

# An Investigation of Community Policies and Attitudes towards Accessory Dwelling Units in Greater Boston

A thesis submitted by

Alexandra P. Levering

In partial fulfillment of the requirements for the degree of

Master of Arts

in

Urban and Environmental Policy and Planning

TUFTS UNIVERSITY

August 2017

Adviser: Barbara Parmenter

Reader: Justin Hollander

## Abstract

This paper investigates community policy and attitudes of ADUs, by exploring how they are perceived, used and permitted in Greater Boston. By collecting and categorizing ADU legislation, and conducting interviews with planning officials of nine selected towns, this paper examines three questions. How are ADUs regulated? Are ADUs being built and if so why, and what are the local opinions of MA Legislature Bill S.2311? Overall, this research found that more permissive legislation should be passed, as ADUs are an important housing option that allows homeowners to adapt to their needs and family budget. In all nine towns interviewed however few ADUs have been built. This seems to be the combined result of economics, living preferences and aging infrastructure. Limited implementation also supports two further conclusions. First, that ADUs in Massachusetts today cannot be considered a meaningful affordable housing solution, and second, they do not meaningfully increase density, change neighborhood character or strain infrastructure as many residents fear.

## Table of Contents

Abstract.....	2
List of Figures .....	4
List of Tables .....	4
Chapter 1 - Introduction.....	5
Chapter 2 - Literature Review .....	9
Affordability Potential for Accessory Dwelling Units .....	9
ADUs and the rental market: Studies from the East Bay of San Francisco, CA and Portland, OR .....	10
ADU's and Owner Affordability .....	12
Is the Market Blocked? Development Limitations .....	13
Community Attitudes of ADUs .....	14
This Thesis Research.....	17
Chapter 3 - Methods .....	19
ADU Data Collection .....	20
Categorizing ADU Bylaws by Town.....	21
ADU Geostatistical Analysis.....	22
Interviews.....	23
Chapter 4 - Results of ADU Bylaws and Categorization .....	26
ADU Bylaws by Town.....	26
Categorization .....	28
Chapter 5 - Results of Interviews .....	30
Reading.....	30
Stow .....	33
Newton.....	36
Lexington.....	39
Duxbury.....	42
Ipswich .....	45
Winchester .....	47
Wellesley .....	50
Medford .....	52
Chapter 6 - Discussion .....	55
Main Conclusions from Interviews.....	55
Limitations.....	59
Chapter 7 - Recommendations and Conclusions .....	61
Further Research and Action.....	63
Appendix A.....	65
.....	66
Bibliography .....	69

## List of Figures

Figure 1 The MAPC Region and its Subregions.....	19
Figure 2: Cluster and Outlier Map of ADU Bylaw Restrictions by Town.....	22
Figure 3: ADU Restriction Level by Town in the MAPC Region .....	33
Figure 4: Reading Level 3.....	30
Figure 5: Stow Level 3 .....	33
Figure 6: Newton Level 3.....	36
Figure 7: Lexington Level 3.....	39
Figure 8: Duxbury Level 2 .....	42
Figure 9: Ipswich Level 2 .....	45
Figure 10: Winchester Level 1 .....	47
Figure 11: Wellesley Level 1 .....	50
Figure 12: Medford Level 1 .....	52

## List of Tables

Table 1: Permitting Requirements of the 65 communities that allow ADUs .....	26
Table 2: Bylaw Restrictions of the 65 communities that permit ADUs by-right or by special permit.....	27
Table 3: ADU Data by Town.....	56

## Chapter 1 - Introduction

Over the past decade, Greater Boston has experienced significant population and economic growth. The region's economy has outperformed the national average for the last nine years, and unemployment is at its lowest levels since 2001 (Bureau of Labor Statistics, 2016). These regional characteristics have acted like a magnet, drawing many new residents to the area. Between 2010 and 2014, Greater Boston grew by 67,000 households (Fitzgerald, 2015). Growth however has its challenges, and housing affordability is at the top of the region's list. Between 2000 and 2014, the median price of a single-family home increased by 52 percent, while homeowner income rose by only 34 percent. Growing population, limited housing options and stagnant wages have resulted in 38 percent of homeowners, and 51 percent of renters being cost burdened, meaning they pay more than 30 percent of their income on housing (Bluestone et al, 2015). These trends, similar across many other cities in the United States, have created an affordability housing crisis. To alleviate the crisis, more housing units need to be created, and those that are developed should be built to reflect the population's changing housing preferences.

Changing housing preferences are the result of two major population trends. Baby-boomers, now ranging in age from 51 to 70 years old, are reaching retirement and are becoming or are already empty-nesters. As a result, many boomers are seeking new homes that are smaller than their current single-family dwellings and require less maintenance, something that is increasingly important

for older adults to maintain their independence. Second, millennials, defined as those born between 1980 and 1999, are transitioning in stages of life, becoming independent and leaving their parents homes. In the past few decades, there has also been a cultural shift among the preferences of adults in their 20's and 30's (Infranca, 2014). Many are staying in school longer, are delaying marriage and waiting to have children if at all. Notably, from 2000 to 2011, marriages declined nationally from 8.2 marriages per 1,000 individuals to 6.8 marriages per 1,000 individuals (CDC, 2014). As a result, household sizes have also shrunk and more people are living alone.

The Metropolitan Area Planning Council, Greater Boston's regional planning agency, also recently recognized that new housing demand will outpace population growth due to declining household size in the Boston area. They explained that with more single-person households (especially seniors), more divorced households, and fewer children per family, average household size is likely to decline 10% by 2040 under cautious predictions. In other words, an average group of people will form 10% more households and thus require 10% more housing units than they do today (MAPC 2014).

At the same time, the number of multi-generational households, which were more prevalent in prior generations, is increasing (Infranca, 2014). Mostly the result of immigrant families, new housing structures with spaces for aging parents to live are becoming more desired. These changing preferences are driving the need for more multi-generational homes in the Greater Boston area.

Unfortunately, there is no panacea for the affordable housing crisis. Current affordable and workforce housing programs and zoning initiatives have failed to keep up with market demands. Thus, different approaches are needed to solve the insufficient housing supply. Accessory dwelling units or ADUs, defined as separate housekeeping units, complete with sleeping, cooking and sanitary facilities, contained within a single-family dwelling, or in an accessory building (Town of Grafton, MA, 2015), is one such approach this thesis will examine further.

Accessory dwelling units however are not a new concept. In fact, they were common in single-family homes prior to the mid 1900's, existing as servant's quarters, places for aging family members to stay or even units above garages for chauffeur living facilities (Jackson, 1985). In some historic neighborhoods, carriage houses behind the main house also provided affordable housing for workers (Tyre, 2008). In the 1940's and 1950's, families around the country often rented out an extra apartment over their garage or in their basement to earn income (Mazur, 2000). In the mid 1900's urban sprawl and low-density suburban developments grew through the ubiquity of cars, the GI Bill, the Interstate Highway Act of 1956 and homeownership tax benefits. As suburban communities grew in Massachusetts, towns passed restrictive zoning regulations to maintain low-density development. Many of those zoning regulations either strictly limited or banned ADUs (Yukubowsky, 1995). These changes caused ADUs to disappear.

In Massachusetts today, there are no state laws governing ADUs. The Commonwealth's Smart Growth Toolkit provides bylaw suggestions to aid towns

to pass legislation, but the toolkit itself holds no legal traction. There is also different nomenclature used for ADUs throughout the state. Commonly they can be referred to as accessory apartments, guest apartments, in-law suites, family apartments or secondary units (Commonwealth of Massachusetts, 2016). Other terms include granny flats, laneway houses, and backyard cottages. Many towns have passed legislation concerning ADUs, but laws vary throughout the state, with some banning them outright, others allowing them by special permit or site-plan review and a few allowing them by-right.

This thesis will investigate community policies and attitudes towards accessory dwelling units. This will be primarily achieved by reviewing existing town bylaws and city ordinances in the greater Boston area and conducting interviews of local planners. First however, the following section will assess the affordability, limitations and drawbacks of ADUs as documented by academic research and review existing case-studies which assessed ADUs policies and outcomes in two U.S. cities.



## Chapter 2 - Literature Review

### Affordability Potential for Accessory Dwelling Units

Affordability is one of the most commonly noted benefits of accessory dwelling units. In the case of ADUs however, affordability can mean many different things, including affordability for the owner and affordability for the renter. Likewise, advocates at the local or state government level may see ADUs as an attractive affordable housing option, because the homeowner is typically paying the cost of construction.

This idea that ADU's aid in the creation of affordable housing is one of the most common benefits described by town and state housing agencies, planners and journalists when discussing ADUs. As ADUs are typically limited in square-feet or number of occupants, and/or are required to be rented to a family member, it is easy to understand why affordability benefits are assumed. ADUs also increase the housing supply, which should help decrease housing costs. Unfortunately, in our complex urban society that does not always appear happen, and there are relatively few case-studies that empirically investigate the ways in which ADUs are, or are not affordable.

The reasons for limited studies are due to a few complicating factors. First, many cities have a substantial number of homes with ADUs that are not properly permitted (Brown, 2009). Some are grandfathered units, but many ignore the law due to limited financing and immediate need. Still others are often unaware of the permitting process. In fact, Martin John Brown predicted, after conducting a study

in Portland, OR, that there are likely two to three times more ADUs in Portland than permits suggest. Another study which considered affordability of ADUs in the City of Berkeley, California, found that potentially 90 percent of ADUs in the city's flatland area lacked permits (Chappel et al., 2012). The significant number of "black market" ADUs make them difficult to study, or even identify.

Further, finding rental data is difficult. Most cities, including Boston, have not collected rental data from landlords, and no city or regional database exists with aggregated rental data. Using online websites including Zillow or Craigslist allows some insight into rental costs, but those have their limitations, and are not typically comprehensive. Finally, many ADUs even if they are permitted, are rented out to family members or friends. As a result, many units are offered at no cost, or at a rent far below the market rate.

ADUs and the rental market: Studies from the East Bay of San Francisco, CA and Portland, OR

Two studies, both on the west coast of the United States, have been conducted to understand ADUs in the context of their cities. The study areas were the East Bay of San Francisco, CA, and Portland, OR. The first study was conducted by the Institute of Urban and Regional Development from University of California Berkeley. Researchers sought to quantify the affordability of ADUs in their East Bay neighborhood of San Francisco. To achieve this, they administered surveys to neighborhood residents that asked questions about ADU ownership, pricing and permitting. They then combined those results with rental data from real estate

websites. Overall, the study found that 16 percent of single family residential properties in East Bay have at least one, typically detached secondary unit. They also found that nearly 17 percent of ADUs were occupied for zero rent, and that those rented to strangers were at least 6% cheaper than comparable non-secondary units (Wegmann & Chappel, 2012).

The second study in Portland, Oregon conducted by the State of Oregon Department of Environmental Quality, used a similar method of surveying residents and comparing results with data from the American Housing Survey, with data aggregated from the US Census Bureau and local assessor parcel data. Their results found that the city had 800 ADUs legally permitted in 2013, accounting for 0.5% of single family properties. Thirteen percent of those 800 units were occupied for zero rent, with another five percent renting below \$500, a rate according to Martin John Brown is far below the market average (Palmeri, 2014).

These two studies, provide an insight into the context and rental affordability of ADUs in their respective cities. Due to housing markets and rental prices varying significantly from city to city, and limited data, academics have wondered whether ADUs create affordable housing at all. Their question is valid, as researchers have found that higher-income homeowners typically do not rent their ADUs (Brown et al., 2014). Instead, owners use them as offices, art studios, short-term rentals or as an extra living space. A newspaper article from Davis, California similarly found that most accessory units in the city are utilized as home

offices for higher-income professionals (Sakash, 2013). Another threat against affordability, is that ADUs can be rented on the short-term market, through services such as Airbnb rather than on the long-term market. Palo Alto, CA, has struggled with this issue, and stricter regulation on ADU and the Airbnb rental market is being considered (Sheyner, 2016).

### ADU's and Owner Affordability

Understanding owner affordability through the creation of ADUs is similarly important. Considering units that are rented out by homeowners, many academics and legislators state that ADUs help owners on fixed incomes, especially in times of recession or when homeowners retire (Semon, 2009). Other benefits are that ADUs enable homeowners to age-in-place. The AARP and the American Planning Association agreed in a report that ADUs have the potential to assist older homeowners in maintaining their independence, by providing additional income to offset property taxes and maintenance and repair costs (Cobb & Dvorak, 2000). ADUs help older homeowners remain in their community and maintain their social networks. Similarly, in circumstances where two or more generations live on a property with an ADU, living costs may be shared (Palmeri, 2014). These arguments however, are based on the assumed ability of homeowners to create ADUs. The next section will discuss the ability of homeowners to develop ADUs, and investigate possible development limitations.

## Is the Market Blocked? Development Limitations

It is important to assess the limitations or obstacles both financially and legally that exists in developing ADUs to understand their possibilities. I will first discuss the financial limitations that may hinder construction including loans and permitting, and then explore possible legal barriers.

The creation of ADUs, whether they are conversions or new construction, often requires financing. Restricted financing options can prevent homeowners from being able to build an ADU, especially if they have low, moderate or fixed incomes. Banks often do not consider expected rental income from the extra unit when offering loans, and make homeowners qualify with only their current income. (Brown & Watkins, 2012). Rosanne Haggerty noted that the tendency for ADUs to be under-appraised may account for banks' reluctance to finance ADUs (Haggerty, 2013). Haggerty further commented that resistance may also be due to appraisers' lack of familiarity with the ADU building structures. Others believe however, that under-appraisal may simply be a result of limited market data to show how property values increase from the construction of an ADU. Fear of lawsuits from an over-appraisal, also generates under-appraised ADU properties (Infranca, 2014).

Another barrier to the creation of ADUs, or at least the legal creation of them, is the cost of required permits. The ways these affect ADU production can be seen in Portland, Oregon, as they have adjusted permit prices. Before 2011, the city charged around \$10,000 for an ADU Permit. From 2011-2016 however, the

city waived the fees for a permit to incentivize new projects. This led to a marked increase in development (Scarlett, 2016).

Building regulations can also be a barrier to the creation or legal development of ADUs. (Chapple et al., 2012). Codes and bylaws vary from city to city, but nearly all limit the size of ADUs through maximum square feet allowed, number of bedrooms, number of tenants or and/or percent size compared to the primary building. Size limitations however can make ADUs in some cases cost-prohibitive. For instance, if a small house is building an ADU and is limited to 33% in size, the cost of the renovation or new construction, compounded with building permit fees may make the development infeasible (Palmeri, 2014). Michael Brown agrees that if the full potential of ADUs are to be realized, permitting and building requirement barriers need to be addressed (Brown, 2009).

### Community Attitudes of ADUs

Not all community members and officials have positive attitudes toward ADUs, and critics have struck consistent themes to express concern. Most notable is the fear that ADUs will change the existing “neighborhood fabric” of the area, and have subsequent impacts of decreasing property values (Palmeri, 2014). This is based off the concern that homes with ADUs will look more like duplexes and make suburban communities feel more urban.

It is also feared that smaller rental units may attract residents who could not otherwise afford their neighborhood, including college students, Airbnb

renters or other lower income individuals. Residents in Ann Arbor, Michigan for instance expressed their concern of renters and especially college students moving into ADUs at a community meeting in 2016. Their fear centered on the concern that students would host noisy parties, and that more cars would clutter their neighborhood streets (Stanton, 2016).

Additional strain on local utilities and amenities including parking and schools is another common concern. People fear exacerbated parking and more congested road-ways in places where off-street parking for ADUs is not required (Liebig, Koenig & Pynoos, 2006). Parents and town officials also voiced concern that ADUs would over-burden school systems, due to increased density. With more households, residents fear the town might need to build new or expand existing schools to meet demand, costing taxpayers more money. Similarly, amenities like sewer or water systems, especially in coastal areas where aging infrastructure can already be a problem, is a further concern (Rondinaro, 1985). Towns might not be able to support increased density based on their water quality or other infrastructure needs.

Other residents are against allowing ADUs, as they feel municipalities are already over-burdened by existing laws and requirements. Cities and towns have limited capacity to enforce rules, and that is a reason to keep rules as simple as possible (Dain, 2015). As such, officials in towns that are not seeing large numbers of illegal accessory apartments, are reluctant to ease ADU restrictions for fear of

passing laws they know town employees will be unable to enforce (Rondinaro, 1985).

On the other hand, many towns have existing problems with illegal ADUs, especially those with high rents burdens or aging populations. Many believe that if people are creating them illegally, towns should pass legislation to allow them. That would ensure ADUs are built safely and that they comply with building code requirements. Edward Gallagher, Mayor of Old Tappan, New Jersey, a community built of mostly single family homes with numerous illegal ADUs, noted "it makes no sense to stick our heads in the sand and pretend [ADUs are not being built]." (Rondinaro, 1985).

The news media has also played a part in adding to the dialogue about ADUs. Over the past 30 years, ADUs have been topics of conversation at the state and community levels and have been covered by journalists. Interestingly however, many news reports including stories in popular press like the *Los Angeles Times*, *The Wall Street Journal* and *U.S. News & World Report* most often focus on disruptions and issues caused by ADUs rather than positive stories (Liebig, Koenig & Pynoos, 2006). Articles discuss instances where people have violated zoning and building codes, or where ADU residents have caused parking issues on streets or strained school systems and other town amenities. Certain cities like Portland and Vancouver who have worked to pass progressive ADU bylaws have sought to change the dialogue and resident perspectives of ADUs by hosting events like ADU



open houses and community meetings, removing development impact fees, and creating video advertisements to promote the idea.

### This Thesis Research

Studying ADUs are difficult due to limited academic research and community data. Few studies exist that investigate the number of ADUs in a town whether legal or illegal, explore how ADUs are used, or seek to understand why a community does or does not allow them. The few cities and organizations that have considered this topic have been located on the West Coast, most notably in the Pacific Northwest including Portland, Oregon, Seattle, Washington and Vancouver, British Columbia, and coastal Californian cities.

As such, this thesis seeks to fill a gap in understanding how ADUs are perceived, used and permitted in the Greater Boston region. It accomplishes this by looking at a variety of ADU issues including permitting, affordability, public sentiment and the state legislative housing bill S.2311. It is also grounded by three primary research questions. First, how do towns in the MAPC region regulate accessory apartments? Second, are ADUs being created, and if so for what reason or purpose? Third, what are the local opinions of the Massachusetts state housing Bill S.2311?

These questions will help explain ADUs in Massachusetts at the state, regional and local level by aggregating and categorizing ADU bylaws and ordinances and conducting interviews of planning staff and other municipal officials of select towns. These steps will be explained further in the subsequent

methods section, followed by review of the bylaw data and interview results. Those results will be discussed, research limitations examined and the thesis will conclude with recommendations and suggestions for further research.

## Chapter 3 - Methods

My investigation of community policies and attitudes toward accessory dwelling units in Greater Boston will involve two main data components. Collection and documentation of accessory dwelling unit bylaws and ordinances of the towns and cities in Greater Boston, and interviews of planning staff to learn their opinions and attitudes towards policies regulating ADU's in their respective towns. This thesis will define Greater Boston as the 101 towns that make up the Metropolitan Area Planning Council's jurisdiction. The region includes Ipswich to the North, Duxbury to the South, and Bolton to the West, represented in Figure 1 below.

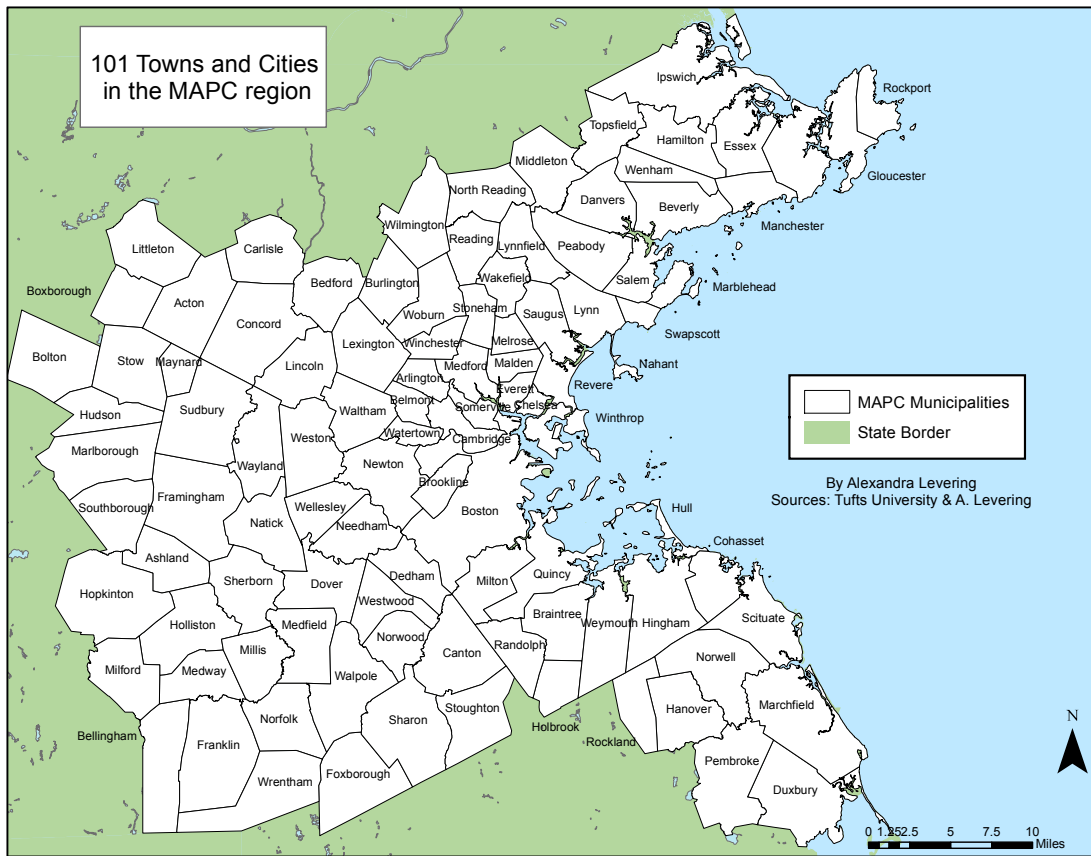


Figure 1: The Metropolitan Area Planning Council Region and its Subregions

## ADU Data Collection

To analyze existing ADU policies by municipality in the MAPC region, bylaws and ordinances were reviewed and individually documented. This was necessary, as the most recent document listing Massachusetts ADU policies by municipality dates to 2004. Data collection for this study was completed between December of 2016 and January of 2017. Once each bylaw was reviewed, the bylaw data was organized into elements involving town permitting and site requirements, occupancy and size restrictions and unit features. Below is a list detailing each category.

- **Permitting Requirement:** By-right, site plan review or special permit for attached and detached apartments
- **Site Requirements:** Existing building, lot size minimum or house size minimum
- **ADU Unit Restrictions:** Bedroom limit, size (square feet or %) limit
- **Occupancy Restrictions:** Owner occupation, of both housing units for either the main house or apartment
- **Parking Requirements:** Number of spaces needed
- **Permit Limitations:** Length of time needed to renew and/or transfer to new owners
- **Unit Feature Requirements:** Side or rear entrances or enclosed stairs

These elements provide a reasonably comprehensive overview of ADU legislation in Massachusetts. The categories were created after I reviewed several bylaws and compared common features and requirements. Many ADU laws restrict apartments in similar ways, however there are always some small differences and chance for error. Therefore, the data might miss some unique or specific requirements in select towns. The complete document analyzing ADU bylaws for all 101 MAPC towns can be found in the Appendix.

## Categorizing ADU Bylaws by Town

To better understand and compare town bylaws and city ordinances, each town was coded based on whether ADUs were allowed by-right, by special permit or not at all. Below provides more detail as to how bylaws were categorized.

(1) = Very restrictive

*a. Meaning not allowed By-Right or by Special Permit for either a detached ADU or an attached ADU.*

(2) = Semi restrictive / nonrestrictive

*a. Allowed by Special Permit but not By-Right for either a detached ADU or an attached ADU.*

(3) = Nonrestrictive

*a. Allowed By-Right for either a detached ADU or an attached ADU.*

It is important to note that many municipalities that allow ADUs by-right only allow them in certain districts or in certain circumstances. Otherwise they allow ADUs by special permit. In those situations, the towns were still coded as (3) nonrestrictive. Category (1) very restrictive also does not mean that ADUs do not exist in those towns. ADUs can be grandfathered, or allowed to remain if they existed before zoning was enacted. New ADUs however, cannot be created legally without a variance.

Separating towns and cities into levels based on the permitting process or lack of permitting process for ADUs, enables easier comparison and analysis of ADU legislation, included in the Results chapter. These categories also helped to

assess spatial patterns, and which cities and towns to interview as discussed in the following sections.

### ADU Geostatistical Analysis

After organizing and categorizing the data for each municipality, my next step was to map the results and perform spatial cluster analysis. Analyzing the data would show if any apparent pattern existed in how restrictive or permissive towns were toward ADUs. To map the data, I first joined my ADU bylaw table to a Massachusetts town shapefile with spatial information in ArcGIS. I joined the data based on town name and selected only matching records. Once all towns were joined, I exported the shapefile from ArcGIS and conducted a Univariate Local Moran's I function using the software program GeoDa, to conduct a cluster and outlier analysis. The result produced the map below.

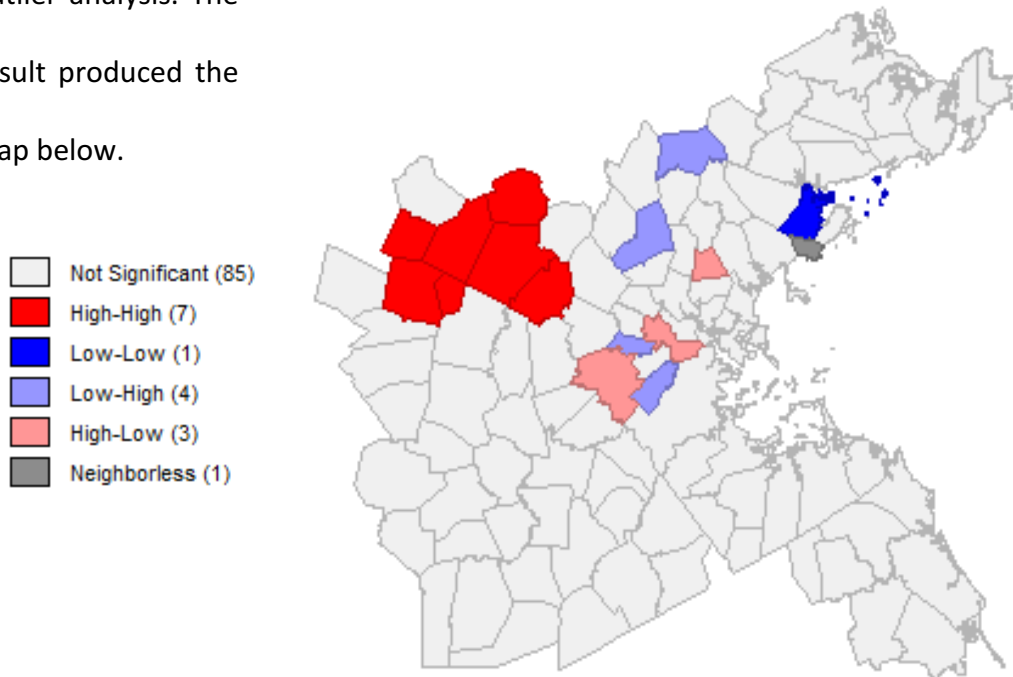


Figure 2: Cluster and Outlier Map of ADU Bylaw Restrictions by Town

The results show that only a few towns appear to be near other towns of similar restrictions. Most notably there is one high-high cluster of towns shown in red in the northwestern part of the MAPC district, composed of Carlisle, Concord, Lincoln, Acton, Boxborough, Stow and Maynard. Most of the towns, 85 in total, however appear to have insignificant results. To confirm my findings, I conducted a second test to assess spatial autocorrelation. In ArcGIS I used the Global Moran's I function. The overall score was 0.26 which was significant at the .05 level. This indicates that there is some level of clustering within the MAPC district. In the southern half of the MAPC district however there appears to be no significant clustering of towns with similar ADU bylaw or ordinances. These findings suggest that location in the northwestern part of the MAPC district might mean towns are more likely to permit ADUs, but that other reasons must exist to explain ADU restrictions. This quick spatial analysis indicates that further research, like interviews, is needed to better understand town situations.

### Interviews

After analyzing general policies, my next step was to conduct nine interviews with planning staff of various towns. I conducted those interviews with communities that varied in population size, location and who had differing ADU bylaws. I choose cities and towns from each level of restriction (1-3). The towns included: Medford, Everett and Winchester from level 1, the most restrictive; Ipswich and Duxbury from level 2, semi restrictive/nonrestrictive; and Lexington, Stow, Reading and Newton from level 3 nonrestrictive.

I conducted the planning staff interviews for four main reasons. First, I wanted to understand the attitudes planners and residents had toward ADU's in their community, including opponents and proponents. Second, I wanted to ask questions about Bill S.2311 and understand planner's hopes or fears for the success of the ADU section of the bill. I also wanted to know if there had been recent pushes to pass legislation to alter their town's bylaw, if amendments had come up and been voted down, or if they were stopped in the research phase. My final reason was to collect data on ADU's I otherwise would not have had access to. That included when an ADU's bylaw was enacted and how many ADU's had been created since it was enacted (if applicable) and potential information on grandfathered or illegal units.

**Below are the interview questions asked:**

1. *What is your professional opinion about ADU's?*
2. *Does your town allow ADU's either by-right or by special permit? (If yes, I will ask the questions below)*
  - a. *How many ADU's have been created in your community since the bylaw was passed?*
  - b. *Were those units attached or detached?*
  - c. *Were any of those units previously unpermitted?*
  - d. *What aspect of the bylaw do you think prohibits people the most from creating ADUs?*
3. *Have there been suggestions to modify your town's existing ADU bylaw, or to create one?*
  - a. *If so what modifications would you have or general restrictions?*
4. *What arguments do you hear against ADUs? What are citizen's fears or concerns?*
5. *Do you get calls from residents interested in creating ADU's?*
6. *Are you aware of MA Legislative Bill S.2311: An Act Promoting Housing and Sustainable Development?*
  - a. *If so what is your opinion of the bill?*
  - b. *Do you think it's appropriate for your community?*



- c. What do you think it's chances would be in your community?*
- d. How might you change it to be more appropriate?*

These interview questions have been reviewed and approved by the International Review Board (IRB). All interviews conducted consisted of conversations with public officials, including planners and building inspectors. As per the IRB process each consented to be interviewed, and represented the views and experiences of their municipality. Information from these interviews will be invaluable. Little to no data exists publically in Massachusetts regarding these types of living spaces, and information from planners and building inspectors will help shed light onto the success of policies, interest and potential ideas for change.

## Chapter 4 - Results of ADU Bylaws and Categorization

### ADU Bylaws by Town

To answer my first research question, how are ADUs regulated in the MAPC region, I aggregated ADU policies by municipality. After navigating to each town website to gather up-to-date data, I reviewed each bylaw and sorted the bylaws into categories including permitting, design and site requirements, unit, parking and occupancy restrictions and permit limitations. The full table of all 101 towns and cities in the MAPC region is included in the Appendix.

In total 65 towns allow either attached or detached ADUs by-right or by special permit, with 36 not allowing them at all. For the 65 towns that do allow them, below is a table breaking down the number of towns that allow attached accessory dwelling units (AADUs) or apartments that are located within or attached to a single-family dwelling and detached accessory dwelling units (DADUs) by-right or special permit.

Table 1: Permitting Requirements of the 65 communities that allow ADUs

<b>AADUs by-right</b>	<b>12%</b>
<b>DADUs by-right</b>	<b>5%</b>
<b>AADUs by special permit only</b>	<b>83%</b>
<b>DADUs by special permit only</b>	<b>26%</b>

Of the 65 municipalities that allow ADUs, 8 or 12% of towns allow attached ADUs by-right, and 3 or 5% allow detached ADUs by-right. Fifty- of the 65 towns, or 83% allow attached ADUs by special permit only, with fewer towns, only 17 or 26% allowing detached ADUs by special permit. The table does not add up to 100%, as

some towns allow attached ADUs and detached ADUs by special permit, and others only detached ADUs and not attached ADUs or vice-versa.

Table 2: Bylaw Restriction Breakdown - Bylaw Restrictions of the 65 communities that permit ADUs by-right or by special permit

Requires building to be existing for a minimum of two years	38%
Requires a minimum lot size	26%
Size limited to 33% of main house	37%
Limited to 1 or 2 bedroom(s)	37%
Occupancy limit to 1-3 inhabitants	31%
Require at least 2 parking spaces	23%
Requires the owner or family to occupy both units	43%
Has an affordability deed restriction option	9%
ADU permit expires upon sale of property	53%
Permit renewal needed every 1-5 years	43%
ADU entrance needs to be on the side or rear	26%

The most common bylaw component of the towns that allow ADUs is that an ADU special permit expires upon sale of the property on which the ADU is located. In most cases, new owners need to reapply for an ADU special permit to use the apartment. In total, 53% of all communities have renewal upon transfer of ownership as a requirement. Similarly, 43% of all towns require owners with ADU special permits to renew them every 1-5 years. In cases where owners do not renew their special permits, owners are asked to dismantle their kitchens, removing appliances such as stoves and ovens. The burden to regulate ADU permit renewals typically falls on the building inspector and planning department.

Also of note is that 43% of all communities require owners or family members to occupy both the ADU and the main dwelling unit. This provision limits the ability for the owner to make money by renting either the ADU or the main

dwelling as owners typically do not charge full market rent (or any rent at all) to family members.

Thirty-seven percent of all units limit the number of bedrooms to one or two, limits the size of the unit to be 33% of the main dwelling or less and requires the building to be existing for a minimum of two years. For the last finding however, many communities require the building to be existing for far longer, with many requiring the building to be constructed 10 years prior, and two even requiring the building to be built before 1921 and 1925 respectively.

### Categorization

As explained in the methods section previously, to better understand and compare ADU bylaws and ordinances, each town was categorized based on whether ADUs were allowed by-right (3- nonrestrictive), by special permit (2- semi restrictive) or not at all (1- very restrictive). Once each town was given a ranking of 1-3, they were joined to spatial town data and mapped. The results are below in Figure 3.

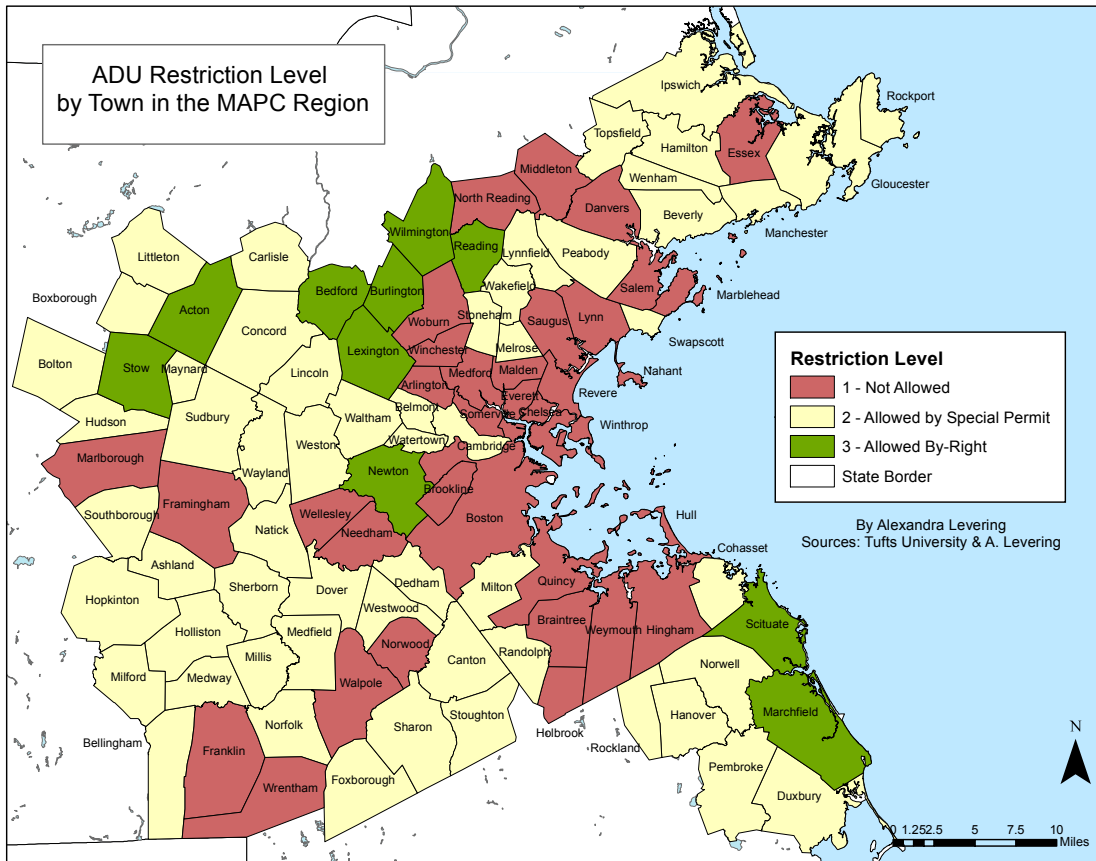


Figure 3: ADU Restriction Level by Town in the MAPC Region

In total, there are 36 towns that do not allow ADUs, 55 communities that allow ADUs by special permit, and 10 communities that allow ADUs by right in certain circumstances. To better understand the distribution of these ADU restrictions the interview results are discussed in the following section.

## Chapter 5 - Results of Interviews

This section includes the results of interviews of nine towns in the MAPC region. Each town has different types of restrictions, including those that allow ADUs by-right and those that do not allow them at all. These interviews were conducted either in-person, or over the phone, and were gathered between March 11<sup>th</sup> and May 15<sup>th</sup> of 2017.

### Reading

The town of Reading allows ADUs by-right and by special permit. Attached accessory apartments are allowed by-right if they are created within an existing single family structure that does not require an addition. Detached units are allowed if they preserve a historic structure, meaning a

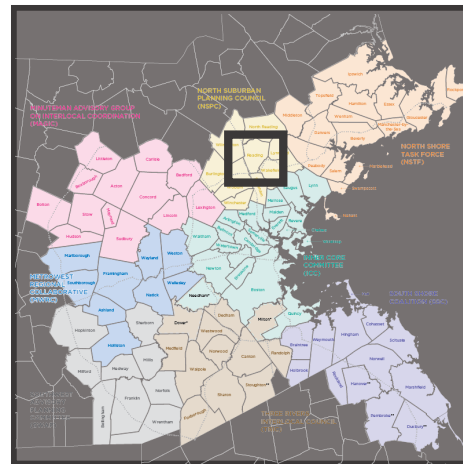


Figure 4: Reading Level 3

carriage house, stable or barn built before 1910, and is included in the town's Historical and Architectural Inventory. ADUs require a special permit if an addition or renovation is needed for either attached or detached ADUs. After talking with Reading's Planning Director Julie Mercier in an in-person interview, I acquired a better understanding of how the accessory apartment bylaw is used in Reading, and her perception of Bill S.2311.

## Current Situation

Since the bylaw was passed in 1983, nine ADUs have been approved. One was a detached unit and the rest attached ADUs requiring approval by special permit. Mercier expressed in her interview her belief that ADUs can increase affordable housing and help diversify the housing stock. The bylaw however has not been taken advantage of, as only a few number of residents have used the provision. She also explained that a few illegal apartments have been brought to her attention, most often found when a house goes up for sale. Most she noted have existed for years, with residents not knowing they were unpermitted. Mercier mentioned that one existing illegal ADU is currently undergoing the approval process required by Reading.

In explaining why few ADU's had been legally built, Mercier revealed that many owners are unable to create ADUs, mostly due to lots being non-conforming and thus unable to have an ADU. Non-conforming lots she explained include homes on lots smaller than the minimum size allowed in a district, or those that violate building setbacks.

Mercier also noted that during the last town meeting, the town voted to amend the ADU bylaw. The bylaw was modified to become slightly less permissive, as a recent detached ADU was reconstructed and did not blend into the neighborhood fabric. In reaction to upset residents, the planning board drafted legislation to modify setback and height requirements, to ensure a similar structure would not be allowed in the future.

## Bill S.2311

Regarding Bill. S2311, Mercier expressed concern over municipal governments losing their authority to properly control and guide development in their towns. She noted that the special permit process was an important part in the municipal government's duty, and to make ADUs allowed by-right would remove the town's ability to review applications and provide design recommendations. The special permitting process Mercier described enables the planning board to have discretion to review buffers between abutting properties, architectural style and other design components that ensures an ADU fits into the neighborhood context. Mercier also noted that allowing ADUs by-right without guidelines might create greater dislike of them in Reading than if Bill S.2311 allowed them by special permit.

To change the bylaw to be more appropriate, Mercier suggested requiring all ADU units to be allowed by-right, only if they fit certain requirements and design characteristics. This would enable communities to designate restrictions that would help an accessory apartment fit into the neighborhood fabric. Another suggestion might be to increase the minimum lot size from 5,000 square feet to something larger, as allowing ADUs on small parcels has the potential to make the area very dense, and change the composition of a town's infrastructure.



## Stow

In Stow accessory apartments are allowed by-right in certain circumstances, if the apartment is located within or attached to an existing single-family building built before 1991, and located on a lot with no less than 1.5 acres. An ADU is allowed by special permit if an owner wants to create

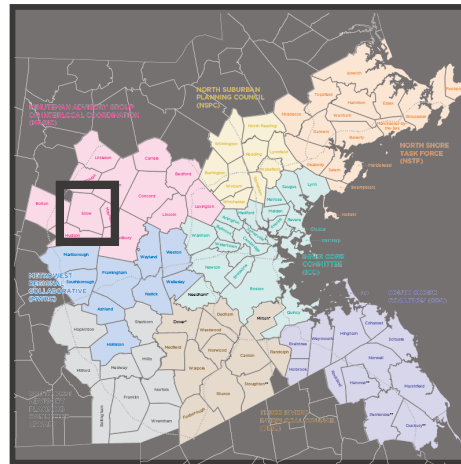


Figure 5: Stow Level 3

a unit on a lot less than 1.5 acres, or if more than one drive way needs to be constructed. Accessory apartments have a long history in Stow, as the town passed a bylaw allowing them in 1991. Talking with Stow's Town Planner Jesse Steadman in an in-person interview, I inquired about how ADUs are perceived, how the bylaw is being used and his opinion of the legislative Bill. S.2311.

### Current Situation

According to Steadman, ADU applications for either by-right or by special permit apartments are rare. In fact, since Steadman started his position as a Town Planner at Stow, which has been nearly 5 years, he has seen only 5 applications.

When asked about illegal units and if they seem to be an issue, Steadman mentioned there are a few instances where illegal units have been revealed to the planning office. In most cases he explained, those have been discovered when a house with an illegal unit is up for sale, or if a house needs a permit to be remodeled. Other times Steadman noted, owners are less explicit. During zoning board appeals for example, some owners ask for relief on plumbing restrictions in

accessory buildings. Steadman hypothesizes that those requests are likely made to create an illegal ADUs in properties that otherwise would not allow an ADUs unit.

In a town that has allowed ADUs for so long and by-right in many instances, I was curious to learn why so few residents have taken advantage of the ADU bylaw, and why some residents need to create them illegally. Steadman believes that the 700-square foot ADU maximum is likely one reason people are less likely to create a unit legally. If there is a limitation on size he explains, residents cannot rent it out for as much or house as many individuals.

Steadman also revealed that Stow's housing costs are relatively high, with an average house costing \$617,000. With expensive homes and a steadily increasing average median income, seniors in town who want to downsize are more likely to leave and go to nearby towns that are less expensive. Especially since the idea of moving into a small accessory apartment is not popular. Steadman mentioned that Hudson is a typical option for residents of Stow, as housing prices and property tax rates are significantly lower.

Regarding Stow's aging population, Steadman mentioned that the town wants to make it easier for seniors to stay in town if they desire. He explained that Stow is talking about a few ways they might change the bylaw to better accommodate residents to create accessory apartments. Some of the changes they are interested in making include getting rid of the requirement for an owner to occupy both units. Recently Stow passed a duplex law allowing them to be

owned or rented by separate families. Steadman believes allowing two families in a duplex but not allowing two renters in an ADU is incongruous, and hopes to amend the bylaw.

Steadman also explained that Stow is considering increasing the maximum size of ADUs from 700 square feet to 1,200 square feet. If this change passes, he hopes it might incentivize people to create ADUs. They would be able to make more money renting them, and give renters or family members more space. Steadman also explained that many properties are unable to create ADUs based on the requirement that a building needs to be built before 1991. That was the date when Stow's first ADU bylaw was passed, but in 2017 the date seems arbitrary and outdated. Steadman hopes the new bylaw would eliminate that condition.

Not all residents are in favor of ADUs however, and a few fear the new apartments might affect the character of their neighborhood. Thus, Steadman revealed that the town is also considering more design requirements in the bylaw than they currently have. That way he explained, the planning board can ensure the new units will fit into the neighborhood environment.

#### **Bill S.2311**

When asked about Bill S.2311, Steadman explained that he welcomes it, and unlike some of his fellow planners does not think it is too permissive. Rather, he believes it would give Stow the impetus to make changes and move forward on creating a more diverse housing stock. The only change he recommends for the

bill, would be to give towns the option to include design guidelines to better fit ADUs into communities. He explained that while residents would initially resist the state bylaw, in the long-run he believes it would benefit Massachusetts communities.

## Newton

Since I conducted an in-person interview with Newton's Deputy Director of Planning and Development, James Freas, and Senior Planner Michael Gleba, Newton has passed legislation to make it easier for residents to create ADUs. Previously, ADUs were allowed by-right in certain

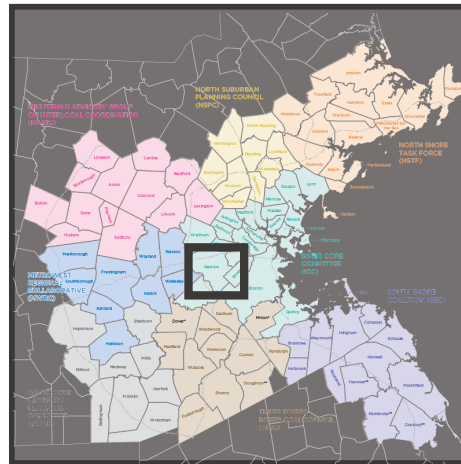


Figure 6: Newton Level 3

circumstances, but as of April 2017, the City Council approved an amendment to allow internal accessory apartments by-right in single-family and two-family households. The only restrictions include the need for the existing structure to be built 4 or more years prior to application that no new parking is created and that exterior alterations are in keeping with the look of the existing structure. A detached ADU is now allowed by special permit in a single-family or two-family house. One of the unique aspects of Newton's ADU ordinance compared to other towns in the MAPC region, has been the limitation that no more than three unrelated people can live on a lot. A provision Newton gleaned from Portland,

Oregon, the requirement curbs the ability for ADUs to meaningfully increase population, and makes the ordinance more agreeable for city councilors and community members.

#### Current Situation

Newton has a long history of allowing ADUs in their city. They passed their first ordinance in 1987, but no apartment was ever created due to the law's restrictions. To make it useful, the town modified the ordinance in 1989, and since then has seen 55 ADUs created and 18 illegal existing apartments brought up to code, for a total of 73 units or .002% of Newton's total housing stock.

Historically, the northern part of Newton has been home to Italian immigrants. In the early 1900's many moved to Newton, and constructed homes with summer kitchens in the basements. This allowed families to cook meals in hot weather more comfortably. Today, many of those homes have converted those basement spaces into accessory units. James Freas explained that many have been brought up to code, but that some are still illegal. Thus, he noted it is important to allow them by-right, to enable fire officials to address code issues and ensure they are safe. The more you put restrictions on them he explained, the more you drive them into the black market.

Apart from allowing ADUs because many already exist, Freas also explained that their ordinance aims to create a more affordable type of dwelling unit to diversify the housing stock, and that it is particularly aimed at seniors. ADUs

he noted can allow aging residents to stay in their homes, and with someone else living on the same property, can help combat social isolation.

When asked the reasons why residents have created new ADUs in town, Freas explained that he sees applications for three main reasons, preservation, aging parents and children with a disability. Starting with preservation, Freas noted that several residents have spent time restoring beautiful antique houses in Newton. Those owners he explained, typically have the know-how and money to invest in their homes, and are concerned that people might want to tear their houses down if they sell. To make that less of an incentive, Freas explained they create ADUs to increase the property value, and help offset living costs. Another reason why ADUs are created, is for family. They can provide housing for aging parents, to create a space for a live-in nanny for childcare, or to provide a space for parents to leave near, but not with children that have a disability.

Despite those reasons, as well as Newton's permissive bylaw and length of time ADUs have been allowed, only 73 units are permitted. When asked what stops residents from creating ADUs, Freas noted that like other towns, economics works against Newton and its aging residents for creating ADUs. He explained that it does not make financial sense to build an ADU if you are in your 60's as you would not get enough return on your investment, and that it makes more sense for homeowners to sell and move to a nearby town.

Between 2005 and 2009, Newton also established an Accessory Apartment Incentive program, using Community Preservation Act (CPA) funds to promote

deed restricted affordable ADUs. The program provided grants or forgivable loans to Newton homeowners interested in creating long-term affordable ADUs. The program ended in 2009 however, as the provision was never used. Even with the incentive money Freas explained, it was not enough to make people build an ADU. People fear a long-term deed restriction on a property will hurt its resale value, and requiring the unit to be rented as affordable reduces a homeowner's ability to control who lives on their property.

### Bill S.2311

Unlike most towns in the area, James Freas and Newton's Mayor Setti Warren, support Bill. S2311 without change. In June of 2016, the mayor spoke out in support of making it easier for homeowners in Newton to create ADUs, as a part of a housing strategy plan. As Newton is increasingly becoming an exclusive and wealthy community, the city is hoping ADU creation will help generate more affordable and diverse housing stock.

### Lexington

Lexington allows attached or detached accessory apartments either by-right, or by special permit, depending on certain site conditions including lot size, age of the structure and if renovations are needed. Generally, an ADU is allowed by-right in residences where the apartment can

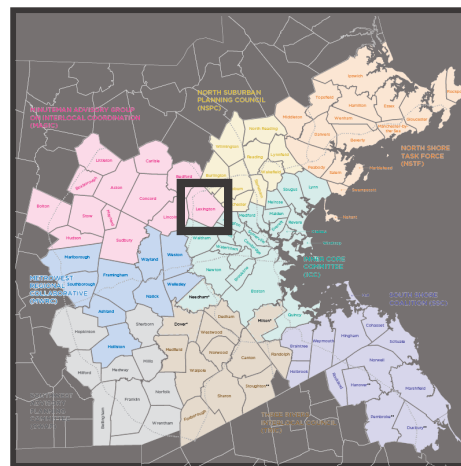


Figure 7: Lexington Level 3

be created with only minor structural changes to the house. Accessory apartment units where a renovation is needed to expand the primary structure requires special permit approval.

### Current Situation

After talking with Lexington's Planning Director Aaron Henry, and Planner David Fields in an in-person interview, they explained the town's history allowing ADUs, and the current use of the bylaw. Lexington first allowed ADUs in the early 1990's. The first law permitted existing unpermitted accessory apartments to be approved through an informal amnesty process, and later amended their bylaw to allow new ADUs to be built under certain provisions.

Since ADUs have been allowed in Lexington, 75 to 80 units have been permitted or allowed by-right, making an average of about three each year. With so few residents taking advantage of the bylaw, Henry explained that conceptually ADUs seem like good housing and cost saving solutions to increase affordability and housing diversity, but that in Lexington at least, that is not the result. In many regards, Henry considers ADUs a "failure of rational planning". As it is a concept that looks good on paper he explained, but fails to achieve the desired results.

When asked why homeowners were not interested in creating ADUs, Henry and Fields had a few explanations. First, they noted that most people build ADUs in Lexington for a family member rather than for extra income. Therefore, the number of residents interested in creating an ADU in Lexington is small. Additionally, Lexington's average median income has steadily increased over the



past 70 years. As a result, seniors who are retiring or who otherwise cannot maintain or afford the homes they live in anymore, make more money selling their house to a developer, rather than investing money to build an ADU to age in place. This is because homes occupied by older residents are typically smaller and older structures that have increased in value since the time they were purchased. If a person's house is older Henry explained, you also run the risk of having to spend more money fixing failing mechanical or structural components over the upcoming years. It makes more sense for most owners to sell and downsized into a new home than it does for them to create an ADU. Economics he explained is working against ADUs in the town of Lexington.

The bylaw has also been updated within the past few years, and again is up for revision in the next few months. The new revisions intend to eliminate some of what Henry terms as "poison pills" that has prevented some residents from creating ADUs. The changes include eliminating the minimum lot size requirement and eliminating the need for structures to have existed for 5 years.

Further, even though ADUs have been allowed in Lexington for over 20 years, many residents continue to disapprove of ADUs. Many people have pride in the "character of their town" and do not want density to increase, green space to be removed and transient renters to move into their neighborhoods. All things they believe will happen should more ADUs be created. Others are scared that if they make the bylaw more permissive, the increased density caused by ADUs might "irrevocably change the character of the town" in a less than desirable way.

## Bill S.2311

Due to public criticism of ADUs, it is not a surprise that Henry and Fields believe the legislative Bill S.2311 would not be well received in Lexington. They accredited their belief to two primary reasons. First, Lexington residents fear ADUs would threaten their town character and overburden town amenities by increasing density. Second, the legislature is proposing the housing bill to increase affordable housing and Massachusetts towns. Due to the lack of interest in creating ADUs in Lexington however, they believe the bill's intent will not be achieved. They fear that with increasing housing costs, residents might be interested in creating ADUs as au-pair suites or care-taker cottages, proving that it has the potential to benefit wealthy landowners but not generate the imagined affordable housing benefit.

## Duxbury

In Duxbury, attached accessory apartments are allowed by special permit for all residential districts if they are not in Planned or Cluster Developments and located on a lot no less than 20,000 square feet. Additionally, the single-family dwelling must have been in existence for at least 10 years. Detached ADUs are not permitted.

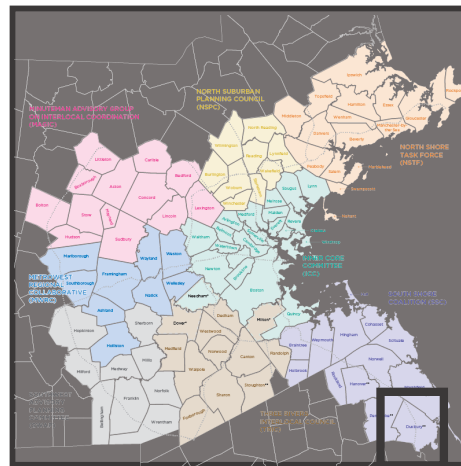


Figure 8: Duxbury Level 2

## Current Situation

To better understand Duxbury's ADU bylaw, I reached out to the town's Planning Director Valerie Massard in a phone interview and Building Inspector Scott Lambiase via email. They explained the intent of their ADU bylaw and its current use. According to Lambiase who has worked in Duxbury for the past twelve years, the town has only permitted five or six apartments. At least two of those he explained were previously unpermitted existing units, with the others being newly built. Regarding illegal units, Lambiase also noted that they receive one or two notifications per year of unpermitted ADUs, many times from the town's assessing department after doing a valuation of a property. Massard also confirmed that the planning office had received no calls inquiring about creating an ADU in the past year.

Massard explained a few primary reasons why she believes the ADU bylaw is not being used, and why others are being created illegally. First, like a few other towns in the region already discussed in this section, home prices are expensive. The average house in Duxbury costs over \$600,000. Thus, it often makes more sense for homeowners to downsize into a new home, than it does for them to create an accessory apartment. Massard also noted that Duxbury does not have enough moderately size and affordable homes to enable people to downsize locally. From a maintenance and care perspective, she echoed the opinion of Aaron Henry from Lexington, noting that many homes eligible for ADUs are older buildings that require more upkeep and maintenance.

Another reason is because the town has existing problems with water quality and quantity. Like many towns in Massachusetts in the summer of 2016, Duxbury had to set strict water restrictions due to limited water supply in the town's reserves. Adding additional density from ADUs without improving the town's existing infrastructure would not be acceptable to residents.

Finally, she noted that restrictions requiring a home to be older than 10 years, with a minimum lot size of 20,000 square feet, makes many homes ineligible for creating ADUs legally. ADUs are also only allowed as attached units located within a single-family home without requiring significant renovation. That further excludes many homes from being suitable to fit new apartments.

Massard explained that there is no current plan or resident interest in modifying the ADU bylaw since she's worked at Duxbury. In 2013 however, there was some interest from a town selectman to expand the bylaw. He mentioned in a public discussion that he supported ADUs as he knew from personal experience they helped families support aging parents. More recently however no group has encouraged ADUs, and expanding the bylaw four years ago never got significant traction. Instead of ADUs, Massard explained they are focusing on overhauling their existing zoning bylaws. Many sections she explained are contradictory and confusing, and the town is involved with lawsuits as a result.

#### **Bill S.2311**

Not surprisingly, Massard noted that she does not believe Bill S.2311 would be well received by Duxbury residents. She believes it takes power away

from municipalities to govern themselves as they see fit. She also explained that allowing ADUs by-right takes away negotiating power towns currently have with developers.

To make the bill more appropriate, Massard believes the state should consider transfer development rights (TDR) rather than promote an ADU bylaw. She explained TDR would put density where it makes sense, and give areas that already have higher population, access to jobs, and better infrastructure to build more densely. Smaller towns like Duxbury, with limited infrastructure would build less.

## Ipswich

Ipswich allows accessory apartments by special permit for attached units and for detached units if they are a conversion of an accessory building providing some type of community benefit. That benefit can include either the restoration of a historic building, deed restricting the unit to be affordable, or to house a family member.

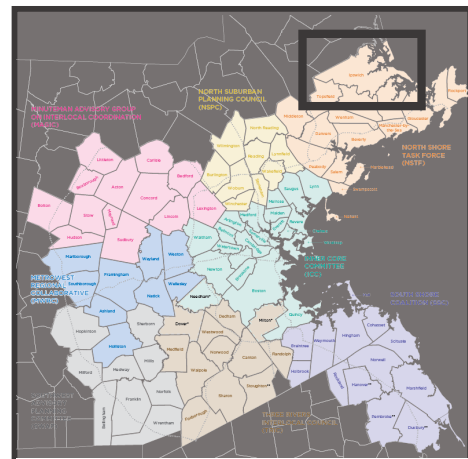


Figure 9: Ipswich Level 2

## Current Situation

Since the bylaw passed in 1992 for an accessory building conversion and in 2002 for accessory apartments in single family homes, 66 units have been created. According to an interview with Ipswich's Senior Planner, Ethan Parsons, ADUs have proven to be a viable housing opportunity for people in various stages in life,

including people with children just out of college, to care for aging parents, and to provide additional income for homeowners. Most conversion requests he explained have unique stories and personal circumstances that are revealed through the special permitting process. As such, accessory apartments in Ipswich have been approved under difference conditions, including historic restoration, payments-in-lieu to pay for a community benefit, and providing a space to house a family member.

Parsons also noted the importance of having a special permit process to approve ADU requests. The bylaw includes guidelines that helps the planning board approve or deny requests fairly and uniformly. If units are not designed appropriately with scale and style taken into consideration, it has the potential to detract from the neighborhood character.

#### **Bill S. 2311**

For many of the reasons stated above, Parsons believes Bill S. 2311 would not be well received in Ipswich. He noted it does not give municipalities enough control, as it strips planning freedom and design discretion from planning boards when they are allowed by-right. Opponents to ADUs already fear the apartments threaten the community's neighborhood character by making already dense neighborhoods even denser. This bill he explained will only make that worse. He did note however that the bill would likely be embrace by developers, as it would be a way for them to make additional money.

To change the bill, Parsons suggests allowing communities to approve ADUs by special permit or site plan review, rather than allowing them by-right. Special permits or a review he explained, provide towns the opportunity to review and apply necessary regulations to ensure appropriate building for the site. This would ensure adequate inclusion of utility capabilities, storm water implications and lot size among others.

## Winchester

Winchester does not permit ADUs in their bylaw. While talking with Town Planner, Brian Szekely, in a phone interview, I discussed the reasons why, from his perspective as a town planner, he believed the town had not passed legislation allowing them and if residents

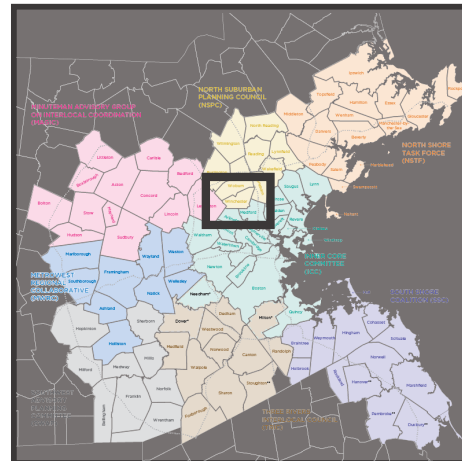


Figure 10: Winchester Level 1

expressed interest in changing the bylaw. I also asked his opinion of Bill S.2311.

## Current Situation

There seems to be a few reasons why Winchester has not passed legislation allowing accessory apartments. The first reason is due to uncertainty by elected officials and planning board members on how to effectively regulate accessory apartments, and the fear that comes with getting it wrong. Szekely noted that most everyone in Winchester agrees that there is a place for accessory apartments, but the Planning Board has been unsure how to effectively allow

apartments without seeing significant density increases. Szekely explained that Winchester is among the top 40 densest municipalities in Massachusetts, and that many residents fear increased density will overburden the town's existing infrastructure and change the character of their community.

Additionally, the other major fear that has prevented discussions about an ADU bylaw, is the fact that Winchester's schools are at or over maximum capacity. The town already is working on plans to remodel existing schools and is considering building a new school to match demand. Reportedly, the planning and education departments have also found that families who live in surrounding towns but have other family in Winchester often give that Winchester address as their children's home address. They do this to send their children to Winchester schools, as Szekely explained the quality of public school education in Winchester compared to some of the surrounding towns is better. If that is true, residents fear Winchester ADUs more likely to house a family, and increase density.

Despite those reasons listed above, there are a few residents in Winchester promoting ADUs. The largest group are residents that have adult children with developmental needs. Those residents want their children to live with them so they can continue to provide care, but also give them a level of independence. ADUs are the perfect solution. Members from the Housing Partnership Board, and Disability Access Commission have proposed a bylaw amendment to the Planning Board within the last few years, but nothing has come of it since.



Szekley also noted that Winchester is in the process of updating their master plan. He hypothesizes that ADUs will be suggested as an option to increase affordable housing. Winchester currently has 3.4% of its housing units' deed restricted as affordable, but in the next few years noted it will drop to around 2%, as many deed restrictions will expire. ADUs he believes will be one way to increase housing diversity and provide more affordable units in town.

#### **Bill S.2311**

Not surprisingly Szekely does not believe Bill S.2311 would be well received by the residents of Winchester. Those reasons are largely due to fear of increased density and overburdened schools. To change the bylaw to better fit Winchester, Szekely would suggest allowing ADUs for family members only. That provision he believes would enable family to stay together, older generations to move into children's houses or help them age in place in their own homes. The provision would also give families with adult children needing care the ability to create semi-independent housing.

## Wellesley

Wellesley does not permit ADUs in their bylaw, with some exceptions for allowing grandfathered units. After talking with Planning Director Michael Zehner and Assistant Planner Victor Panak in a phone interview, I acquired a better understanding of how accessory apartments are perceived

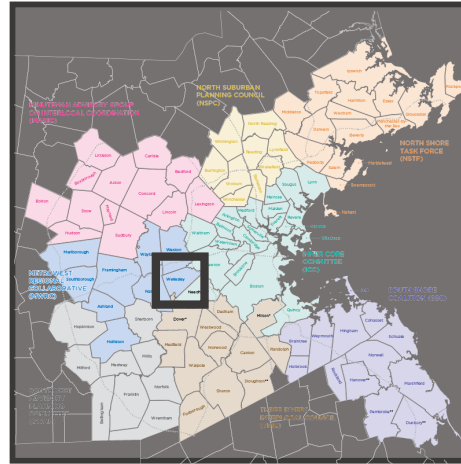


Figure 11: Wellesley Level 1

in Wellesley, Bill S. 2311 and interest in changing the bylaw.

## Current Situation

According to Zehner, the town's Comprehensive Plan last updated in 2007 provided recommendations for allowing ADUs in town, noting it was a way to increase the diversity and affordability of Wellesley's housing stock. After 10 years however, no action has been taken to make that recommendation a reality, and the plan is currently undergoing updates and review for 2017. The Director of Planning cited a few reasons why ADUs had not been pursued by the planning board, with the primary reason being lack of interest or appetite by the town selectmen and other elected officials. Zehner believed the disinterest in ADUs centered on the fact that elected officials either objected to the concept of ADUs themselves, or that they believed it was a touchy subject with residents where they would expect political backlash.

To be fair, Zehner noted that the selectmen's sentiments and fears for supporting ADUs are likely not off-base. In other zoning cases involving housing in Wellesley, residents often raise concern over increasing rental units and density in their communities. They fear rental units attract more transient families and individuals that will be less invested in the community as opposed to owner occupants. Other concerns include apprehension over increased traffic and parking congestion in streets.

Despite those predicted concerns, some Wellesley residents have expressed their support for ADUs and have encouraged the town to pass a new bylaw allowing ADUs for residents needing certain healthcare needs. Specifically, the bylaw would allow accessory apartments for disabled or elderly persons to create separate living spaces in caretaker homes. Leading this movement has been members of Autism Housing Pathways and Advocates for Autism of Massachusetts (AFAM), in reaction to the new MA legislative bill S. 708 passed last year. Bill S. 708 encourages the creation of housing for people with disabilities and for seniors in the form of an accessory apartment. The bill also provides access to loans at 0% interest rates, and deferred repayment opportunities. This new bylaw recommendation has yet to be voted on, but it would pave the way for an initial ADU bylaw in Wellesley.

#### **Bill S.2311**

Regarding legislative Bill S.2311, Michael Zehner expressed his personal as well as professional opinion of the suggested law. Personally, he felt Bill S.2311

was something that provided zoning reform as opposed to a zoning amendment. He noted the bill received more traction than it has in prior years it has been voted on, and he was surprised but supportive of the ADU section in the bill.

From a planning perspective however, he recognized that municipalities in Massachusetts including Wellesley, likely would see it as overreach. It forces towns to allow and pass legislation regarding ADUs, and takes zoning control out of municipality's hands. When asked how he would change the bill to be more appropriate, he noted that a statewide bill needs to provide guiding legislation, enabling community to still regulate themselves rather than mandates. He noted that the less the bill dictated the better. He also indicated that if the law allowed ADUs to be counted as affordable housing units and included in the town's affordable housing percent, more towns would likely support it.

## Medford

Medford does not allow accessory apartments in their bylaw. To get an understanding of how ADUs are perceived and why they have not been permitted, I talked with the town's Community Development Director, Lauren DiLorenzo and one of the town's building inspectors,

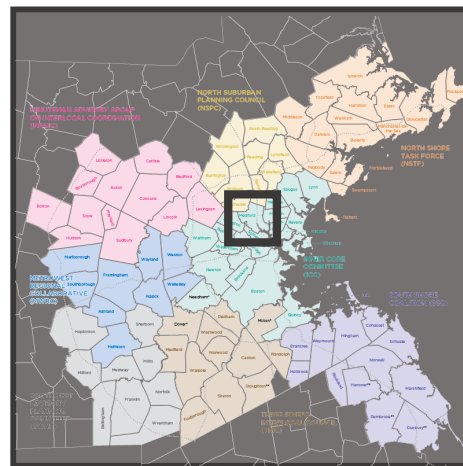


Figure 12: Medford Level 1

Kenneth Lanzilli in separate phone interviews. I learned how the bylaw is enforced

and regulated, resident perceptions toward ADUs, and predictions on how ADUs might impact the community if allowed in the future.

### **Current Situation**

When speaking with Inspector Lanzilli, he noted that illegal ADUs are a common problem in Medford. Many people create them he explained, to save money or host family, but that they are often unsafe. Some he noted are built in hazardous situations like unvented basements and boiler rooms. To ensure these illegal living situations are stopped, the inspectors make owners remove everything in the illegal space, leaving only the studs and concrete. Speaking with planner Lauren DiLorenzo however, she explained that she does not get many phone calls from people interested in ADUs, and has not heard from any community groups or organizations interested in promoting them.

While residents are not talking about ADUs specifically, DiLorenzo noted that there are a few concerns she typically hears when the topic of increasing housing units is raised. Expanding housing she explained, typically elicits negative reactions in an already dense neighborhood like Medford. Concerns ranging from parking and traffic to fear of new units would decrease their property values.

### **Bill S.2311**

DiLorenzo explained that Medford is interested in considering ADU ordinance in the future, but wants to assess the appropriateness of ADUs in town first. While she wants to do more research, one initial concern of hers is Medford's density and small lot sizes. She explained many homes are already multi-family,

and that single-family homes would not have much room to create ADUs due to setback restrictions. Other lots DiLorenzo explained are already non-conforming, and thus would be precluded from an ADU ordinance. She would also like to investigate if units on small lots would be able to make their ADUs handicap accessible, or large enough to have sufficient living space.

Regarding the Massachusetts legislative housing Bill.S2311, DiLorenzo did not think it was appropriate for Medford. Allowing ADUs by-right she explained, eliminated the community process and the ability for the public to make recommendations regarding design and how they would fit in the community. To modify the law, she agrees with other planners in the area that they should be allowed through a special permitting process.

## Chapter 6 - Discussion

### Main Conclusions from Interviews

The interviews of the nine towns in the MAPC region revealed a few interesting insights into how ADUs are created, perceived and used. There were commonalities in most towns wanting to preserve their neighborhood character, as well as unique community circumstances in others that influenced resident opinion toward ADUs. The interviews helped provide context and information at a town by town level that could not have been gathered in any other way. The rest of this section will discuss five main conclusions derived from my discussions.

1. A permissive bylaw does not mean ADUs will be created.

While planners and community officials can theorize how zoning amendments and other reforms will be used in their community, they can never know an amendments real affect until it is in place. Table 3 on the following page, aggregates information gathered in each town interview that allows ADUs by-right or special permit. The towns with the most accessory apartments are Lexington with 75 units, Newton with 73 units and Ipswich with 66. These towns also have the most ADUs created each year, with 3, 3.2 and 2.6 being created in Newton, Lexington and Ipswich respectively.

Table 3: ADU Data by Town

Town	Age of ADU Bylaw/Ordinance (years)	Number of ADUs	Number of ADUs created per year	Share of Single-Family Houses with ADUs**
Reading	34	9	0.3	.14%
Stow	26	<i>unknown</i>	1*	<i>unknown</i>
Newton	23	73	3.2	.42%
Lexington	25	75	3	.85%
Duxbury	12	6	0.5	.01%
Ipswich	25	66	2.6	1.9%

\* Jesse Steadman noted that since he started working for the town of Stow, he's seen one ADU project a year on average.

\*\* Housing totals gathered from ACS Demographic and Housing Estimates 2011-2015 American Community Survey 5-Year estimates

Looking at the number of ADUs per town out of the entire housing stock, Ipswich proves to have the largest percentage of ADUs at 1.9% out of the total number of detached housing units. That is far more than Newton and Lexington who have more permissive ADU legislation. These findings demonstrate that other factors besides legislation must account for why ADUs are created.

2. In many towns, homeowners are not economically incentivized to create ADUs.

This is especially the case for older residents in wealthier towns that are experiencing increasing property values and rising average median incomes. As residents retire and become empty nesters, many seek to downsize to reduce costs and save money. As discussed in the literature review, the AARP reported that ADUs help homeowners augment housing costs by providing income through rent, or creating a space for a caretaker or family member to live close-by.



As revealed by the interviews with planners from Lexington, Stow, Duxbury and Newton however, senior residents looking to downsize do not create ADUs, but instead sell their homes and move. This is due to a few reasons. First, many aging residents who own homes typically have seen their property and home values increase significantly since they purchased it. It makes more sense for them to capture those gains and sell to interested developers than to construct an ADU. Second, many residents having lived in single-family homes are not interested in sharing their space with renters that are not family. Third, seniors' homes are older, meaning they will require more and more maintenance as time progresses. For aging residents building an ADU might subsidize maintenance costs, but create more to worry about and maintain.

3. No community is the same. Many have unique reasons for allowing or not allowing ADUs.

Many towns had similar experiences with the creation of accessory apartments or community concerns. There were however a few unique circumstances to explain why certain municipalities did not yet have ADU legislation. Most notably, those towns were Duxbury and Winchester.

In Duxbury, the town has existing problems with water quality and quantity. Located on the coast, Duxbury has limited access to fresh water. This has put stress on the town's water supply. Adding additional density and households from ADUs without improving Duxbury's existing infrastructure will only make the problem more acute. Thus, residents oppose expanding their bylaws.

Winchester also appears to have a unique circumstance, as their schools are at or in some cases exceed maximum capacity. While the town is renovating schools to match demand, residents largely oppose establishing ADU legislation as they fear they will exacerbate the problem.

4. Outspoken community groups advocating for ADUs are parents who have children with disabilities.

In towns that do not have an ADU bylaw, the most common advocates promoting ADUs are parents who have children with disabilities. In Wellesley for instance, the group Autism Housing Pathways and Advocates for Autism of Massachusetts (AFAM), are coming together to advocate for an ADU bylaw. Winchester similarly has a group of residents with adult children with developmental needs, who are advocating for ADUs.

ADUs are needed for adult children with disabilities, as it allows parents or caretakers to provide care but give them a level of independence. Children with autism also do better with consistency and similar surroundings, so an ADU would allow that person to live in the same place, but perhaps switch caretakers as needed.

5. Home rule and fear of change is strong in Massachusetts

When asked about why residents oppose ADUs, or their reaction to Bill S.2311, there was one common answer. Residents fear change that might impact their “neighborhood character”. People dislike increased density and believe additional residents will make their suburban communities more urban.

Most town planners, apart from Newton and Stow disliked Bill S.2311. The planners that disliked it, suggested that the bill should include design guidelines or allow ADUs by special permit rather than allowing them by-right. Planners believed the bill overstepped a town's ability to control their own development, and believed the special permit, or design review process was an essential part of ensuring ADUs blended well into the community.

### Limitations

There are a few limitations that need to be discussed regarding data collection and analysis of this thesis. First, town and city zoning bylaws and ordinances are always changing. As amendments need to be approved by the Massachusetts state attorney general's office before they are law, some zoning information used in this study might be slightly outdated.

Very little data on ADUs exists at the city or town level. I was not able to find data to compare the MAPC region to towns on the East Coast, which likely would have been more similar in terms of cities and towns being more historic and municipalities having strong home rule.

Additionally, much of my information and findings were gathered from conversations I had with town planners and building inspectors. Opinions of town planners therefore greatly influenced my findings for each of the nine towns I interviewed, and thus my overall findings as well.

Every town I talked to raised different points about how ADUs are used, created or advocated for in their respective communities. Therefore, to get a full

understanding of how ADUs are regulated in the MAPC region I would have needed to interview all 101 municipalities. The nine towns I selected to interview, were chosen to provide insights on issues, however these cannot be made into valid generalizations across the region.

## Chapter 7 - Recommendations and Conclusions

Accessory apartments are a flexible housing solution that allow homeowners to adapt to the needs of their family and budget. They can create multigenerational housing options by enabling an aging parent to live nearby or adult children with disabilities to live near family or caretakers. ADUs provide an adaptable housing solutions that can help families manage changing lifestyle, fiscal or caretaking situations. For individuals and households where ADUs may help them adapt to and meet their needs, towns should allow them to be created.

In places where ADUs are allowed however, limited numbers have been built. In Newton and Lexington for instance, which have allowed ADUs for over 25 years, only 70 - 80 apartments have been created. These towns, which have some of the most lenient ADU bylaws in the MAPC region, provide interesting case studies. Clearly home owners are taking advantage of ADU flexibility but in limited ways to meet their family needs.

But viewing ADU development from the perspective of increasing affordable housing options, this study reveals important barriers. The leading barrier found was economics. With Boston's growing population and job market, and especially in wealthier suburban towns, it often makes little economic sense for homeowners to build an ADU. Rather, many older homeowners looking to downsize or live a more manageable lifestyle sell their homes and move. Many of those homes are also older, so investing in an aging structure means increased upkeep in the future.

ADUs can also potentially help homeowners offset their mortgage if they rent the accessory apartment for extra income. Talking to town planners in the MAPC region however, I found no instance where this was the case. In many towns homeowners are not able to rent the units, as they require the owner or family to occupy both units. In others, younger families are priced out of the single-family home market, even if they intend to build an ADU.

Due to limited ADU creation, even in towns that have more liberal accessory apartment regulations, ADUs should not be considered a meaningful affordable housing solution in Massachusetts. Many growth management and housing production plans include ADUs as a solution to increase affordable housing, and diversify the housing stock. While this is the case in certain situations, too few ADUs are being created to make a meaningful impact.

As such, this also disproves citizen's fears that ADUs will negatively affect their community. With limited implementation, accessory apartments will not meaningfully increase density, change the neighborhood character of their communities or strain town amenities and infrastructure. Expanding town bylaws should thus not be feared. It will allow the residents who need to create accessory apartments to do so legally, while not changing or significantly impacting the community.

Hence, I would recommend that the Massachusetts legislative bill S.2311 be passed with only minor modifications. The bill will make ADU bylaws in all towns except for Newton more permissive. One element of the bill that concerned

most planners I talked to, was the desire for towns to have some control over ADU design. Adding design restrictions would allow towns to ensure ADUs will blend in amongst the surrounding neighborhood and add to the community. Thus, I would recommend that bill. S.2311 allow towns to require site plan review, with the provision that new construction for ADUs match the existing architecture.

### Further Research and Action

This research was a good start to try to better understand ADUs in the Greater Boston region, looking at how they are regulated, if and why they are being created and Bill S.2311. I hope this research will provided a basis for others to expand upon to better assess the impacts, benefits and consequences of accessory dwelling units in the Boston region.

First, lack of data on ADUs at a town, regional or state level is a significant barrier in studying ADUs. It is difficult to find the number of ADUs permitted or created by-right in a town (if allowed). With that being hard to determine, it is even harder to find other characteristics such as if the ADU is attached or detached, how it is being used and amount it is being rented for if applicable.

As such, further research is needed by conducting surveys on a town by town basis. Following the example of the two case-studies discussed in the literature review, in East Bay, San Francisco and Portland, Oregon, Massachusetts towns should administer surveys to neighborhood residents that ask questions about topics such as ADU ownership, pricing and permitting. This will allow for

more empirical studies of ADUs and better explain how they affect the housing market, if they are affordable or how they benefit renters or homeowners.

Beyond surveys and research, a gap that makes studying ADUs in Massachusetts difficult, is the lack of documentation of ADUs in permitting software and accessor's data in town planning and building offices. While some towns manage this process well, many planners are unaware of the number of illegal ADUs found by building inspectors, or how many detached or attached ADUs exist by-right or special permit. Having towns keep better documentation of this information will make studying the topic in the future far easier.

Further research should also be conducted on how homeowners can more easily finance ADUs. Studies in Cascadia show that obtaining loans from banks, and paying for construction costs is difficult for homeowners, and can limit the type of people who can create ADUs to wealthier individuals. This likely would be the same in Massachusetts, and to make ADUs more feasible, financing solutions should be researched.



# Appendix A

Town	Attached By-Right	Detached By-Right	Attached Special Permit	Detached Special Permit	Existing Building or Ownership Required	Minimum Lot Size (sq. ft.)	Minimum House Size (sq. ft.)	Minimum ADU size (sq. ft.)	Maximum ADU Size (sq. ft.)	ADU % Size Limit	Bedroom Limit	Occupancy Limit	Parking Space(s) Needed	Occupancy Requirements both = owner occupies both units   one = owner occupies either primary dwelling or ADU	Expiration of ADU Permit at sale	Permit Needs to be Renewed Every (years)	Sale or Rear Entrance Required
Acton	YES	No	No	Yes	1990				800	50	2		1	both	No		
Arlington	No	No	No	No													
Ashland	No	No	YES	No					800	20		4		both	Yes	2	
Bedford	YES	No	No	No			18000			30	2		2	both	No		Yes
Bellingham	No	No	YES	No	2 yrs prior								2	both	Yes		
Belmont	No	No	No	YES	1971									both	No		
Beverly	No	No	YES	No						30		2		both	Yes		Yes
Bolton	No	No	No	Yes	1925			400		33		2		one			
Boston	No	No	No	No													
Boxborough	No	No	Yes	No	2007				600			3	2	both	No		
Braintree	No	No	No	No													
Brookline	No	No	No	No													
Burlington	No	No	YES	No			1800			30	2		2	both	No		Yes
Cambridge	No	No	Yes	No		5000	1800		900	35				one			
Canton	No	No	YES	No		10000								both	Yes		
Carlisle	No	No	YES	YES		87120			1200	35	2			one	Yes		Yes
Chelsea	No	No	No	No													
Concord	No	No	YES	No	10 yrs prior		1200			25				one	Yes		Yes
Concord	No	No	YES	No	2 yrs prior			350		33			2	one	Yes		
Danvers	No	No	No	No													
Decliam	No	No	YES	No	2000			350	1000	33	1	2	1	one	Yes	3	Yes
Dover	No	No	Yes	No	1985				900	25			1	one	Yes		
Duxbury	No	No	YES	No	10 yrs prior				850				1	one	No		Yes
Essex	No	No	No	No													

Town	Attached By-Right	Detached By-Right	Attached Special Permit	Detached Special Permit	Existing Building or Ownership Required	Minimum Lot Size (sq. ft.)	Minimum House Size (sq. ft.)	Minimum ADU size (sq. ft.)	Maximum ADU Size (sq. ft.)	ADU % Size Limit	Bedroom Limit	Occupancy Limit	Parking Space(s) Needed	Occupancy Requirements both = owner occupies both units   one = owner occupies either primary dwelling or ADU	Expiration of ADU Permit at sale	Permit Needs to be Renewed Every (years)	Sale or Rear Entrance Required
Everett	No	No	No	No													
Foxborough	No	No	YES	No					850				2	both			
Frankingham	No	No	No	No													
Franklin	No	No	No	No													
Gloucester	No	No	YES	No		5000			600	35				both	Yes	1	
Hamilton	No	No	YES	No	2 yrs prior	10000			1000	33	1	2	1	both	Yes	4	
Hanover	No	No	YES	No					800	33	2		1	both	Yes	1	Yes
Hingham	No	No	No	No													
Holbrook	No	No	No	No													
Holliston	No	No	YES	No					600			2		both	Yes	2	
Hopkinton	No	No	YES	No					800			3	1	both	Yes	2	
Hudson	No	No	YES	YES					900	25	2	3	2	one	No		
Hull	No	No	No	No													
Ipswich	No	No	YES	YES		15000			900	25	1		1	one	No		
Lexington	No	No	YES	YES					1000	40	2			one	No		Yes
Lincoln	No	No	YES	No	10 yrs prior	40000			1200	35			1	one	No		
Littleton	No	No	YES	No								1	2	both	Yes	3	
Lynn	No	No	No	No													
Lynnfield	No	No	YES	No				300		25				one	Yes	1	
Malden	No	No	YES	No	1987	2X min lot size				35			4	one			
Manchester	No	No	No	No													
Marblehead	No	No	No	No													
Marchfield	Yes	No	Yes	No	3 yrs prior	By district				40			1	one	Yes	1	Yes
Marlborough	No	No	No	No													
Maynard	No	No	YES	No					600			3	1	both	Yes	2	

Town	Attached By-Right	Detached By-Right	Attached Special Permit	Detached Special Permit	Existing Building or Ownership Required	Minimum Lot Size (sq. ft.)	Minimum House Size (sq. ft.)	Minimum ADU size (sq. ft.)	Maximum ADU size (sq. ft.)	ADU % Size Limit	Bedroom Limit	Occupancy Limit	Parking Space(s) Needed	Occupancy Requirements both = owner occupies both units   one = owner occupies either primary dwelling or ADU	Expiration of ADU Permit at sale	Permit Needs to be Renewed Every (years)	Sale or Rear Entrance Required
Medfield	No	No	YES	No	1938		2000	500 +					1	one	Yes		Yes
Medford	No	No	No	No													
Medway	No	No	YES	Yes					800		1		1	both		2	Yes
Melrose	No	No	YES	Yes	1990									both	Yes	3	
Middleton	No	No	No	No													
Milford	No	No	YES	No								2		both		3	
Millis	No	No	YES	No										both	Yes	5	
Milton	No	No	YES	No					800		2			both	Yes	4	Yes
Nahant	No	No	No	No													
Natick	No	No	YES	No					700		1			both			
Needham	No	No	No	No													
Newton	Yes	No	No	Yes				200/250	1000/1200		33		1	both	Yes		
Norfolk	No	No	YES	No					1200		50		1	both	Yes	1	
North Reading	No	No	No	No													
Norwell	No	No	YES	No	2 yrs prior						33			both	Yes		
Norwood	No	No	No	No													
Peabody	No	No	YES	No					700		50		1	both	Yes	1	Yes
Pembroke	No	No	YES	No	1 yr prior	40000			800		50		2	both			
Quincy	No	No	No	No										both			
Randolph	No	No	YES	No					800		1		2	both		2	
Reading	YES	Yes	No	Yes					400		33		3	one	No		Yes
Revere	No	No	No	No													
Rockland	No	No	YES	No	2 yrs prior				400					both	Yes	1	
Rockport	No	No	No	Yes					650								
Salem	No	No	No	No													

Town	Attached By-Right	Detached By-Right	Attached Special Permit	Detached Special Permit	Existing Building or Ownership Required	Minimum Lot Size (sq. ft.)	Minimum House Size (sq. ft.)	Minimum ADU size (sq. ft.)	Maximum ADU Size (sq. ft.)	ADU % Size Limit	Bedroom Limit	Occupancy Limit	Parking Spaces(s) Needed	Occupancy Requirements both = owner occupies both units   one = owner occupies either primary dwelling or ADU	Expiration of ADU Permit at sale	Permit Needs to be Renewed Every (years)	Sale or Rear Entrance Required
Saugus	No	No	No	No													
Scituate	Yes	Yes	Yes	Yes					750	40	2		2	one			Yes
Sharon	No	No	Yes	No	1933									both			
Sherborn	No	No	Yes	Yes					800	30		3		both	Yes		
Somerville	No	No	No	No													
Southborough	No	No	Yes	Yes							25			both			
Stonham	No	No	Yes	No					750		1	2	1	both			
Stoughton	No	No	Yes	No										both			
Stow	Yes	Yes	Yes	Yes	1991	65340			700			4	2	one			
Sudbury	No	No	Yes	Yes	cheduled - 5 yrs prior				850	40/50		4	2	one	Yes	4	
Swampscott	No	No	Yes	No					800		2	3		one	Yes	1	Yes
Topsfield	No	No	Yes	No					750		2	2		both	Yes	3	
Wakefield	No	No	Yes	No				300		25				one	Yes	1	
Walpole	No	No	No	No													
Waltham	No	No	Yes	No	5 yrs prior owner	15000/20000						2		one	Yes	3	
Watertown	No	No	No	No													
Wayland	No	No	Yes	No	2 yrs prior	20000								one	Yes		
Wellesley	No	No	No	No													
Wenham	No	No	Yes	Yes		2000/40000			1000	35	2		3	one	No	1	
Weston	No	No	Yes	Yes	10 yrs prior		3000	600		35	2		1	one	Yes		
Westwood	No	No	Yes	Yes				500	900	33				one		4	
Weymouth	No	No	No	No													
Wilmington	Yes	No	No	No					1250		2		1	one			
Winchester	No	No	No	No													
Winthrop	No	No	No	No													
Woburn	No	No	No	No													
Wrentham	No	No	No	No													

## Bibliography

- Bluestone, Barry, James Huessy, Eleanor White, Charles Eisenberg and Tim Davis. (2015). *The Greater Boston Housing Report Card 2015: The Housing Cost Conundrum*, Report for The Boston Foundation, [www.tbf.org/~media/TBFOrg/Files/Reports/GB%20HousingReportCard%20111315.pdf](http://www.tbf.org/~media/TBFOrg/Files/Reports/GB%20HousingReportCard%20111315.pdf) Accessed October 29<sup>th</sup> 2016.
- Brown, Martin John. (2009) *People in Portland want and build ADU's—with or without permits*, Architectural Therapy Blog. Accessed October 31<sup>st</sup> 2016 <https://architecturaltherapy.files.wordpress.com/2009/10/portland-adus-permitted-and-not-2009-10-13.pdf>
- Brown, Martin John and Taylor Watkins (2012). *Understanding and appraising properties with accessory dwelling units*, Appraisal Journal No 80 Is. 4 pg. 297.
- Brown, Martin John, Kol Peterson and Eli Spevak. (2014) *Do ADUs provide affordable housing?*, AccessoryDwellings.org, <https://accessorydwellings.org/2014/08/07/do-adus-provide-affordable-housing/> Accessed October 31<sup>st</sup> 2016.
- Bureau of Labor Statistics (2016). *Boston Area Employment*, Accessed October 30, 2017
- Chapple, Karen, Jake Wegmann, Alison Nemirow, Colin Dentel-Post. (2012). *Yes in My Backyard: Mobilizing the Market for Secondary Units*, The Center for Community Innovation (CCI). University of California, Berkeley. <http://communityinnovation.berkeley.edu/reports/secondary-units.pdf>
- City of Seattle (2009). *Backyard Cottages: Director's Report*, Department of Planning and Development. [www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web\\_informational/p2401715.pdf](http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/p2401715.pdf)
- Cobb, Rodney L. and Scott Dvorak (2000). *Accessory Dwelling Units: Model State Act and Local Ordinance*, The Public Policy Institute, AARP, Washington, DC.
- Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs. (2016). *Smart growth/smart energy toolkit bylaw: Model bylaw for accessory dwelling units*.

- [http://www.mass.gov/envir/smart\\_growth\\_toolkit/bylaws/ADU-Bylaw.pdf](http://www.mass.gov/envir/smart_growth_toolkit/bylaws/ADU-Bylaw.pdf)  
Accessed October 30<sup>th</sup>, 2016.
- Dain, Amy (2015). *The state should encourage accessory apartments. Could be a partial answer to housing shortage.* MassINC: Commonwealth.  
<https://commonwealthmagazine.org/opinion/the-state-should-encourage-accessory-apartments/> Accessed April 10<sup>th</sup> 2017.
- Durning, Alan (2013). ADUs and Don'ts- The gauntlet of rules that in-law and cottage units must run. Sightline Institute.  
<http://www.sightline.org/2013/03/15/adus-and-donts/> Accessed April 8, 2017.
- Fitzgerald, Jay (2015). *Mass. economy outpacing US, but challenges still exist*, The Boston Globe.  
<https://www.bostonglobe.com/business/2015/06/01/massachusetts-economy-outpacing-nation-many-measures/wiL3nX6DWQWnawlDYAdloK/story.html> Accessed Oct 30<sup>th</sup>, 2016
- Haggerty, Rosanne (2013). *You Can't Build What People Want: Building Codes vs. Affordability*, Rooflines The Shelterforce Blog. National Housing Institute.
- Infranca, John. (2014). *Housing Changing Households: Regulatory Challenges for Micro-Units and Accessory Dwelling Units*. Stanford Law & Policy Review Vol. 25, 53-89
- Jackson, K.T. (1985) *Crabgrass frontier: the suburbanization of the United States*, New York: Oxford Press.
- Liebig, Phoebe S., Teresa Koenig and Jon Pynoos (2006) *Zoning, Accessory Dwelling Units, and Family Caregiving*, Issues, Trends, and Recommendations Pages 155-172
- Mazur, Daniel (2000). *Accessory Dwelling Units: Affordable Apartments, Helping People Who Have Low Income and People Who Are Aging in Single Family Housing*, Brandeis University. Dissertation, Proquest.
- Metropolitan Area Planning Council (MAPC) (2014). *Population and Housing Demand Projections for Greater Boston: Regional Projections and Provisional Municipal Forecasts*,  
[www.mapc.org/sites/default/files/MetroBoston%20Projections%20Final%20Report\\_1\\_16\\_2014\\_0.pdf](http://www.mapc.org/sites/default/files/MetroBoston%20Projections%20Final%20Report_1_16_2014_0.pdf) Accessed: October 31<sup>st</sup> 2016
- National Marriage and Divorce Rate Trends* (Center for Disease Control & Prevention 2014) [www.cdc.gov/nchs/nvss/marriage\\_divorce\\_tables.htm](http://www.cdc.gov/nchs/nvss/marriage_divorce_tables.htm).

- Palmeri, Jordan (2014). *Accessory Dwelling Units in Portland, Oregon: Evaluation and Interpretation of a 2013 survey of ADU owners*, State of Oregon Department of Environmental Quality. Accessed October 31<sup>st</sup> 2016  
[www.deq.state.or.us/lq/sw/docs/SpaceEfficient/adusurveyinterpret.pdf](http://www.deq.state.or.us/lq/sw/docs/SpaceEfficient/adusurveyinterpret.pdf)
- Rondinaro, Gene (1985). "Illegal Accessory Units Trouble Suburbs". *The New York Times*. Accessed April 15<sup>th</sup> 2017.  
<http://www.nytimes.com/1985/03/03/realestate/illegal-accessory-units-trouble-suburbs.html?pagewanted=all>
- Sakash, Tom. (2013). *Granny Flats to Contribute to City Affordable Housing Count, Thanks to Split Council Vote*, Daily Enterprise a subsidiary of McNaughton Newspapers. Accessed  
[www.davisenterprise.com/local-news/city/granny-flats-to-contribute-to-city-affordable-housing-count-thanks-to-split-council-vote/](http://www.davisenterprise.com/local-news/city/granny-flats-to-contribute-to-city-affordable-housing-count-thanks-to-split-council-vote/) October 31 2016
- Scarlett, Paul L. (2016). *Accessory Dwelling Units Program Guide*, Bureau of Development Services, City of Portland  
[www.portlandoregon.gov/bds/article/68689](http://www.portlandoregon.gov/bds/article/68689) Accessed November 1<sup>st</sup> 2016
- Semon, Craig. S (2009). *Housing add-ons back on agenda; Recession spurs bylaw proposal*.  
*The Free Library*. from [https://www.thefreelibrary.com/Housing add-ons back on agenda; Recession spurs bylaw proposal-a0192029475](https://www.thefreelibrary.com/Housing+add-ons+back+on+agenda;+Recession+spurs+bylaw+proposal-a0192029475) Accessed December 05, 2016
- Sheyner, Gennady. (2016). *Palo Alto cautious about encouraging second-dwelling units: Planning commissioners call for more study before relaxing any restrictions*. Palo Alto Weekly, July 28<sup>th</sup> 2016.  
[www.paloaltoonline.com/news/2016/07/28/palo-alto-cautious-about-encouraging-second-dwelling-units](http://www.paloaltoonline.com/news/2016/07/28/palo-alto-cautious-about-encouraging-second-dwelling-units) Accessed October 31<sup>st</sup> 2016.
- Stanton, Ryan (2016). *Community debate over accessory apartments in Ann Arbor heating up*. MLive Michigan.[http://www.mlive.com/news/ann-arbor/index.ssf/2016/02/community\\_debate\\_over\\_accessor.html](http://www.mlive.com/news/ann-arbor/index.ssf/2016/02/community_debate_over_accessor.html) Accessed April 18<sup>th</sup> 2017
- Town of Grafton, MA. (2015) *Zoning Bylaw- Section 2- Definitions* Planning Department.  
[http://www.graftonma.gov/sites/graftonma/files/uploads/zoning\\_section\\_2\\_0.pdf](http://www.graftonma.gov/sites/graftonma/files/uploads/zoning_section_2_0.pdf) Accessed October 30<sup>th</sup> 2016

Tyre, Patricia (2008). *Accessory dwelling units as affordable housing and smart growth: case studies of Winter Park and Orlando, Florida*. (Doctoral Dissertation, University of Florida).

Wegmann, Jake and Karen Chapple. (2012) *Understanding the Market for Secondary Units in the East Bay*, Institute of Urban and Regional Development. University of California, Berkeley. Accessed October 31<sup>st</sup> 2016 <http://escholarship.org/uc/item/9932417c>

Yukubousky, R. (1995). *Foreword*. In *Accessory Dwelling Units: Issues and Options*, Report No. 33, pp iii, Municipal Research and Services Center of Washington, Seattle.