DENSITY through DESIGN

Research Reports









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1. HISTORICAL OVERVIEW of ZONING

Zoning is a system of regulations that are designed to develop municipalities in accordance with the objective of the respective municipality. Zoning is the primary planning tool used to regulate land uses, commercial activities, traffic, and the construction of buildings (lawdictionary.com, 2007). It is also used to conserve land for open space, preserve historical landmarks, and regulate dimensions of buildings. Zoning ordinances have been implemented to protect the health, wealth, morals, and safety of the public as well as to preserve the character of the neighborhood.

Comprehensive zoning regulations began in the United States in the beginning of the 20th century. New York City is usually credited with enacting the first comprehensive zoning bylaw in 1916. The bylaw regulated height and bulk requirements, and all other land uses. The bylaw also included an official zoning map of the city (Juergensmeyer and Roberts, 2003). Ten years later, the constitutionality of zoning laws was upheld in the landmark 1926 Supreme Court case Village of Euclid, Ohio v. Ambler Realty Co. In this case, the court upheld the power of zoning authorities to designate land use for separate uses on the basis that varied uses should not be mixed in a single district. Euclidean zoning also provides dimensional limits to building sizes and setbacks. Named for the type of zoning code adopted in the town of Euclid, Ohio, it has shaped the US landscape into a sprawling, auto-dependent society characterized by segregated communities of isolated populations (Jason, 2004).

2. The IMPACT of REGULATIONS

At the local level, The State of the Nation's Housing report cites the most pressing regulatory barriers that remain as being:

Large minimum lot sizes, restrictions on the land available for residential development, impact fees that place the marginal cost of infrastructure and public services on new homebuyers, and approval processes that add risk and delays all play a hand in rising house prices. Because per-unit impact fees and permitting costs represent such a large share of the costs of developing modest units, they directly discourage the production of low-income housing (State of the Nation's Housing, 2006, p.4)

Other regulatory barriers that discourage housing developments are:

- □ Local regulations protecting health and the environment that are stricter than state regulations. (Goodman and Palma, 2004);
- □ "Local Building Inspectors that use local standards rather than uniform codes" (Goodman and Palma, 2004);

Rate of development regulations limiting the amount of permits approved in a given time to control growth (Goodman and Palma, 2004);

Contradictory regulations issued by the Commonwealth;

Confusion created when overlapping authorities that are responsible for overseeing the implantation of regulations do not have any contact with each other (Goodman and Palma, 2004); and

Altering regulations at the local level will have a significant impact on changing the environment in which land and housing decisions are made. Additionally, further gradual policy changes striking a balance between incentives and mandates will also be crucial to creating more affordable housing and compact development.

Home Rule Power

Massachusetts' home rule power.

Changing of policies in Massachusetts is done at a local level due to The Home Rule amendment of the Massachusetts constitution, which gives cities and towns the power to "adopt, amend, or repeal ordinances or by-laws "for the protection of the public health, safety and general welfare". Prior to the passing of the amendment in 1966, the power to enact and amend zoning laws was strictly a power of the legislature. Cities and towns had no power except over what the state legislature permitted. With the passing of the home rule amendment, local municipalities were granted independent powers to enact and amend zoning laws as part of their "independent police power". This police power was intended to control "land usages in an orderly, efficient, and safe manner to promote the public welfare", as long as these enactments are not "inconsistent with the Constitution or laws enacted by the Legislature" (Durand v. Bellingham, 2003). One negative element of home rule is that it allowed further fragmentation of local municipalities and gave them the power to implement bylaws more stringent than legislation within the jurisdiction of the state.

Environmental Legislation

The environmental movement that occurred during the 1970s produced another kind of legislation that greatly affected regulations. The National Environmental Policy Act (NEPA), which was signed into law on January 1, 1970, established a national environmental policy and a means of implementing this goal into various agencies other than the Environmental Protection Agency. This act influenced other environmental legislation with much stricter state equivalents that often have much tighter standards than their respective federal acts. Furthermore, these policies and regulations, although perhaps necessary for

the environment, also gave zoning authorities a means to hide their exclusionary intention under the pretense of environmental protection. (Fischel, 2004).

Land Use

A communities' utilization of land is another key factor that correlates with the sprawl in a community. The lack of high density development because of large minimum lot sizes, increase the prices of new houses.

The Predominance of the Single Family Residential Use

Despite advantages of multi-family housing, single-family homes remain the most protected use in the United States despite recognition that the American public has outgrown this norm. In the 2000 census only 23.5 percent of family households consisted of a married couple with children under 18 years old, while non-family households consisted of 31.9 percent of all households. However, a nuclear family is the ideal implied by many of the definitions of family found in zoning regulations. Residential zoning that predominantly favors single-family homes does not take into account the necessities and living conditions of other family types and living arrangements. This norm also reflects the idea that the single family home is ideal for the "nuclear family" of a mother, father and two children is the ideal and that considering other types of families will interfere with a communities planning objective (McCamant and Durret, 1989; Hayden, 1989). The protection of single-family use reflects the local political power that homeowners have throughout the United States and in the commonwealth.

3. A STUDY on MASSACHUSETTS' HOUSING COSTS

Land Valuation

In the 495/ MetroWest Corridor, zoning and other land use controls have created an affordable housing crisis, rather than conventional free-market land models (cost of land and construction) (Glaeser and Gyourko 2002). Glaeser and Gyourko found that governmental regulation is responsible for high housing costs where high costs exist. Measures of zoning strictness are strongly correlated with high prices.

Lack of Land or Man Made Regulations

One frequently stated explanation of the affordability dilemma is that the corridor is simply running out of land. Glaeser and Ward (2006) refute this, asserting that density regulations have created perceived land shortages. Their two arguments are as follows:

☐ Actual density levels have not changed significantly over the past 25 years.

□ The places with the most land allow the least construction.

A controversial report, in 2000, by the Massachusetts Executive Office of Environmental Affairs (EOEA) demonstrated a difference in allowable density on available buildable land in a sampling of 16 communities. Current zoning in the state of Massachusetts allows for 0.9 new residential housing units per acre while current density is 1.8 units per acre (Euchner and Frieze, 2003; Euchner 2003). The implication of this is the lack of space for multi-family housing because it is effectively "zoned out".

Large lot zoning (1 dwelling unit per acre or greater) is typical of many suburban and semi-rural communities in Massachusetts. This density is not only impractical for affordable housing but it also exacerbates sprawl. Large lot zoning requires capital investment in improved roads and increased sewer, water and other services that are costly to create and expensive to maintain (Massachusetts Housing Partnership Housing Affordability Initiative 2002; McElfish 2007).

4. REGULATORY BARRIERS to AFFORDABLE HOUSING

Barriers to Affordable Housing

Arguably the most significant reason for the lack of affordable housing are the regulatory barriers that have been put in place by local, state, and federal governments. There are five categories that are frequently cited as regulatory barriers to affordable housing. These are as follows:

Infrastructure financing;
Zoning and subdivision controls;
Building Codes;
Procedural Rules; and
Regulations protecting natural and cultural resources (Eliminating Regulatory Barriers: A Balancing
Act).

Affordable Housing Background

The initial need for affordable housing became evident after the Great Depression. After World War II the demand shifted towards "a decent home and suitable living environment for every American Family" (Housing Act of 1949). This sentiment is credited with causing "The Baby Boom." It was not until the 1960's when a variety of Housing Acts were created, as a result municipalities were forced to fill the demands. Many of the Acts provided for improvements in infrastructure and discount for

land acquisition, thus leading to the developer's dream — the subdivision (Yang, 2004). Between the years of 1980-2000, the federal government faced the challenge of dealing with community developments that were becoming outdated and deteriorated. The result was inflation, which shifted national attention towards "affordability re-use, and preservation while dueling with the nation's desire for all things new and mobilizing the nation towards homeownership" (Yang, 2004). This shift made it necessary to create housing opportunities for families from lower to middle income brackets. As a result the need for affordable and workforce housing grew, yet became difficult to create due to impediments to this form of housing.

National Studies

The U.S. Department of Housing and Urban Development (HUD) has identified excessive regulation as the greatest barrier to higher density and affordable housing. Excessive regulation can be a combination of infrastructure costs, local building practices, excessive impact fees, growth controls, environmental regulations, multifamily housing restrictions, bureaucratic inertia, and property taxes. One-third of the homes in the nation's 25 largest metropolitan areas are affordable (National Association of Homebuilder (NAHB) 2005). Conversely, 2/3 of homes are unaffordable to the most people.

Study	Findings
Sundig and Swoboda (2004)	Various forms of housing regulation decreased the total amount of housing builtand increased prices by as much as \$40,000.
Ben-Joseph (2003)	Regulatory system has gotten more complex over the last two decades and constitutes the single greatest problem in getting housing built.
Glaeser and Gyourko (2002)	Government regulation is responsible for high housing costs where high costs exist. Measures of zoning strictness are highly correlated with high prices.
Baden and Coursey (2000)	In suburban Chicago, municipal fees increase new housing costs by 70% to 210% of the actual fee imposed, which ranges from \$2,224 to \$8,942 for an average four-bedroom home in the study.
Green and Malpezzi (2000)	Moving from a light regulatory environment to a heavy regulatory environment raises rents by 17%, increases house values by 51%, and lowers homeownership rates by 10 percentage points.
Luger and Temkin (2000)	Excessive regulation can raise the final new home price by \$40,000 to \$80,000, or approximately 35%. In New Jersey, this amount prices approximately 430,000 households out of the market
Phillips and Goodstein (2000)	Portland's Urban Growth Boundary law has increased median house prices in the Portland metropolitan area.
Levine (1999)	A study of 490 California cities and towns found that growth control measures that remove land from devel- opment or require less intense development reduced rental and ownership housing. Impacts on rental hous- ing were particularly severe.
Salama, Schill, and Stark (1999)	In New York City, the price of newly built homes could decline by 25% if the city implemented a comprehen- sive barrier removal strategy.

Table 4.1. Existing studies and literature identifying excessive regulation which impedes workforce housing:

Regulatory barriers attribute to a quarter of a homes sale price. Swifter (streamlined) permitting processes and removal of outdated, exclusionary and unnecessary regulations could drop housing prices by at least 25% (HUD 2005).

In many cases, the regulations in urban areas prohibit accessory apartments or impose strict

requirements that add to the cost of creating said accessory dwellings. There is also a large opposition to multifamily dwelling units in suburban areas that may be expressed through zoning and comprehensive plans. In many localities, a home selling for \$300,000 is considered "affordable" and may only be purchased by a person who qualifies for affordable housing under their strict guidelines.

In areas with high housing costs, accessory apartments are often strictly prohibited and enforced by penalties that can cost the owner far more than the cost of rent. In order to create more affordable housing, housing standards, zoning and building codes must all be more permissive with their regulations and what they allow. Citizens are often the cause for the strict regulations when it comes to multi-family zoning and affordable housing developments. It is not uncommon for residents to lobby against any type of affordable housing by claiming that the area can be better served as an open space or park for the community. These types of reactions to stigmas of affordable housing are oftentimes the cause of restrictive zoning to stop "unwanted" developments (Yang, 2004).

Chapter 40B

In order to create more affordable housing, Massachusetts has adopted a sometimes controversial statute known as Chapter 40B, this statute has also taken on another more colorful name, "anti-snob zoning." Chapter 40B enables the local Zoning Boards of Appeals (ZBA's) to overrule and approve housing developments, provided that they have at least 20-25% of the units with affordable housing deed restrictions. This statute is only applicable to cities and towns that currently do not meet the state-wide requirement that 10% of housing in that municipality must be affordable. This regulation encourages local governments to make strong efforts to meet the 10% affordable housing requirement, for fear of getting a 40B development in their locality. Chapter 40B has effectively allowed developments to be completed that otherwise could not have been built under the local zoning regulations. As a result of Chapter 40B, zoning regulations are made less strict and will typically allow for a higher density, thereby making it more financially feasible for a developer to create affordable housing. Since its inception in 1969, Chapter 40B has been highly controversial. Residents usually loathe it; however, Massachusetts is one of the most expensive states to reside in the country, therefore Chapter 40B is probably a necessary tool that is being used to create more affordable housing and less regulatory barriers for developers.

When considering Chapter 40B, it may be beneficial for towns to examine the possibility of receiving approval for Chapter 40R and 40S. Chapter 40R is the creation of Smart Growth Zoning District, while 40S provides reimbursement for educational costs associated with the new higher density zones. Both were designed to help motivate towns to embrace changes in permitting and land use patterns. 40R and

40S are designed to eliminate the fiscal problems created by new development that the town must absorb. Massachusetts must use the bulk of its local aid to successfully encourage new construction in villages, town centers, and transit oriented developments, but also for areas where resources could be used to improve transit and circulation (Glaeser, 2006), like Sudbury.

5. REGULATIONS DRIVING UP HOUSING COSTS

The housing situation in Massachusetts is similar to other areas of the country that have seen housing development limited by excessive regulations. Census data (2000) shows there is an out-migration of the workforce. Young people who have grown up and been educated in Massachusetts are leaving for more affordable locales. There have been several studies calculating the added costs to excessive regulation; both economically and socially. The U.S. Department of Housing and Urban Development (HUD) has determined that regulations can account for up to a quarter of a home's sale price.

A Report by Glaeser et al called *Massachusetts Regulatory Barriers That Impede Higher Density Development*, assess the status of Massachusetts land values and densities. Local information is given for Sudbury which reflects housing trends on the state level. The following is an excerpt from the Glaeser report:

"Several recent studies have found that the high cost of housing in the Boston area is promoting many residents, especially younger people who can't afford to buy a first home here, to decamp for other states. Massachusetts is the only state that lost population in each of the last two years, according to the US Census, and businesses are increasingly worried about attracting and retaining workers" (Glaeser 2006).

State Building Codes

Building codes are often inconsistent. Local interpretation of state standards introduces uncertainty that gets translated into added costs to developers—and ultimately to the home buyer. For example, the building code, which is enforced by the local building inspector, is just one of 9 state codes, each with its own state-level board and local implementation process. Consolidating building and specialty codes (including handicap access, electrical, health, and other codes) under the roof of a single agency, with simplified, understandable code would be most beneficial.

Fiscal Zoning

In addition to building codes, another regulatory barrier which contributes to the location of affordable and dense housing is fiscal zoning. Fiscal zoning is a tactic that many communities use to increase their tax base without having to spend much money on municipal services. Towns court commercial and

industrial businesses that will contribute to the tax base without utilizing services like schools and recreation. Fiscal zoning contributes to sprawl development by preventing lower income employees from living nearer to where they work.

The implications of this are twofold; first, a 'spatial mismatch' occurs where employees must commute to work in areas that utilize fiscal zoning. Typically, employment opportunities for low-income people are located far away from the areas where it is affordable to live, causing transportation issues. Quality of life for these workers is an issue. Not only can the commute for the employed be undesirable but it can be more difficult for the unemployed to find work contributing to low morale (HUD 2005). The second issue is that these communities eventually see a decline in the quality of services that they possess. Installation and maintenance of infrastructure is so expensive, and without increase revenues for such projects, the value of the service declines.

Accessory Apartments

Bylaws prohibiting accessory apartments are another common regulatory barrier to increased residential density. Currently, 60 percent of municipalities in Eastern and Central Massachusetts allow accessory apartments in single family residences. However, more than half of these cities and towns limit occupancy to relatives of the homeowner and also demand frequent re-permitting and restoration of the home to its original state after the relatives move out (Stergios, 2006).

Subdivision Control Laws

Subdivision control laws regulate site design, land development and the infrastructure of new developments. Housing densities are often compromised when municipalities mandate characteristics of a community. Towns may mandate that subdivisions have increased financial burdens on homeowners and developers. Currently there are nine boards and commissions that oversee the building code. It is clear that a less expensive, streamlined process is necessary (Pikounis 2003).

Approval Not Required

An important way for towns to lessen regulatory barriers is through Approval not required (ANR) lots, which may be developed as long as minimum dimensional requirements and a single property is created. Other criteria include: that there is no division of land into two or more lots, and every lot shown on the plan has frontage of at least such distance as is presently required by zoning; and every lot shown on the plan has frontage located on either a public way, away shown on a plan previously approved and endorsed in accordance with the Subdivision Control Law, or a private way having sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed

use of the land abutting thereon (Subdivision Control Law 2006). In instances like these, local zoning controls are not enforced and developers can do whatever they wish. Specifically, continuing practices contributing to unsustainable development. This zoning loophole has created patterns of development that many towns realize needs to change.

6. ENVIRONMENTAL REGULATORY BARRIERS

The Commonwealth of Massachusetts has a set of important regulations aimed to protect natural resources, critical habitat and water quantity and quality. The Wetlands Protection Act is a vital set of regulations that have effectively protected wetland resources since it was first passed in the late 1970s. However, these regulations pose site restrictions and a maze of permitting processes that increase costs for developers because of all the uncertainty about what the actual outcome of the wetlands process will be.

Massachusetts Wetland Protection Act

Development near wetlands is governed by the Massachusetts Wetlands Protection Act (the Act). The Act was established to protect water bodies, land under water bodies, land areas bordering water bodies, land that is subject to tidal action or coastal flowage, lands that are subject to flooding, and buffer zones. These areas include the following; riverfront areas, freshwater wetlands, coastal wetlands, beach dunes, flats, marshes, meadows, swamps, creeks, rivers, streams, ponds, and lakes (The General Laws of Massachusetts, Chapter 131, §40). State governments have recognized the critical role of wetlands as a major component in the success of ecosystems. Although the intent of this act was noble, it has proved detrimental to housing production in eastern Massachusetts. The Act severely limits the number of buildable lots due their proximity to water bodies, or buffer zones. The Department of Environmental Protection oversees the administration of the wetlands laws, and develops the regulations and policies on a statewide level. This authority is shared with conservation commission administrators on a local level (Euchner, 2003).

Many municipalities have adopted far more restrictive bylaws that govern wetlands. At the local level the conservation commission administers the Wetlands Protection Act. This body has the power to create even more stringent restrictions in addition to the state act, which cover issues that are not within the jurisdiction of the Department of Environmental Protection. Some of these local bylaws include the creation of "no-build" and "non-disturbance" zones, which go above and beyond the restrictions, set forth by state codes (Euchner, 2003).

Appeals Process

To complicate matters, the bifurcated wetlands appeals process is another barrier in itself. Under the State Wetlands Act, appeals must go through the Department of Environmental Protection regional office, then to the office of Administrative Appeals and finally to the Superior Court. Appeals to the local wetlands bylaws travel directly to the Superior Court. The current uneven, two-track systems make the permitting process complicated for developers (Euchner, 2003). Often times land developers do not attempt to appeal decisions due to the length and expense of the wetlands process. The Act and local wetlands bylaws require developers to go through a complicated permitting process and meet stringent standards when they are building in the vicinity of wetlands. A consolidated appeals process would improve the regulatory procedure of issuing permits (Euchner, 2003). Developers thrive on certainty, and this two-track process doesn't offer much.

Streamlining Environmental Permitting

Governor Patrick has identified the Commonwealth's permitting process as one of many reasons for the state's housing crisis and the out-migration of both businesses and workers. In response, he is moving ahead with a streamlined permitting program passed by the legislature last summer. The legislation sets up a new \$4 million agency known as the Mass Permit Regulatory Office. The goal is to process 90% of permits that have to be issued by the Department of Environmental Protection within 180 days. Local municipalities have to opt into the program, which may require a two-thirds vote of town meeting or city council. This Act is strictly for utilization by business – there is a perception that Chapter 40B already accomplishes the same permit expediting for the residential market. The new act is controversial for this very reason, but it illuminates the problem with permitting that hopefully will translate into innovative permitting processes for homebuilders.

Medway Wetlands Regulations

The town of Medway, Massachusetts has imposed a General Wetlands Protection Bylaw used to protect wetlands, related water resources, and adjoining land areas. "This bylaw is intended to unitize the Home Rule authority of this municipality to protect additional resource areas, for additional values, with additional standards and procedures stricter than those of the Massachusetts Wetlands Protection Act and its regulations" (Town of Medway General Wetlands Protection Bylaw, 1996).

"Except as permitted by the Conservation Commission, or as provided in this bylaw, no person shall commence to remove, fill, dredge, build upon, degrade, discharge into, or otherwise alter the following resource areas: any freshwater wetlands, marshes, wet meadows, bogs, swamps, vernal pools, banks, reservoirs, lakes, ponds of any size, rivers, streams, creeks, land under waterbodies, lands subject to

flooding or inundation by ground water or surface water, and lands within 100 feet of any of the above resource areas. Said resource areas shall be protected whether or not they border surface waters" (Town of Medway General Wetlands Protection Bylaw, 1996).

Medway Flood Plain

The Medway Zoning Bylaw also created a Flood Plain District as an overlay district, which includes all land bordering any natural water body that lies within 25 feet from the median high waterline, all water bodies encircled by the boundary lines of the district, all land bordering Stall Brook, Hopping Brook, Chicken Brook, and any of their tributaries, and all wetlands. The Flood Plain/ Wetland Protection District overlies other districts established by the Medway Zoning Bylaw. No new buildings or structures may be constructed in this overlay district. This is done to protect the lives, health and safety of residents of Medway; however it limits the amount of developable land in Medway (Medway Planning Board).

Sudbury Wetlands Regulations

The Conservation Commission in Sudbury has imposed their own Wetlands Administration Bylaw Regulations. Wetland resources that are protected through this bylaw include:

- 2.1.1 Any creek, stream (intermittent or perennial), river, pond, or vernal pool
- 2.1.2 Isolated and bordering land subject to flooding
- 2.1.3 Any bank, freshwater wetland, marsh, swamp, wet meadow, or bog bordering on or having a hydraulic connection to any of the resources listed in
- 2.1.1 or 2.1.2.
- 2.1.4 Land under any of the bodies listed above
- 2.1.5 Any adjacent upland resource area as defined by the Bylaw or these regulations (Sudbury Wetlands Administration Bylaw Regulations, 2006).

In Section 7 of the Wetlands Administration Bylaw Regulations, Permits and Conditions, the Conservation Commission asserts the right to set disturbance restrictions. "A growing body of research evidence suggests that even 'no disturbance' areas reaching 100 feet from wetlands may be insufficient to protect many important wetland resource characteristics and values." Thus, the Conservation Commission designates disturbance restrictions of adjacent upland resources including the designation of a no disturbance area:

"This is an area in which virtually no activities or work, other than passive passage, are permitted. No vegetation may be disturbed, leaf litter and debris remains in place, etc. The no disturbance area should remain unchanged from its pre-project state" (Sudbury Wetlands Administration Bylaw Regulations, 2006).

Sudbury Wetlands Replication

In the case of wetland replication, the Sudbury bylaw requires that any replicated wetland be fully constructed prior to the construction of any structures. The replicated wetland must reproduce all the values and functions of the original wetland as determined by the Sudbury Conservation Commission. The area of replication must be a minimum of twice the size of the original resource area that will be destroyed due to construction. These regulations make the option of wetland replication unattractive to developers because a large enough parcel to accommodate a wetland area double the size of the original resource is required, decreasing opportunity costs for developers and increasing costs which are passed on to buyers. Replication can seriously impact the timetable and cost of a project. Replacement of specific functions and values can require substantial amounts of time before being completely replicated (Sudbury Wetlands Administration Bylaw Regulations, 2006). It is not until all of these features are replicated, that building can commence. This leads to a great deal of contention from developers.

Sudbury Title V

In the town of Sudbury, Title V permits may be deemed insufficient for the protection of wetlands. There are many harmful effects of septic system effluent on wetlands and adjacent resource areas that Title V does not take into account, such as eutrophication. As part of the bylaw, the Sudbury Conservation Commission may require more stringent standards including larger setbacks, greater separation to groundwater, secondary treatment, and alternative technologies (Sudbury Wetlands Administration Bylaw Regulations, 2006).

Sudbury Wildlife Habitat

The Sudbury bylaws also address the protection of wildlife habitat. All resource areas are presumed significant for wildlife habitat interests and values. According to the bylaw, "no project may have a significant adverse project/site-specific impact or an adverse cumulative impact on wildlife habitat for more than two growing seasons" (Sudbury Wetlands Administration Bylaw Regulations, 2006). Habitat features that are protected under this bylaw include: large cavity trees, turtle nesting area, existing nest trees, beaver dams, mink or otter dens, vernal pools and movement corridors that provide connectivity to other wildlife habitats. If it appears that a project may have an adverse impact on wildlife habitat, the Conservation Commission may require the applicant to get approval from the Massachusetts Division of Fisheries and Wildlife, creating yet another obstacle for developers seeking permits (Sudbury Wetlands Administration Bylaw Regulations, 2006).

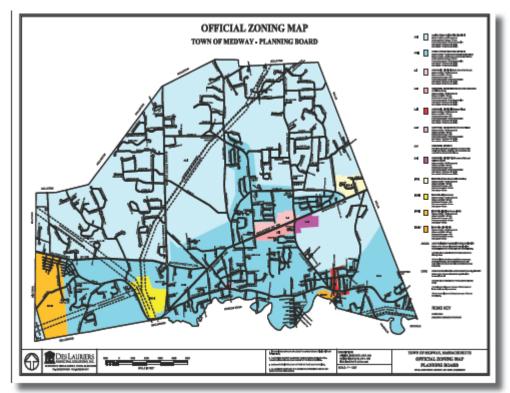
Environmental regulations create one of the largest obstacles for developers. Wetland protection laws and TitleV requirements are impediments to the creation of workforce housing in Massachusetts. The municipalities of Sudbury and Medway have imposed even stricter bylaws that limit the amount of buildable lots in their communities.

Rewriting of the zoning regulations in such a way that would permit higher-density, workforce housing without compromising the integrity of the environment or the welfare of residents would make it easier to acquire land to develop for workforce housing.

7. REGULATORY BARRIERS for the TOWN of MEDWAY and SUDBURY

Medway

Medway is a town that appears to take planning and development seriously as demonstrated though their Master Plan and Zoning Bylaws. The Zoning Bylaws of Medway were first developed in 1951 and are amended through June 6, 2005. The purpose of the bylaws is; to prevent overcrowding of land; to avoid undue concentration of population; to encourage housing for persons of all income levels; to facilitate the adequate provision of transportation, water, water supply, drainage, sewerage, schools, parks, open space and other public requirements to conserve the value of land and buildings (Town of Medway, 2005).



Agricultural and Residential District II

The parcel of land for the proposed housing project is within two zoning districts; Agricultural and Residential District II, and Industrial District III. The Agricultural and Residential District II allows for single-family residences and agricultural uses. Multifamily homes and accessory dwelling units are permitted by special permit. Accessory dwellings may only have one bedroom and must be occupied by either the owner of the premises or by specified family members. Any single-family dwelling must have a minimum lot size of 22,500 square feet and 150 feet of frontage along a street. Any multi-family dwelling must have a minimum lot size of 30,000 square feet and 150 feet of frontage along a street.

Industrial District III

The Industrial District III allows for the following industrial uses; manufacturing, storage, processing, fabrication, packaging and assembly. This zoning district also allows for office buildings for professional use as well as churches, municipal buildings, schools, wholesale offices, and warehousing. Unfortunately, residential uses are not allowed in the Industrial District III.

Medway Master Plan

The Medway Master Plan suggests that there is a need for housing primarily for young adults that have grown up in Medway. There is also a need to develop more senior housing. By the year 2020, senior citizens are projected to make up a greater portion of the population than young adults (age 20-29) (6). The Medway Master Plan presents four primary goals with reference to the housing stock in Medway:

- 1. Manage the rate of residential growth
- 2. Develop an affordable housing plan
- 3. Target housing needs
- 4. Maintain current character

The suggested action in goal one states that the town should implement a phased growth plan that limits the number of residential building permits each year. This will allow the town to keep up with the excess strain that will be put on infrastructure and schools.

Another action item states that the town should "consider rezoning portions of ARI and ARII". This will allow the town to keep up with the economic development needs in the town of Medway. The suggested action laid out in goal two is to "balance the housing inventory to both meet community needs and to address state mandates on affordable housing quotas." Medway does not meet the 10% state requirement for affordable housing, (currently at 5.3 percent) this puts Medway in a position where a developer can

push a Chapter 40B project through the Zoning Board of Appeals (ZBA). According to the master plan "developers have recognized this and have pursued this avenue." A 40B project would put Medway in a position where they would not be able to manage their own growth.

Medway Zoning Bylaws

Through the examination of Medway's Zoning Bylaws and Master Plan, it becomes clear that the Town of Medway is committed to developing more affordable and market rate housing for young adult populations and senior populations, while maintaining the overall character of the town. However the current density requirements set forth by the zoning bylaws make this an arduous task to complete. It is very difficult to conserve land with large-lot zoning. An ideal situation would be for the town to create an overlay that would allow for a slightly higher density cluster development within the site. This would allow more homes to be built within a smaller space, thus preserving open space and surrounding agricultural land. The creation of more homes could mean that a higher number could be given deed restrictions for affordable housing. The project site is located within an Adaptive Use Overlay District (AUOD), which allows for residential development along with some mixed-use commercial development. This type of zoning is ideal for the creation of a walk-able, higher density neighborhood.

It is also important to note that the Town of Medway's Zoning Bylaw allows for an Adult Retirement Community Planned Unit Developments (ARCPUD). This type of development is designed to encourage developers to create housing for people who are 55 and older.

Overall we find that the Town of Medway has set forth goals that will enhance their town and preserve the existing character and charm that residents enjoy. It is important to residents that their town continues to look and feel as it does by controlling the rate of growth. In the proposed project area, the current minimum lot size is large, and thereby creates a situation where it becomes difficult to develop housing which is reasonably priced while conserving land and the overall character of the town. If the minimum lot size were decreased within this area, it would create a situation where a housing development could be built with higher density. These homes could be marketed for younger generations of Medway's workforce residents and allow them ability to afford housing within the town. More affordable housing, housing for young adults, and more senior housing are both goals set forth in Medway's Master Plan. Medway is a town that has a lot to offer to its residents and they should be awarded with the chance to remain residents of Medway.

Sudbury Master Plan

Sudbury's Master Plan is a document which seeks to translate and compliment the visions and policies set forth by various participants in the town. Chapter 41, § 81D states a master plan is a "statement which identifies the goals and policies of the municipality for its future growth and development". Even so, the goals have not translated to significant changes, including affordability.

Community members may decide how they want their town to be in the future but it is the zoning bylaw that determines the success of this vision. There is no requirement for consistency between master plans and zoning ordinances under current Massachusetts zoning laws (Massachusetts General Law). One example of this inconsistency is: "Allow incentives for inclusion of affordable housing units in single-family subdivisions." In reality, there is little affordability in single-family subdivisions because current zoning regulation prohibits such use. (Sudbury Planning Board, 2001)

Sudbury Zoning Analysis

There are 11 zoning districts in Sudbury, encompassing residential uses, commercial and industrial uses, and open space uses. In addition, several anchored overlay zoning districts cover portions of the Town, which govern certain land uses, such as water resource protection, flood plain protection, historic districts, wireless communication services and wastewater treatment facilities. Sudbury's high minimum lot sizes are typical of the MetroWest region (see table 6.1 below).

Table 6.1

Minimum	Lot Area for Primary	Zoning Dis	tricts
Zoning District	Minimum Lot Size	Acreage	Percent
Single Residence A	40,000 sq. ft.	10,880	69.83%
Single Residence C	60,000 sq. ft.	2,291	14.70%
Single Residence Wayside Inn Historic Preservation	5 acres	1,166	7.49%
Business	None	44	0.28%
Limited Business	None	53	0.34%
Village Business	None	30	0.19%
Industrial	None	93	0.60%
Limited Industrial	100,000 sq. ft.	143	0.92%
Research	8 acres	151	0.04%
Industrial Park	100,000 sq. ft.	7	0.97%
Open Space	None	721	4.63%
	Total	15,580	100%

Table 6.2

Overlay Districts:
Flood Plain
Historic Districts:
Old Sudbury
Hudson Road
Wayside Inn 1
Wayside Inn 2
King Phillip
Water Resource
Protection
Wireless Services

Sudbury has been creative and successful in enacting some progressive zoning overlays such as:		
	Cluster development bylaw (article 5100)	
	Flexible development bylaw (article 5200)	
	Senior residential community bylaw (article 5300) (Town of Sudbury, MA 2006b)	

However, certain barriers remain to the development of the workforce housing that 495/MetroWest communities like Sudbury need to retain a diversity of residents and housing stock. The lack of available land which is an issue in nearly all housing debates. Sudbury has about 3,387 acres of developable land. The community must assess how much land they want to actually be developed for the predicted 2,088 residential units. A second is the preservation and conservation of land, which certainly makes a positive contribution to a community's character, which studies show, can impede housing by driving up land values. (Euchner, 2003)

Sudbury Accessory Apartments

Sudbury's zoning bylaws currently allow single accessory apartments in single family residences. However, the impediment to the town's accessory apartment bylaw is the requirement that occupants must be low-income, family members or live-in domestic servants. Sudbury's Master Plan envisions that attached housing be available to persons over the age of 62. If this eventually is enacted, existing housing units could be available on the market. Accessory apartments are authorized by special permit for five years after the date of initial occupancy and limit the permit to 5% of the single-family dwellings in Single Residence District "A", "C" or Wayside Inn Historic Preservation Zone (Town of Sudbury, MA, 2006).

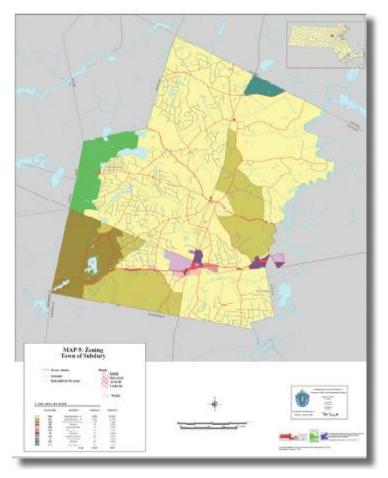
Sudbury Manufactured Homes

Manufactured homes are not an allowable use in Sudbury as they are thought to detract from the town's character (Town of Sudbury, MA, 2006). This is another barrier to increased residential density, as mobile or manufactured homes are often an effective way to increase both affordability and density. However, there is an ever increasing political, social and geographical marginalization of both owners of mobile homes and sitting of such parks. In recent years mobile homes have come to comprise approximately two-thirds of available affordable housing stock in the US (Schmitz, 2004). Furthermore, the quality of manufactured homes continues to rise, which is helping to reduce community resistance to this type of housing.

Sudbury Accessory Uses

Sudbury's approach to accessory uses in residential zones may actually help encourage higher densities. Home businesses fall into the category of accessory uses. The Town of Sudbury explicitly mentions: family and child day care, religious purposes, agriculture of five or more acres and the seasonal sale of produce, wine and dairy products as allowable home business accessory uses (Town of Sudbury, MA 2006).

Accessory uses add to quality of life and the affordability of a home (and to compliments goals of the Sustainable Sudbury master plan) because the homeowner does not have to commute to work.



Sudbury Multi-Family Housing

Multi-family housing is an important zoning tool used to increase density but many times it is either prohibited or the dwelling unit per acre ratio is simply unaffordable

- Multi-family housing is zoned out of Sudbury in every land use district except one, Village Business District (VBD). "Residential apartments on second and/or third floors, above ground level business uses" are allowed by right in VBD along Route20 (Town of Sudbury, MA, 2006b).
- □ There are 26 multi-family units in the VBD with a median lot size of 1.81 acres (Massachusetts Housing Partnership Housing Affordability Initiative, 2002; Town of Sudbury, MA 2006b)

Sudbury's Community Preservation Act

One major criticism of the Community Preservation Act (CPA) in Massachusetts is the act's linkage of increased affordable housing with preserving open space. Opponents of the CPA often question how it is possible to promote the construction of housing when developable land is being set aside for preservation. The Act mandates that a minimum of 10% of CPA funds be directed towards affordable housing (Euchner and Frieze 2003; Hamin, Steere, & Sweetser 2006) As a result, many communities make use of CPA funds to bolster existing housing programs rather than implementing new ones.

In 2006, Sudbury dedicated \$410,000 to study and purchase affordable housing units. The town appropriated \$50,000 for a land feasibility study on two parcels of land to assess affordable housing and/or recreational uses. Additionally, the Town administered a total of \$360,000 for down payments to help home buyers purchase existing or newly constructed housing units to be added to the Sudbury Housing Authority rental housing inventory. This "buy down" tactic is extremely proactive in subsidizing market rate units for affordability (Town of Sudbury, MA, 2006a). Sudbury passed the Community Preservation Act in 2002 and has become one of the few Massachusetts municipalities that use CPA money in a progressive way to create affordable housing developments.

Sudbury's Inclusionary Zoning Study Committee

In 1994, Sudbury's Inclusionary Zoning Study Committee proposed a zoning amendment to Annual Town Meeting that would have required the construction of affordable units in all new subdivisions with more than six lots (or payment in lieu of construction to an affordable housing fund) in exchange for a density bonus to develop extra market-rate lots. The article was defeated due to lack of public support and acceptance. Such development would have increased Sudbury's affordable housing stock at no cost to the town, on scattered sites, thus preventing concentration of units in one area. However, the Planning Board and other town officials continue to study and promote this idea (Sudbury Planning Board, 2001; Pioneer Institute, 2006).

Sudbury Section Summary

Legislation to reward cities and towns for adopting zoning changes that lessen the burden on developers and improve the predictability of zoning approvals is extremely important. A planning process that preapproves certain types of development within predefined areas could accomplish the goal of increasing workforce housing and keeping young people in the State.

Sudbury has been proactive in contributing to the spatial needs of its growth while maintaining town character. Under conventional zoning, future development is likely to continue to be characterized by typical low-rise, suburban style shopping and office centers and large lot single family detached homes. Growth management helps guide how and where the community's expected growth should occur. Densities need not be limited to urban locales, but more prominently utilized in a fashion that can retain Sudbury's agrarian charm.

8. REGULATORY BARRIERS CONCLUSION

Our findings have shown that high housing costs in the Greater Boston and outlying areas are largely due to the lack of housing. This is a common supply and demand model that has caused housing costs to skyrocket, therefore middle class workers are unable to afford to live in the area. Claims have been made that the region has run out of developable land, research has shown that this may not be the primary cause of the lacking affordable housing. It has been found that the primary reason for the shortage of affordable housing and working class housing is the regulatory barriers that discourage developers from constructing such types of housing projects. In Massachusetts two main types of regulatory barriers have been found to impede these types of housing projects;

- □ Barriers that impact the permitting process for housing developers
- Zoning regulations that limit the land that is available for higher density development

Understanding the current policies and processes can provide a basis for rewriting the zoning regulations in such a way that would permit higher-density workforce housing without compromising the integrity of the environment or the welfare of residents. Perhaps if legislation were to reward cities and towns for adopting zoning changes that lessen the burden on developers and improve the predictability of zoning approvals, the situation housing shortage could be improved. A planning process that pre-approves certain types of development within predefined areas could accomplish the goal of increasing workforce housing and keeping young people in the State.

Sudbury has been proactive in contributing to the spatial needs of its growth while maintaining town character. Under conventional zoning, future development is likely to continue to be characterized by typical low-rise, suburban style shopping and office centers and large lot single family detached homes. Growth management helps guide how and where the community's expected growth should occur. Densities need not be limited to urban locales, but more prominently utilized in a fashion that can retain Sudbury's agrarian charm.

As the town of Medway and Sudbury are rapidly approaching buildout, these barriers may be a great obstacle to the objectives of the respective towns. Large lot zoning, lack of infrastructure in certain areas and an over dependence on property taxes create a hindrance for the Town of Medway's planning goals. The findings in this report indicate that Medway should;

Diversify and increase their commercial and industrial use to increase profitable tax base
Decrease the fear of negative fiscal impact
Promote compact development to maximize the productivity of infrastructure

The town of Sudbury faces similar restraints to compact development because of their large lot zoning, but does not have the same problems with its tax base and infrastructure as Medway. Nevertheless, Sudbury's affluent median income makes it one of the most unaffordable places to live in Massachusetts. As Sudbury also approaches buildout, the town should establish more compact development to accommodate new residents and those of future generations.

At the root of low density development of land is Euclidean zoning. Euclidian zoning has historically contributed to the process of urbanization in the US, but has failed at shaping the US landscape in a way that is sustainable. Form based Codes, Smart Codes, and New Urbanism, are innovative ways of supporting mixed use development, diverse and affordable housing opportunities, the preservation of open space and other environmental resources. The towns of Medway and Sudbury can begin or continue to some of these codes to create more compact, mixes use neighborhood that do not alter the character of the respective towns.

Zoning Bylaws and environmental regulations can also be deterrents to higher density developments. Environmental regulations on a state level such as the Wetland Protection Act, and even more stringent municipal bylaws, severely limit the number of buildable lots in the MetroWest area. Infrastructure financing, zoning and subdivision controls, building codes, procedural rules, and regulations protecting

natural and cultural resources create obstacles for developers. In order to reduce the negative impact that the workforce housing shortage has on the economy in the future, innovative proposals will be made.

Finally, other barriers such as minimum lot size requirements, prolonged permitting process, impact fees, and stricter local regulations than the corresponding state equivalents should be removed. The state should review laws related to planning to eliminate contradiction and ambiguities.

As housing costs in Massachusetts continue to increase, now is the time to make changes that will encourage existing residents to stay and attract new residents to the area. The towns of Sudbury and Medway are in a situation that is similar to other towns within the Commonwealth of Massachusetts. If the regulatory barriers that discourage affordable and workforce housing are lessened, Massachusetts can begin to attract residents to the region as they have in years past.

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