general, the IRC requirements are easier and less expensive to achieve than the IBC requirements. Learn more about the Building Code at "ADU Regulations and Guidelines" on page 149.



STAIR TO ENTRY



STAIRS WITHIN



ACCESSIBLE FNTRY



ACCESSIBLE UNIT



This icon shows whether entry into the ADU and/or movement within the ADU requires navigating stairs. Stairs are a key factor in design for accessibility, and owners desiring more accessible units should look to designs with no stairs.







# **Sprinkler Requirements**

This icon shows whether the Building Code and related regulations would require sprinkler system installation and, if so, whether sprinklers are required in the whole of the property or just the ADU. Sprinkler systems are a significant cost for ADU projects, so understanding what is required can be important for owners. Whether or not they are required may vary depending on the number of units in the building, the nature of egress (building exit) design, distance from the street to the ADU structure, and the amount of frontage the building has. An overview for when and where sprinklers are required is found at "Sprinkler and Fire Access Requirement Checklists" on page 165, but the specific requirements for your property and ADU design must be determined with your architect.

# **READING PLANS**

This guidebook includes many architectural plans and diagrams. The format of these drawings will be new for some readers.

- Red, orange, or purple blocks, lines, and drawing labels indicate the area is part of the ADU. The colors vary depending on whether the design is on a smaller lot, medium lot, or larger lot.
- Gray blocks, lines, and drawing labels indicate the area is part of the principal unit or units.
- Blue blocks, lines, and drawing labels indicate common areas, like entryways and stairwells.
- Green blocks indicate permeable outdoor areas like yards.
- Triangles indicate the entries/exits for each unit and for the building as a whole.
- At the exterior of the buildings in each drawing, enclosed rectangles indicate a solid wall, while single lines indicate windows.

