

Unlocking Small Multifamily Housing through Building Code Reform

Report Launch Event
July 14, 2026

Report by
Nominal

With support from
Boston Indicators & The Harvard Joint Center for Housing



The
Boston Foundation

Housing Practice



 **Nominal**
Architecture & Design

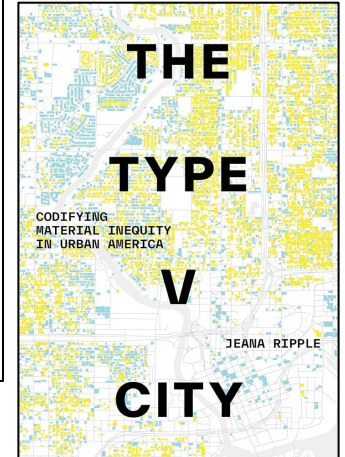
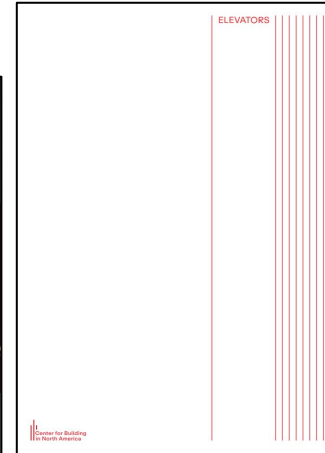
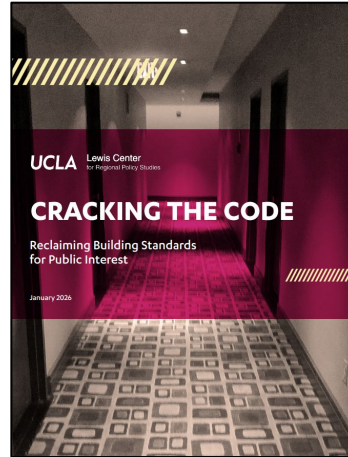
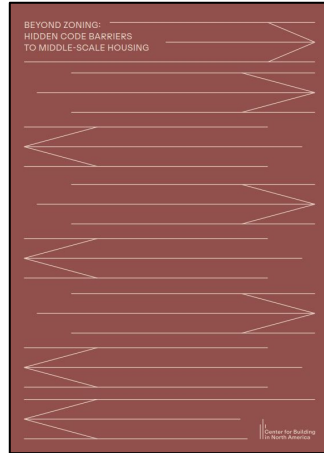
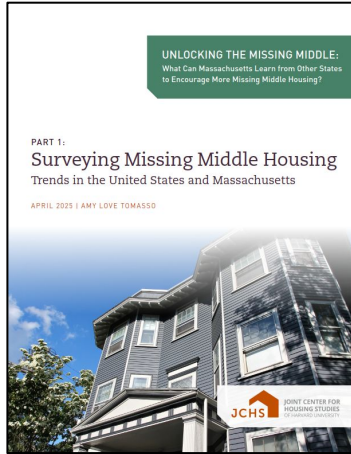


Research & Reports

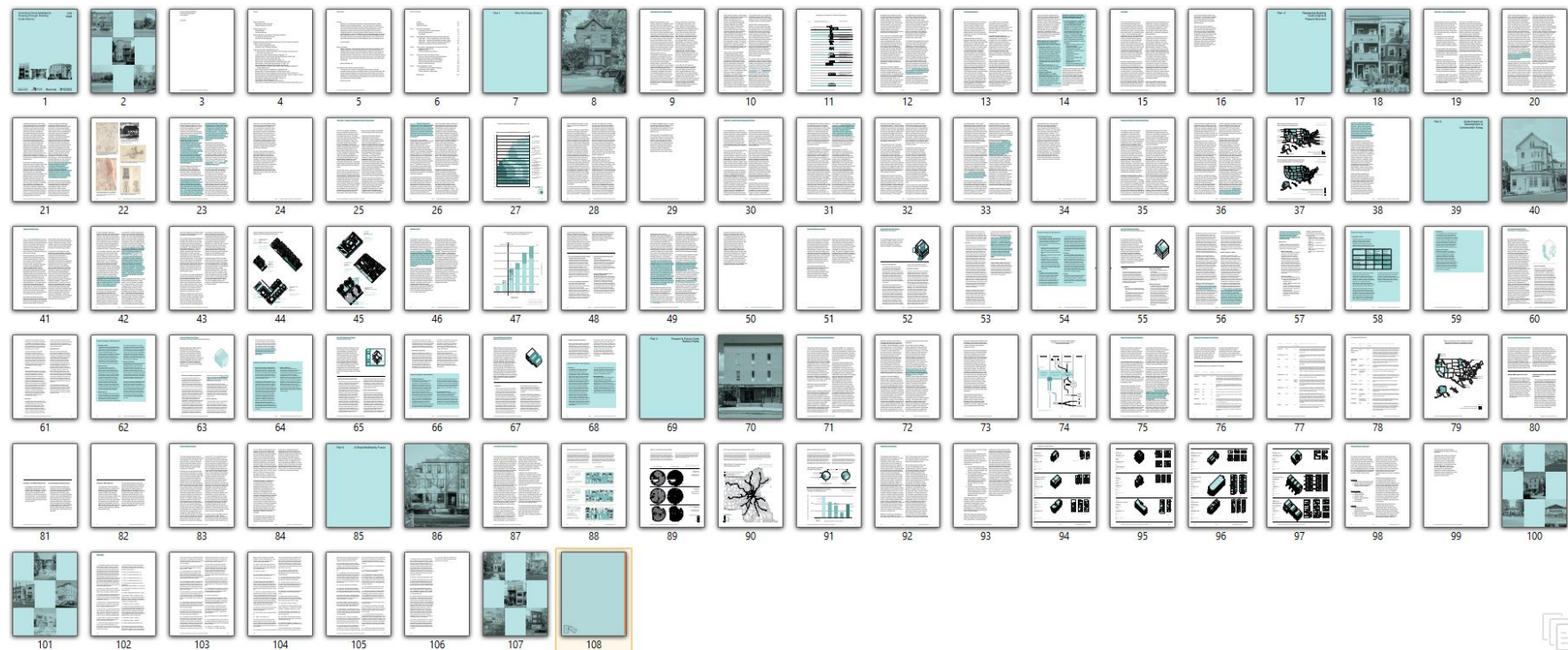
Small Multifamily Housing & Quality of Life



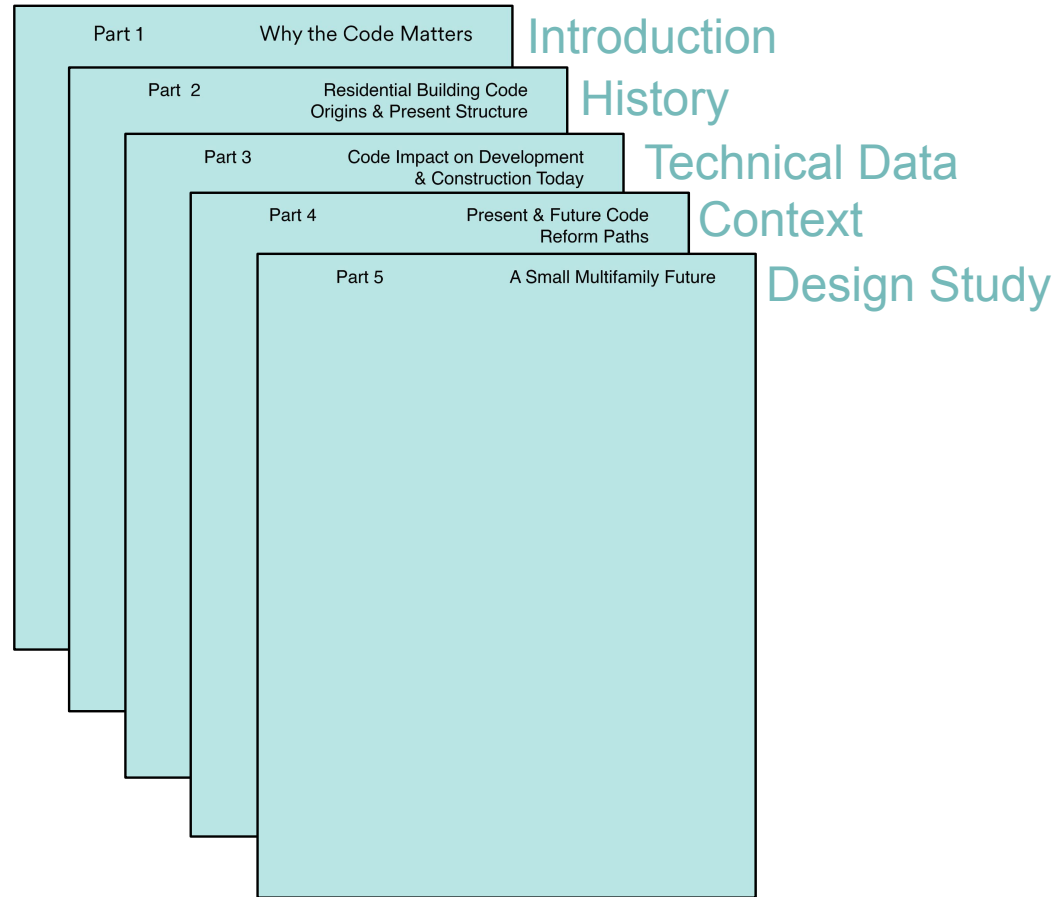
Supporting Literature



The Report



Chapters

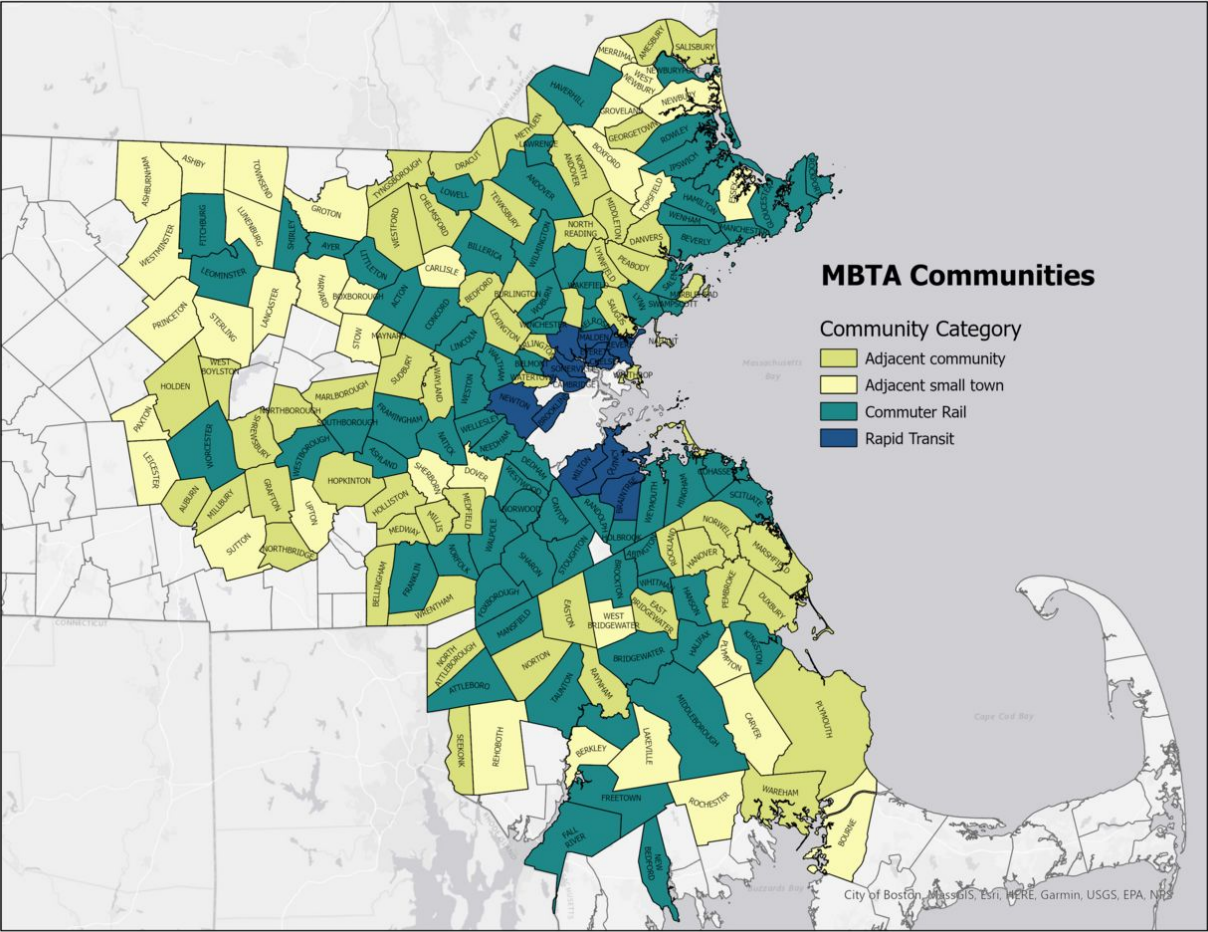


Part 1

Why the Code Matters



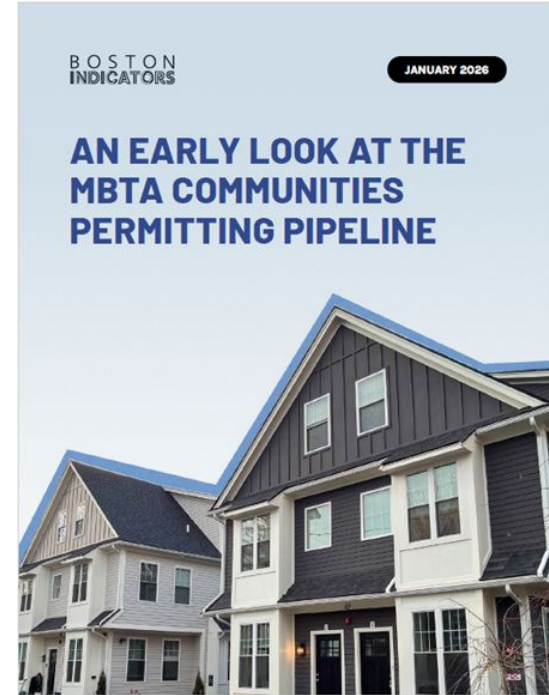
Statewide Transit-Oriented Upzoning



Zoning for Small Multifamily

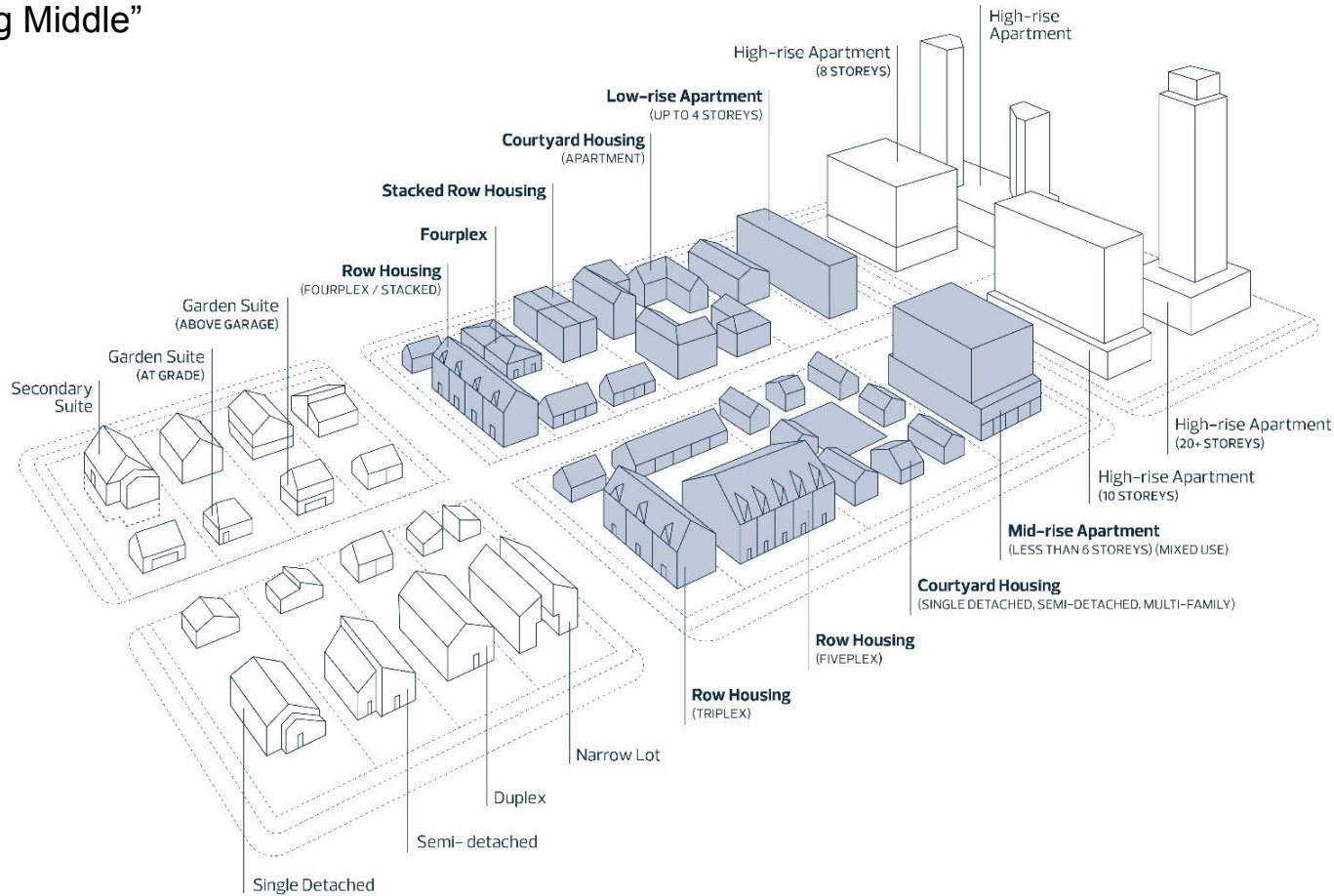


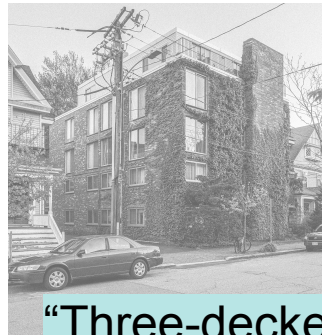
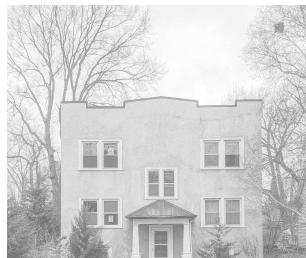
Orleans, MA - Utile - Zoning Visualization



Boston Indicators Zoning Report

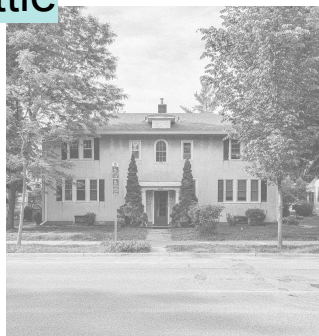
The “Missing Middle”





“triplexes and fourplexes up to mid-rise apartments—may win the zoning battle but lose the code war.”

“Three-deckers do not work.”



A Steep Cliff

IRC
Residential Code



Single-family

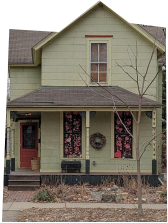


Duplex

A Steep Cliff

IRC
Residential Code

IBC
Commercial Code



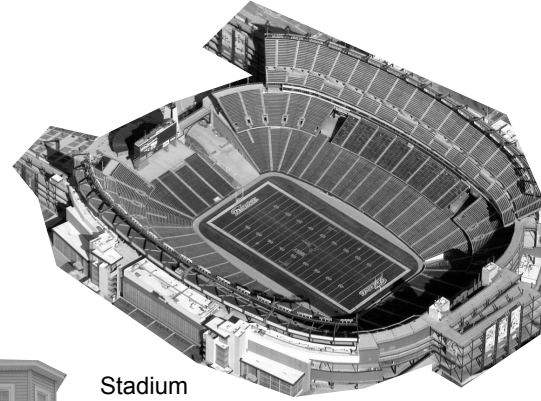
Single-family



Duplex



Three-family



Stadium



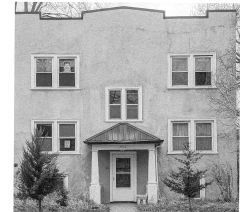
High-rise



Large Multifamily



University



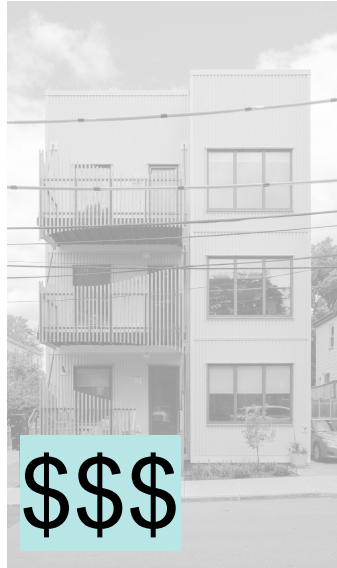
Four-plex

Incentivized Residential Types

IRC
Residential Code



IBC
Commercial Code



Greater Boston Fine-Grain Urban Fabric

1874



1894



1935



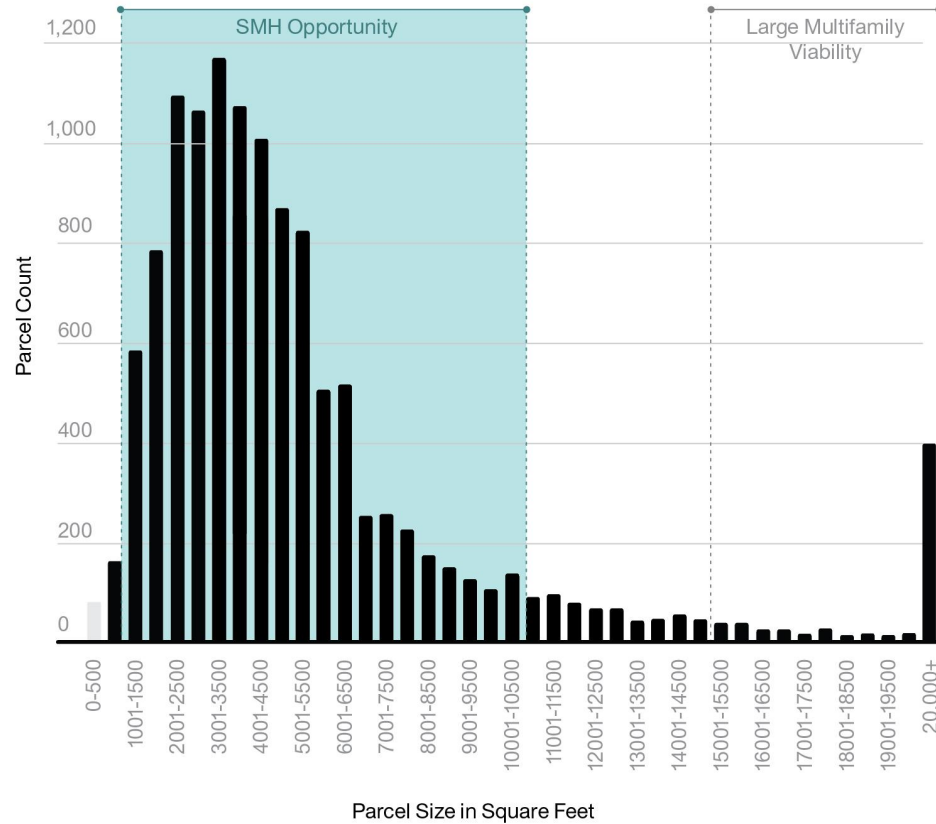
2019



Dorchester through
the years Via
MapJunction

Greater Boston Fine-Grain Urban Fabric

Typical Triple
Decker Range



1

Build capacity into the state building code board to:

- + **Focus on unlocking housing production** in its code amendment process
- + **Add resources** to study the effects of the code on development
- + **Add board members** who can speak for small multifamily
- + **Create a multifamily-focused subcommittee**

2

Develop a small multifamily code appendix to the state building code:

- + Right size rules on **sprinklers, fire alarms and assemblies**
- + Revise **accessibility codes**
- + Revisit **energy code standards** and thresholds
- + Loosen **engineering requirements** for permit
- + Evaluate impact on **mixed-use** and **adaptive reuse** projects

Part 2

Residential Building Code Origins & Present Structure

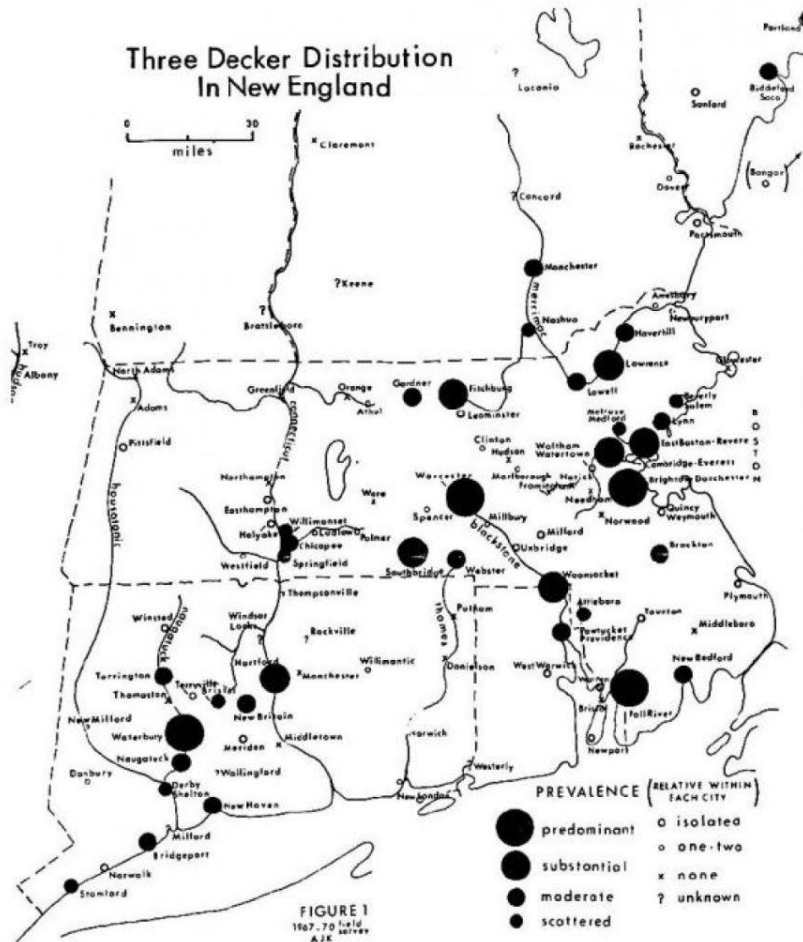


Codes Origins in Urban Fire Risk

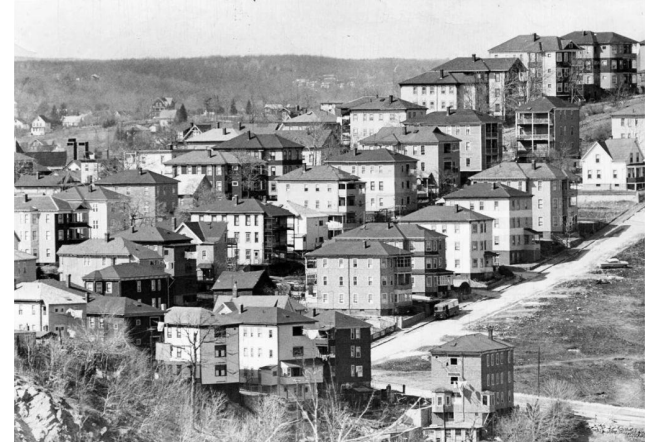


1872 Great Boston Fire

The Rise of Multifamily



Arthur Krim's map of three-decker distribution in New England, based on his field work from 1967-1970. Courtesy of Arthur Krim, Clark University and via Jacobsohn, Diane. "Boston's 'Three -Decker Menace': The Buildings, the Builders and the Dwellers, 1870s-1930." ProQuest Dissertations & Theses, 2004.



Backlash for Building Code as a Tool for Stopping Multifamily

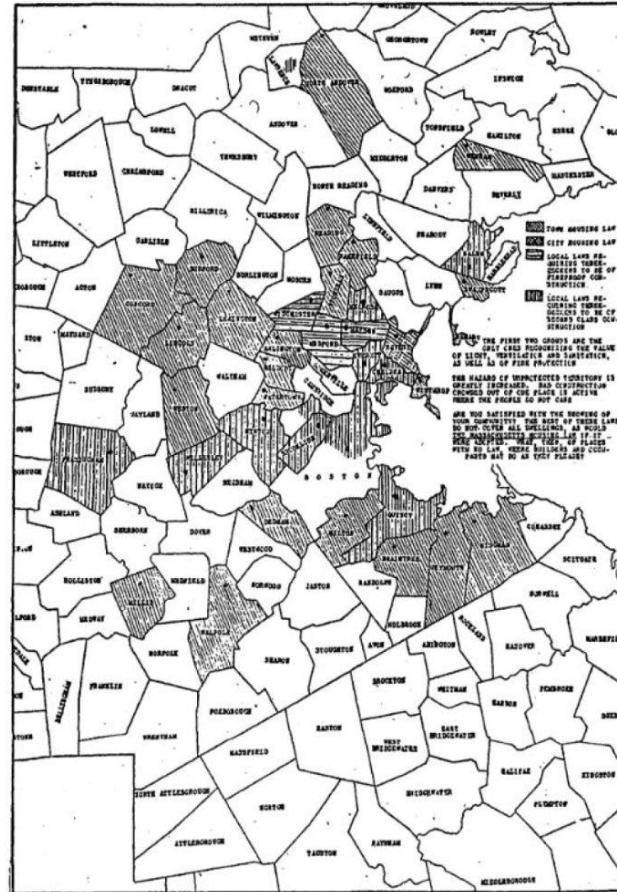
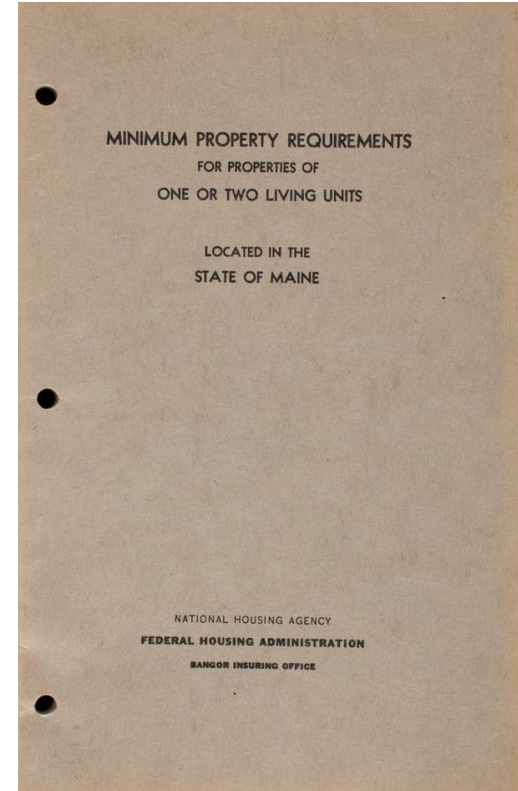


Fig. 63. Map Showing Progress of Housing Laws in Massachusetts. A part of this same map was reproduced in "The Wooden Apartment House" pamphlet by Gorham Dana and "The Wooden Apartment House Question in Brookline" by the Town Improvement Committee of the Brookline Education Society. In both cases, however, the map was cropped so as to exclude most of the areas to the north and south that had not passed legislation against three-deckers and so emphasize the towns surrounding Brookline that had passed this legislation. From John Ihlder, *The Houses of Providence* (Providence: Snow & Farnham Co., 1916), p. 38.

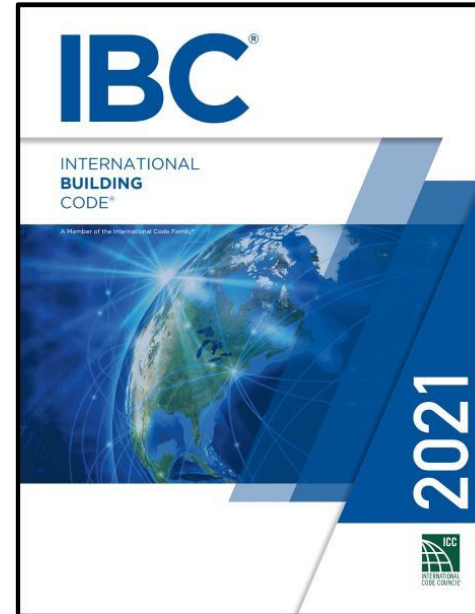
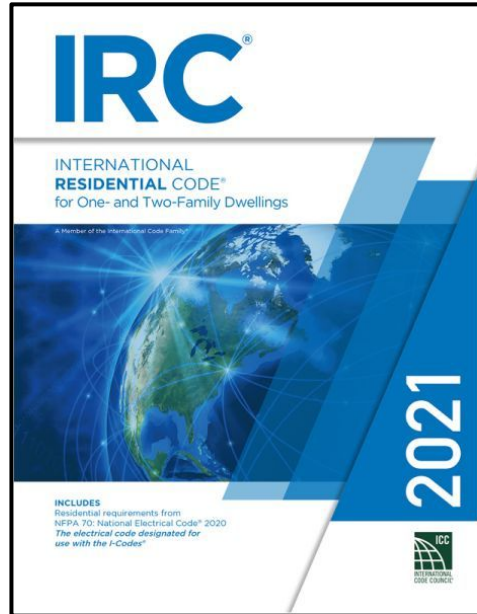
“Massachusetts had already adopted a ‘town tenement act’ in 1912, enabling municipalities to ban any ‘wooden tenement’ in which ‘cooking shall be done above the second floor’”

Rise of Suburbanization & The “Residential” Codes



ICC & The Model Codes

- Prioritizes **affordability**
- Focused on **Houses & Duplexes**
- **Large representation** from home-builders



- Prioritizes **commercial construction**
- Focused on **large commercial & industrial** buildings
- **Minimal representation** from multifamily builders

Part 3

Code Impact on Development & Construction Today



Extremes of Development

IRC - Residential Code

IBC - Commercial Code



New duplex in Newton, MA

Small
House

**Large
Duplex**



New multifamily in Chelsea, MA

Small
Multifamily

**Large
Multifamily**

IRC Code-Hacking



Austin, TX



Tempe, AZ



Atlanta, GA



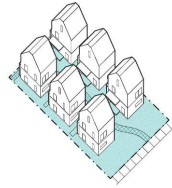
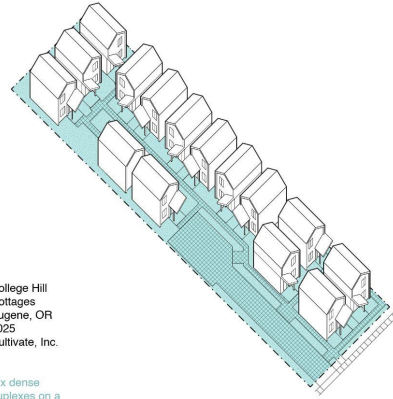
Detroit, MI

IRC Compliant Dense New Housing

Project
Location
Completed
Architect(s)
Dwellings

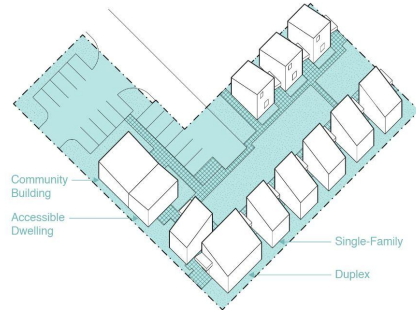
Shortstack Milwaukee
Milwaukee, OR
2025
WORKS Architecture
15

Detached single family
houses on micro lots
with minimal setbacks



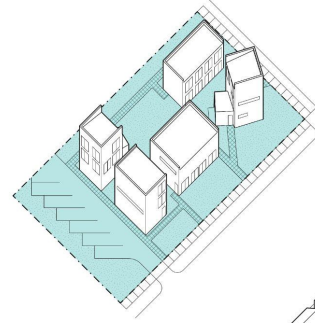
**College Hill
Cottages**
Eugene, OR
2025
Cultivate, Inc.
6

Six dense
duplexes on a
deep lot



Tempe Micro Estates
Tempe, AZ
2022
colAB Studio
13

A cottage court of single
family homes with lofted
second stories

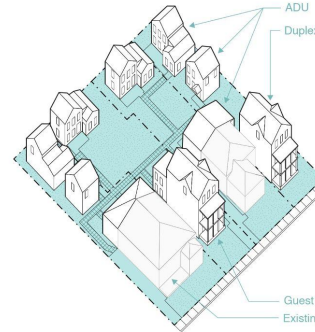
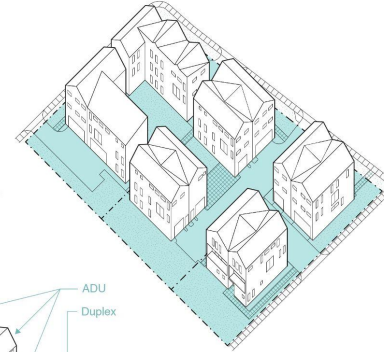


The Canopy
Detroit, MI
EC3 & Studio Detroit
10

Confetti-esque
arrangement of five
duplexes in a shared
garden landscape

Mira Development
Austin, TX
Plural Office
12

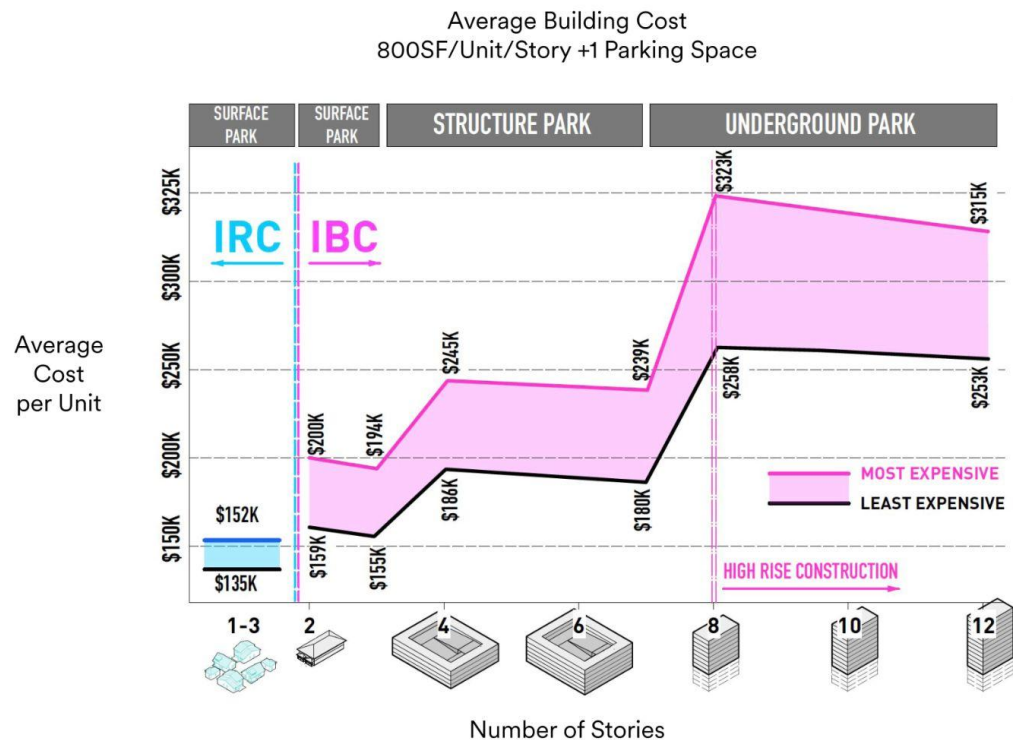
Six clustered three
story duplex homes
with individual
garages



Finley St Cottages
Atlanta, GA
Kronberg Urbanists Architects
16

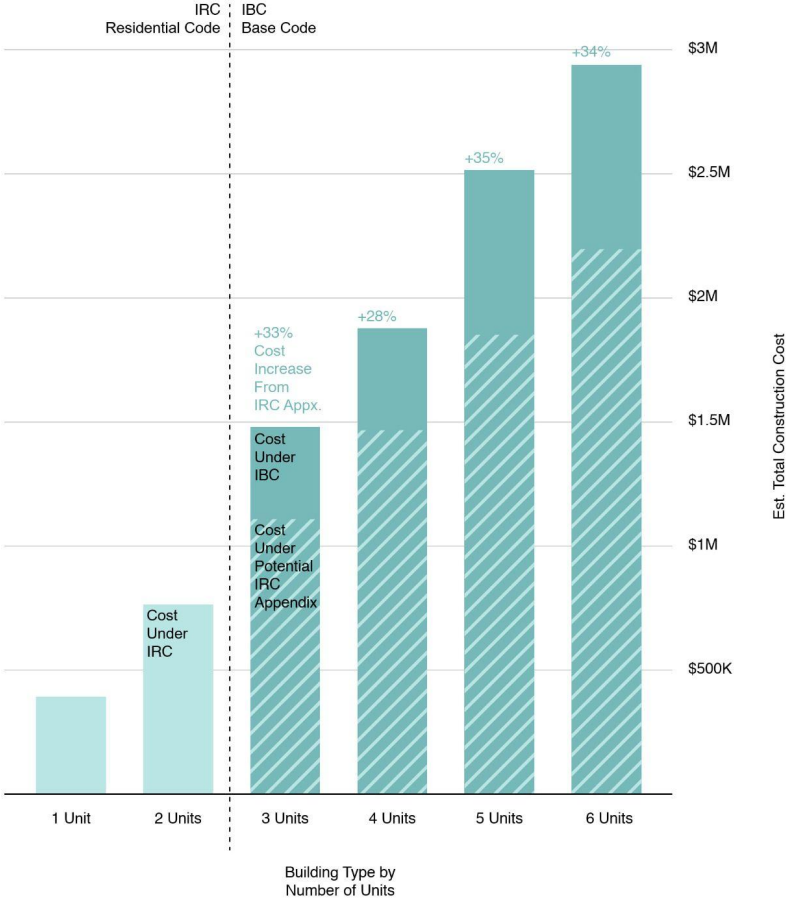
A cottage court of mixed
typologies and a renovation
of two single family homes

Construction Costs by Others



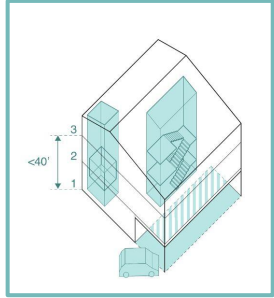
Via Kronberg Urbanists
Architects

Our Construction Cost Study

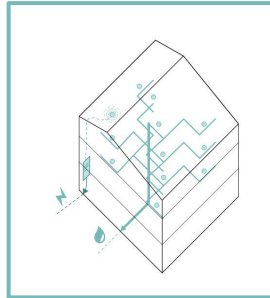


Building the Appendix: Key Code Elements for Reform

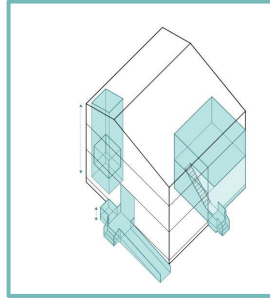
Building Form &
Layout



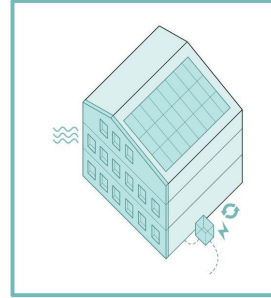
Sprinklers & Fire
Alarm Requirements



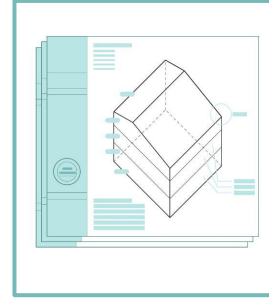
Accessibility & Site
Requirements



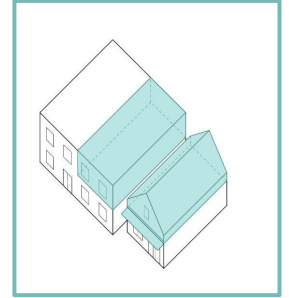
Envelope & Energy
Performance
Requirements



Process & Soft Costs

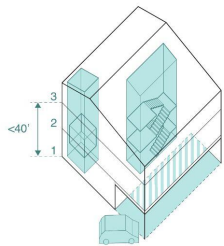


Mixed-use &
Adaptive Re-use



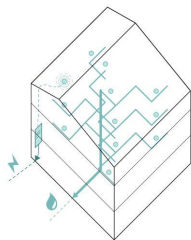
Building the Appendix: Key Code Elements for Reform

Building Form & Layout



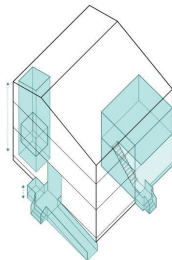
- > Expand Single-stair rules
- > Allow smaller elevators
- > Clarify parking codes

Sprinklers & Fire Alarm Requirements



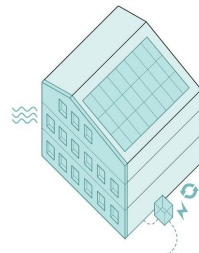
- > Remove Sprinkler mandate for small buildings
- > Right-size fire alarm requirements
- > Focus on passive fire protection features

Accessibility & Site Requirements



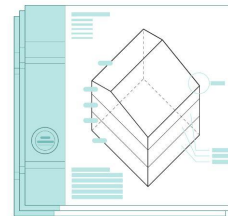
- > Permit lifts and other options for on-grade access
- > Reform elevator rules
- > Exempt multistory dwellings from code reqs.

Envelope & Energy Performance Requirements



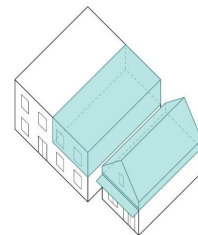
- > Reduce passive house threshold
- > Provide prescriptive code paths for compliance

Process & Soft Costs



- > Reduce engineering requirements for permit
- > Utilize more delegated design strategies

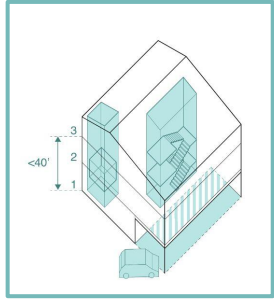
Mixed-use & Adaptive Re-use



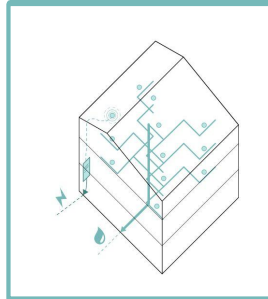
- > Allow mixed-use and live-work residential uses in the appendix
- > Revise existing building code requirements for upgrading older buildings

Building the Appendix: Key Code Elements for Reform

Building Form & Layout



Sprinklers & Fire Alarm Requirements

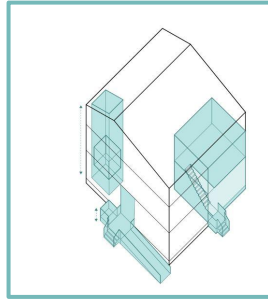


> Remove Sprinkler mandate for small buildings

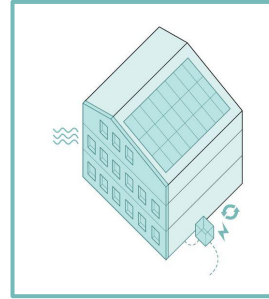
> Right-size fire alarm requirements

> Focus on passive fire protection features

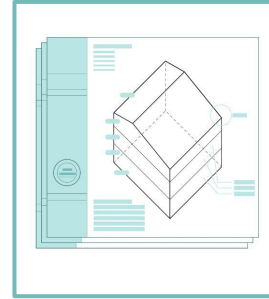
Accessibility & Site Requirements



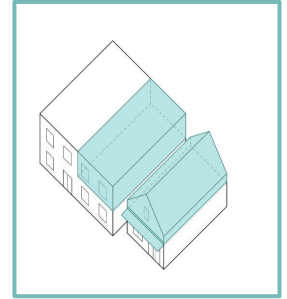
Envelope & Energy Performance Requirements



Process & Soft Costs



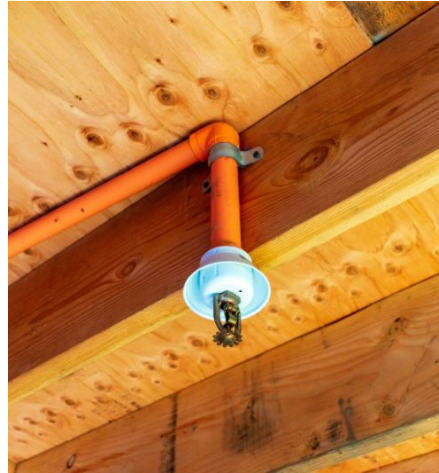
Mixed-use & Adaptive Re-use



Sprinklers & Fire Alarm Requirements



Houses & Duplexes
($< 14,400$ SF)



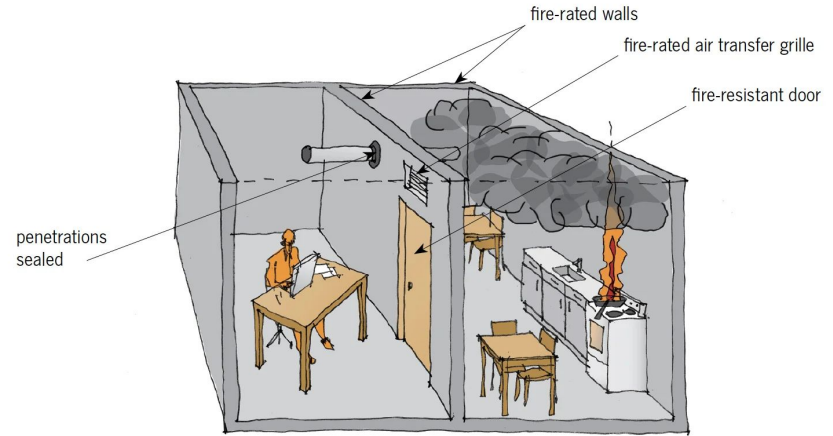
Multifamily
(any SF)



Sprinklers & Fire Alarm Requirements



Wood frame fire separation walls



Fire spread controlled through passive compartmentalization

Sprinklers & Fire Alarm Requirements

Proposed Changes for SMH Appendix

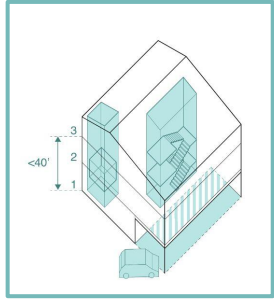
• Sprinklers & Alarms

Sprinklers should not be unilaterally required for SMH. Instead optional pathways of compliance should be available to achieve safety. One path, based on Memphis SMH appendix,⁷⁴ could have a menu of options that looks like this:

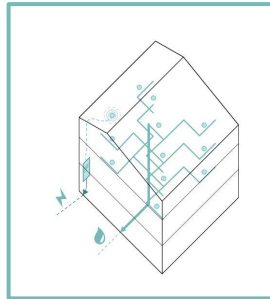
SMH size/scale	No Sprinklers 2-hour separations	NFPA 13D Sprinklers 1-hour separations	NFPA 13R Sprinklers ½-hour separations
3–6 dwelling units < 5,000 GSF < 30' in height	Permit Pathway 1	Pathway 2	Pathway 3
7–12 dwelling units < 12,000 GSF < 40' in height	Not Permitted (NP)	Pathway 2	Pathway 3
12–24 dwelling units < 24,000 GSF < 40' in height	NP	NP	Pathway 3

Building the Appendix: Key Code Elements for Reform

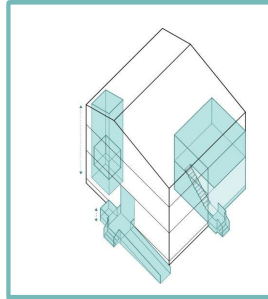
Building Form & Layout



Sprinklers & Fire Alarm Requirements

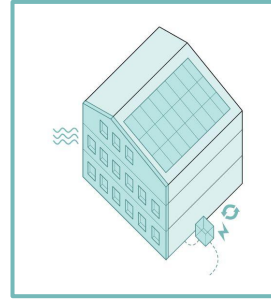


Accessibility & Site Requirements

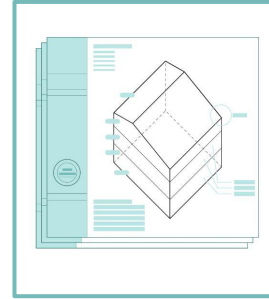


- > Permit lifts and other options for on-grade access
- > Reform elevator rules
- > Exempt multistory dwellings from code reqs.

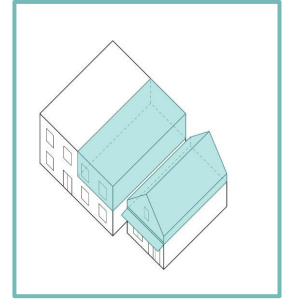
Envelope & Energy Performance Requirements



Process & Soft Costs

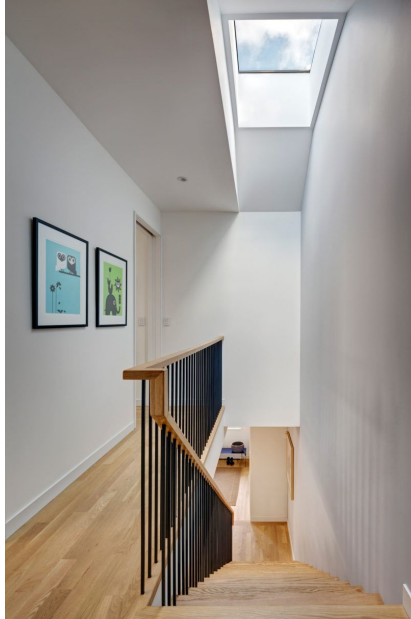


Mixed-use & Adaptive Re-use



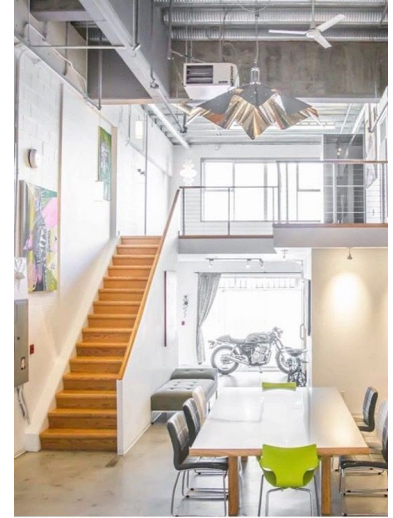
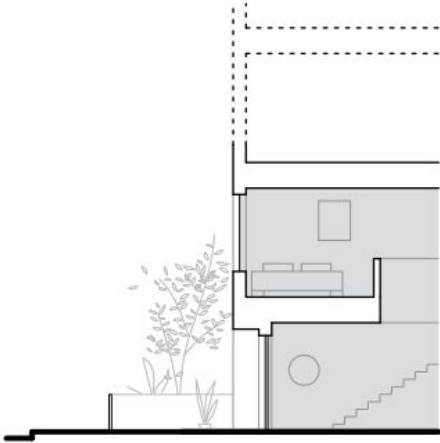
Accessibility & Site Requirements

Multistory Dwellings

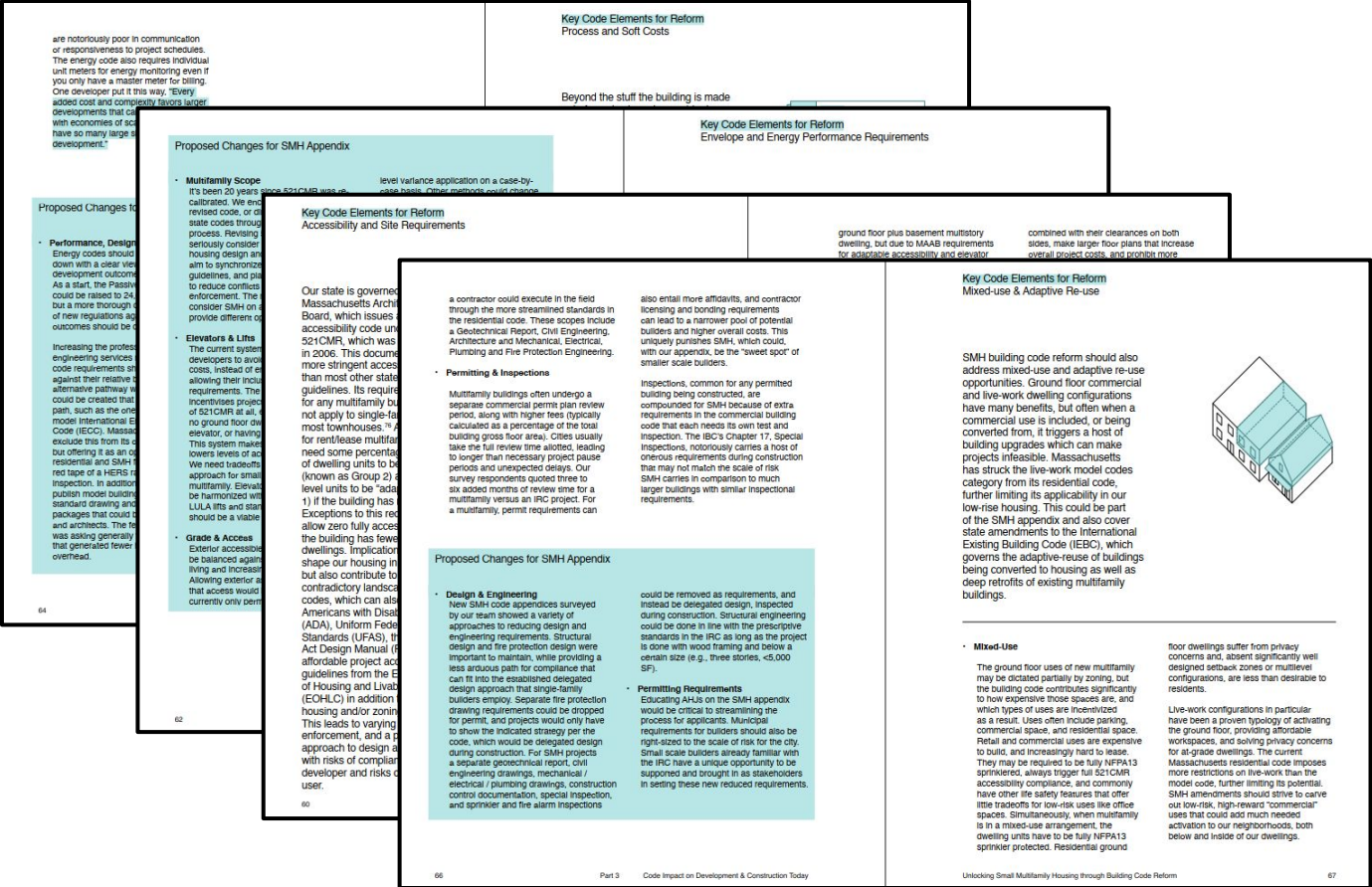


Accessibility & Site Requirements

Multistory Dwellings



Key Code Elements for Reform



Part 4

Present & Future Code Reform Paths





[CODES \(/PUBLICSQUARE/CATEGORY/CODES\)](#)

Your city legalized triplexes. The building code said no

To build more affordable 'missing middle' housing, changing zoning laws is not enough. We need small multifamily buildings to be regulated under the residential code.

MATTHEW PETTY (/node/11042), MATTHEW HOFFMAN (/node/11043) APR. 1, 2026

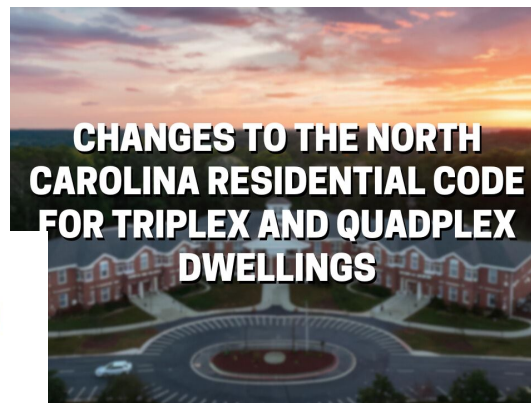
Updates

Memphis, TN Amends Local Building Code to Allow up to Six Units Under Residential Building Code (IRC) to Enable Missing Middle Housing



[All Articles](#)

Dallas City Leaders Approve Landmark Ordinance to Support Missing Middle Housing

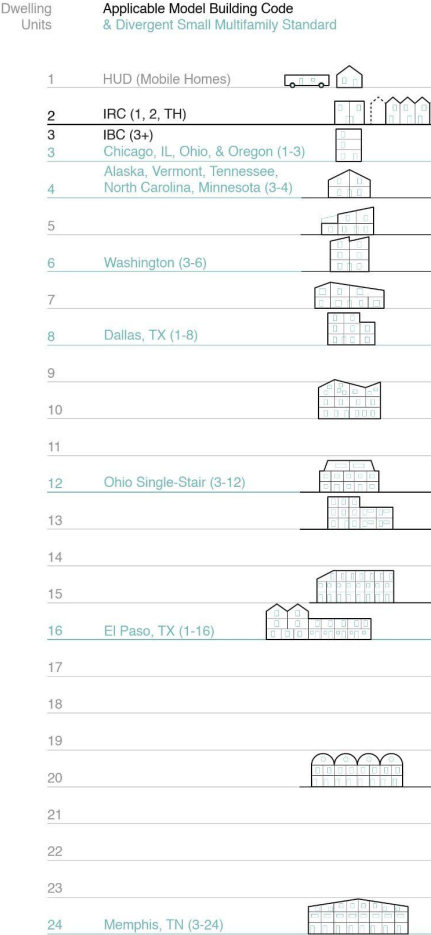


Vox
February 4, 2026

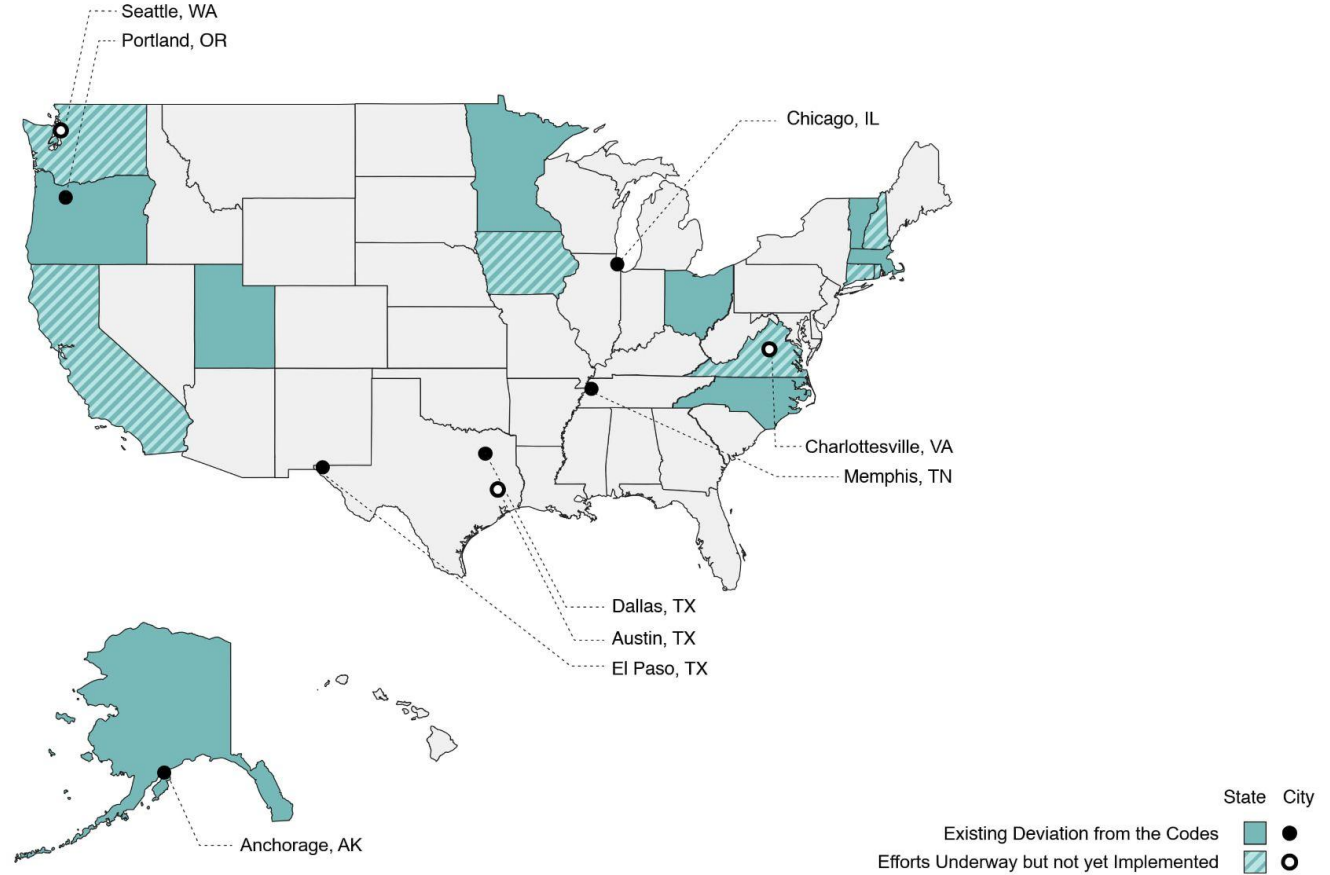
THE HIDDEN DOUBLE STANDARDS DRIVING OUR HOUSING CRISIS



Softening the Code Cliff



Mapping the Progress



Part 5

A Small Multifamily Future



Better Quality of Life



Better daylight



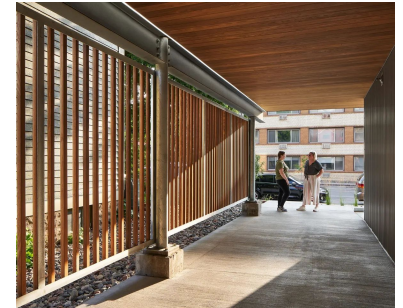
Cross ventilation



Outdoor space



Smaller, more
tight-knit
communities

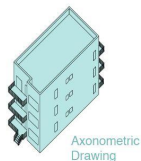


Greater accessibility

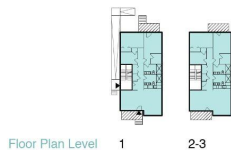
Small Buildings, Big Potential



Name
Triple-decker
Architect(s)
Rerame Systems
Construction
2025
Location
Somerville, MA
Dwellings
3
Stories
3
Density (DU/A)
36

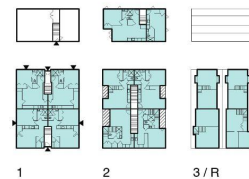
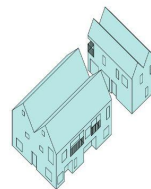


Axonometric
Drawing



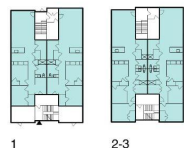
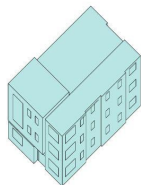
Floor Plan Level 1 2-3

Name
Edenton Micro Suites
Architect(s)
Montgomery Choi
Construction
2024
Location
Raleigh, NC
Dwellings
10
Stories
3
Density (DU/A)
63



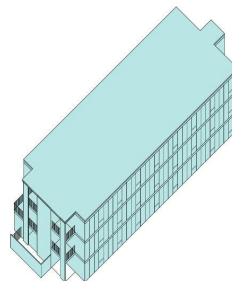
1 2 3 / R

Name
**Minneapolis Scattered
Site Family Housing**
Architect(s)
DJR
Construction
2024
Location
Minneapolis, MN
Dwellings
6
Stories
3
Density (DU/A)
34



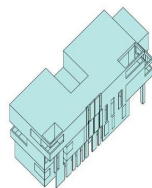
1 2-3

Name
**2087 Random Road
Apartments**
Architect(s)
Bucchieri Architects
Construction
2023
Location
Cleveland, OH
Dwellings
11
Stories
3
Density (DU/A)
28



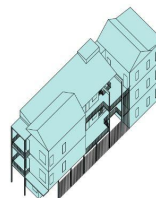
1 2-3

Name
Axolotl
Architect(s)
Yu2e
Construction
2023
Location
Los Angeles, CA
Dwellings
7
Stories
3
Density (DU/A)
44



1 2 3

Name
3333 Hennepin
Architect(s)
AWH Architects
Construction
2023
Location
Minneapolis, MN
Dwellings
11
Stories
3
Density (DU/A)
85

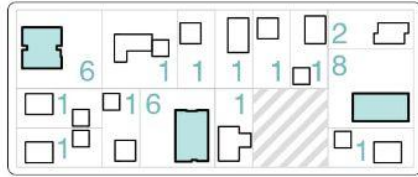


1 2 3

Incremental Density through SMH



Incremental Density through SMH

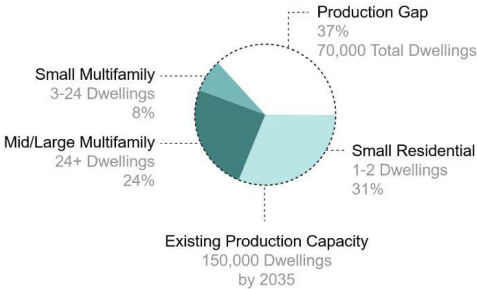
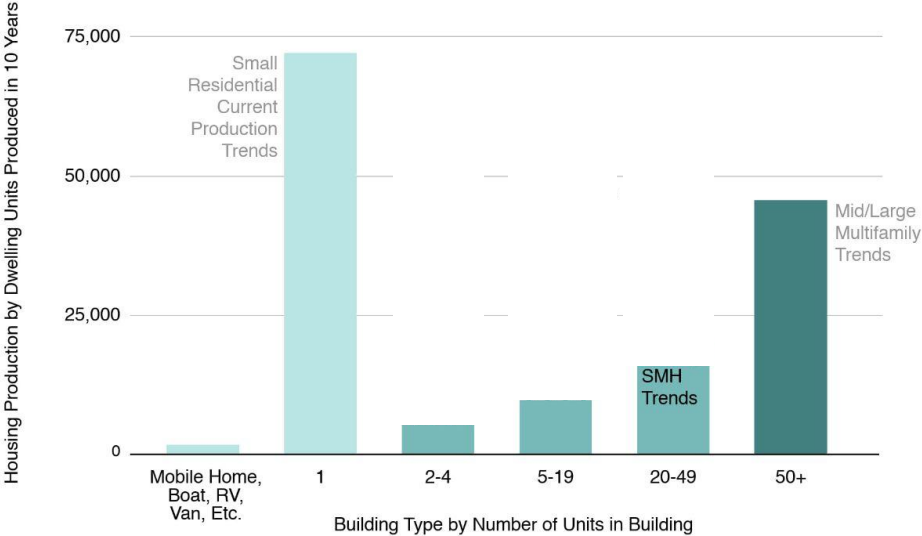


Prototypical Block in
Natick Station

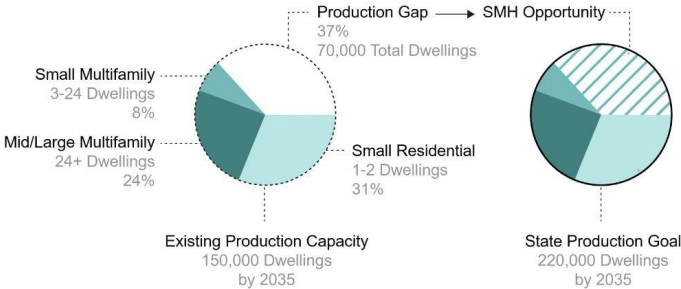
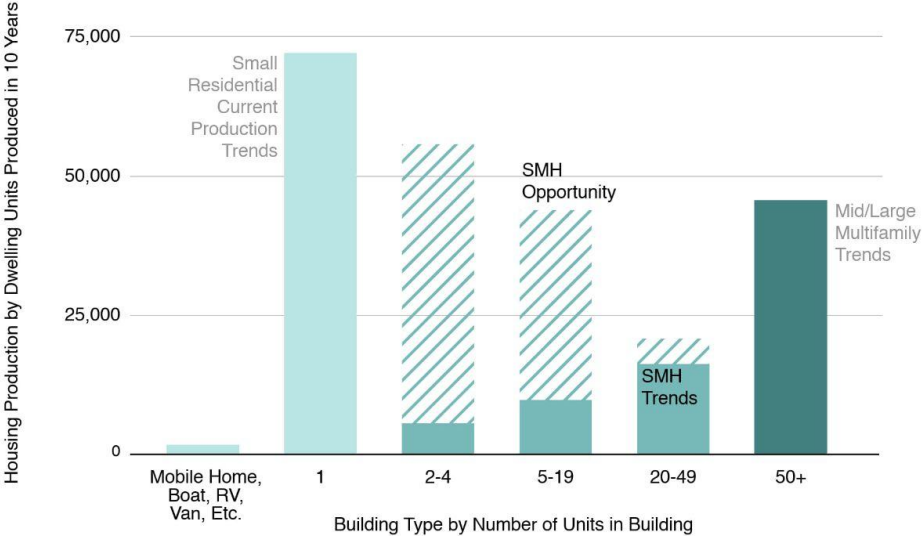
Existing Density 5.3 DU/A
New Density 8.4 DU/A



Existing Trends in Multifamily Typologies



Existing Trends in Multifamily Typologies



Next Steps...

- State Board of Building Standards and Regulations (BBRS) Reform
- Legislature Engagement
- Build Coalition of Multifamily Builders
- Further Technical Code Research & Studies





Thank You!

