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## Smart growth zoning for housing supply in Massachusetts: Community response to Chapter 40r and 40s

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SMART GROWTH ZONING FOR HOUSING SUPPLY IN MASSACHUSETTS:  
COMMUNITY RESPONSE TO CHAPTER 40R AND 40S

A dissertation presented

by

Tej Kumar Karki

to

The Law, Policy and Society Program

In partial fulfillment of the requirements for the degree of  
Doctor of Philosophy

in the field of

Law, Policy and Society

Northeastern University  
Boston, Massachusetts  
April 2010

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ABSTRACT OF DISSERTATION

Submitted in partial fulfillment of the requirements  
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## **ABSTRACT**

Massachusetts housing is among the least affordable in the nation. Reports have warned that skilled workers are leaving the state because of high housing costs. In partial response to these concerns, the state has passed two pieces of legislation to create a surplus of zoned land for single and multi-family homes in smart growth locations at relatively higher densities with the hope of encouraging the development of housing in Massachusetts.

Chapter 40R was enacted in June 2004 by the state to provide monetary incentives to communities that designate a zoning overlay district (Chapter 40R district) and allow as-of-right densities of at least 8 units per acre for single family homes, 12 units per acre for two and three family homes, and 20 units per acre for multi-family homes. Chapter 40S was passed in November 2005 to create the Smart Growth School Cost Reimbursement Fund to provide partial reimbursement for educational costs resulting from new development in Chapter 40R districts. As of October 2008, 24 communities had created Chapter 40R districts which ultimately could provide as-of-right zoning for nearly 9,000 units of housing, at least 20 percent of which would be affordable to households earning less than 80 percent of the area median income in their communities.

At this point in time, it is useful to determine what community characteristics matter to the adoption of Chapter 40R. Who are the adopters? Who are not, and why?

More specifically, this study will investigate two major questions: What demographic or socio-economic characteristics matter to the adoption of Chapter 40R? Why have some communities adopted and others not? Logistic regression analysis of 115 communities was carried out, and officials from 10 communities, five Chapter 40R-adopting and five non-adopting, were interviewed to answer these questions.

My research found that the adoption of Chapter 40R largely depends upon the provision of town planners in communities, the selection of politically less-sensitive sites, communities' awareness of Chapter 40R advantages, communities' confidence in the state's ability to fund Chapter 40R and the availability of water and sewer in communities.

## ACKNOWLEDGEMENTS

It has been a great pleasure to work on a topic that is so important for the American people, who have faced housing accessibility problems for generations. I am thankful to the late David Soule who suggested this topic to me. Thanks to Professor Barry Bluestone who was so kind to supervise this research. His warm response, sharp insights and support of fieldwork made this research possible. I thank Professor Joan Fitzgerald and Stephanie Pollack for helping me refine this research. Eleanor White from Housing Partners Inc., Ted Carmen from Concord Square Development and Professor Lawrence Susskind from MIT were kind enough to make suggestions that helped to guide my research.

Ishwar Khatiwada's generous support in arranging data in an SPSS program format is worth praising. Michael Burns and Kristen Hudak spent many hours of their valuable time reading my research and helping to improve the language. My brother-in-law Deepak and his wife Jenny supported me in difficult times and made this research possible. Special thanks goes to Kingston Town Planner Thomas Bott and Freetown Town Administrator Winn Davis who took the initiative to meet me at the commuter rail station, show me the site, take me to the town hall and drop me off again at the train station. Municipal staff, taxi drivers and commuter rail employees also deserve acknowledgment.

## **DEDICATION**

As a mid-career professional, I left my country and job to get a PhD education from Northeastern University. My wife Mahalaxmi Karki stood behind me and accompanied me all the way to this land. She made all the sacrifices that were necessary to allow me to work full time in this research. She provided love, care and resources when I needed them in difficult times. I cannot imagine this accomplishment without her support. I dedicate this research to her sacrifice.

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## CHAPTER 1

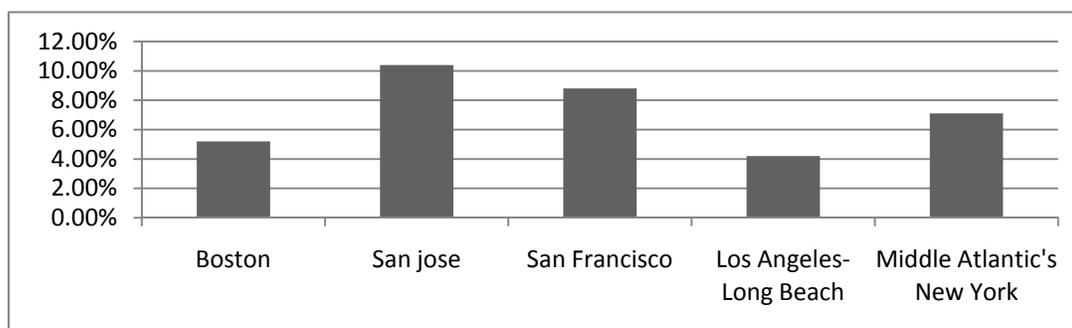
### INTRODUCTION

#### 1.1 Problem Statement

A large number of Metropolitan areas of the United States have been experiencing a sharp rise in housing costs over the past couple of decades. New England home prices increased five-fold between 1980 and 2006 (Office of Federal Housing Enterprise Oversight, 2006). The Pacific region experienced a 475 percent increase in house prices during the same period. Among 304 Metropolitan Statistical Areas (MSAs), Boston, San Francisco, San Jose, Washington, DC, Fort Lauderdale and New York had the most expensive housing in the US (Bluestone, Stevenson, & Williams, 2008). Where housing costs are now highest, research has demonstrated higher domestic net-outmigration from these regions and slower job growth (see Figure 1.1).

In particular, Greater Boston experienced a 186 percent increase in the median price of single family homes between 1999 and 2005 (Bluestone & Heudorfer, 2007). The median single-family home price increased from \$212,000 to \$395,000. Normally, housing supply responds to such high housing prices. However, this generally did not occur in the Greater Boston region. The total number of single-family housing permits dropped from 7,775 to 7,270 units during the same period in the metro area (Bluestone & Heudorfer, 2007).

**Figure 1.1 Domestic Net-outmigration in High-Housing-Cost Regions (2000-2004)**



Source: Bluestone, Stevenson, & Williams, 2008

The supply situation was even worse in the case of multi-family housing units. The percentage of municipalities allowing multi-family housing by right dropped from 44 percent in 1972 to 17 percent in 2004 in Eastern Massachusetts (Schuetz, 2006). The land zoned for multi-family housing was just 1.5 percent of the total land of the entire region (Massachusetts Department of Housing and Community Development & Mass Housing Partnership, 2007).

As the housing supply continued to lag behind rising housing prices, housing became more expensive and unaffordable in a large number of Greater Boston communities. In 2008, Bluestone, Billingham and Davis reported:

By 2005 only 19 of the 161 municipalities in Greater Boston had a median home price that was “affordable”<sup>1</sup> by a median income homebuyer purchasing the

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<sup>1</sup> A home is affordable if a household is spending no more than 30 percent of its income for mortgage, property tax, and home insurance. If a renter spends no more than 30 percent of its income for rent and utilities then the rental unit is considered affordable.

median-priced house in that community. This was down from 101 “affordable” communities in 2000 and 59 as late as 2003” (p. 11).

Among 50 states, Massachusetts was the seventh highest in terms of homeowners living in unaffordable homes, and third highest in terms of renters living in unaffordable rental units in 2006 (Bluestone, Billingham, & Davis, 2008).

As low and moderate-income families pay large portions of their income for housing, they are increasingly facing problems in funding their health, education and other daily expenses. A public opinion poll conducted in 2007 among 515 residents statewide and 401 residents of Cape Cod revealed that 36 percent of the respondents or their immediate family members were seriously considering leaving the state because of the high housing costs (UMass Donahue Institute & Citizen's Housing and Planning Association, 2007). Between 2000 and 2005, more than 230,000 residents out-migrated from Massachusetts (Bluestone, Billingham, & Davis, 2008). As working families move from high-housing-cost to low-housing-cost regions, so do jobs. Bluestone, Stevenson and Williams (2008) report:

In response to the difficulty of retaining and attracting workers in high housing cost regions, businesses move to metro areas with lower costs in the expectation that is where they can find a ready supply of labor at wage rates not inflated by the need to cover high living costs. (p. 428)

In Greater Boston, employment dropped by 4.9 percent between 2000 and 2004, and many jobs moved from Greater Boston to low-housing-cost communities in New

Hampshire and Rhode Island (Bluestone, 2006). This shows how high housing costs can stifle a region's economy. Even with the current weak state of the economy and the housing meltdown, housing in Greater Boston actually became less affordable relative to other regions where housing prices fell faster, according to Bluestone, Billingham and Davis (2008):

As of 2006, over 31 percent of homeowners were still paying more than 30 percent of their gross income in principal, interest, property taxes, and home insurance. . . . 52.6 percent of renters were paying more than 30 percent of their income on monthly rent, the highest proportion ever. Back in 2000, "only" 38.8 percent of renters had to pay this much. A quarter of renters (25.6 percent) were paying more than 50 percent of their gross incomes in rent in 2006, also a record. (p. 19)

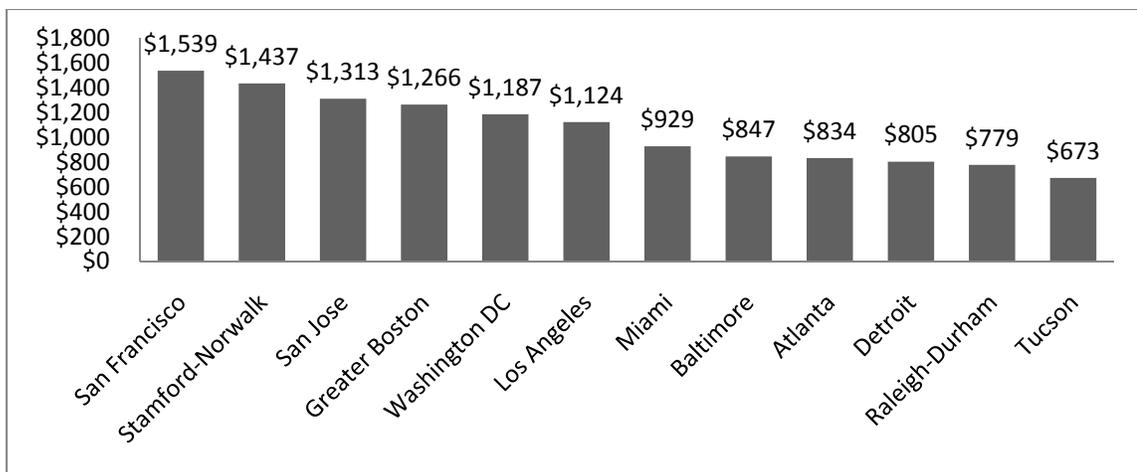
In the post-recession period, if growth in the housing supply continues to remain slow, housing prices could spurt again. Bluestone, Billingham and Davis (2008) anticipate:

Faster economic growth could exacerbate the region's ability to offer housing at competitive prices. Not only will the absolute affordability of housing in the region decline, relative affordability will likely decline, as well. The gap in home prices between Greater Boston and competing regions of the country could expand rapidly, compromising the region's ability to retain young families in the region and to attract others from various parts of the country. (p.67)

A comparative assessment of Greater Boston and Raleigh-Durham can explain the kind of challenges Greater Boston is likely to face in the post-recession period (see Figure 1.2). In 2005, the Boston metropolitan area's average monthly housing cost (\$1,266) was 1.6 times more expensive than the Raleigh-Durham metropolitan area (\$779), and the monthly childcare cost was 1.5 times more expensive (Bluestone, 2006).

According to Bluestone (2006), nearly 9,000 residents moved from Massachusetts to North Carolina between 1990 and 2002. If the current economy picks up speed, Greater Boston could experience a rise in housing prices faster than the Raleigh-Durham. As a result, Raleigh-Durham and other similar regions become more viable locations for Greater Boston residents to migrate. Greater Boston will lose more working families and jobs.

**Figure 1.2 Average Monthly Housing Costs- 4 Person Family**



Source: Economic Policy Institute, 2005

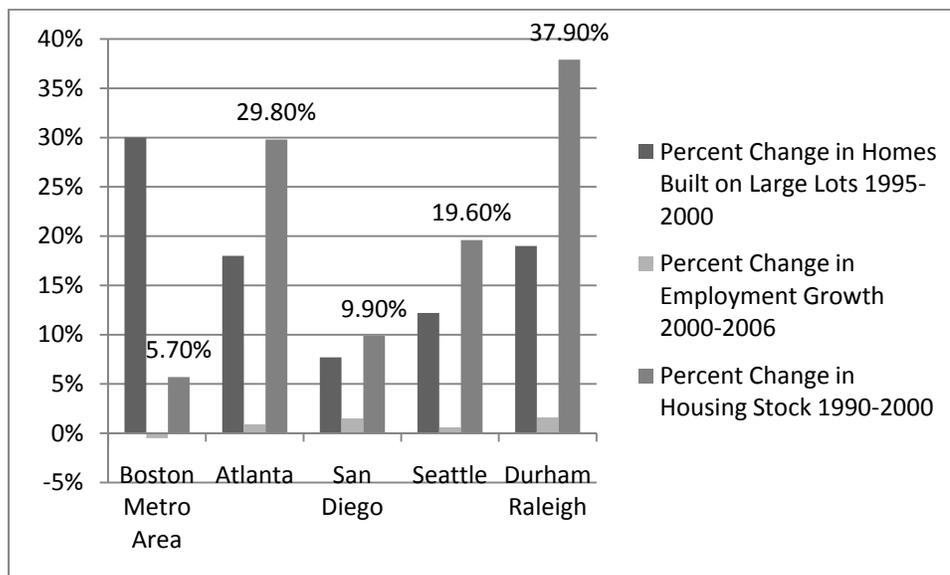
## **1.2 Reasons for High Housing Costs**

One of the main reasons for the persistent housing-supply problem in the United States in general, and Massachusetts in particular, is large-lot-zoning regulations. Between 1985 and 2001, 24 percent of new housing units (eight million housing units) were built on lots of more than one acre in the United States (US Census Bureau, 2008). Large-lot-zoning regulations create a regional shortage of smaller lots for affordable housing and raise housing costs because of the excessive land requirements per housing unit. The costs of large lots accounted for 65 percent of the total housing costs in the US communities (NAHB Research Center, 2007). They also mean longer streets, sewers, water lines, sidewalks and more municipal services.

Moscovitch (2009) analyzed the data of 242 metropolitan regions in the US and found that among the five largest metropolitan regions, Greater Boston was the only region to have a large number of homes built on large lots, a small increase in housing stocks and a negative growth in employment (see Figure 1.3).

About 30 percent of new homes in Greater Boston were built on lots of one-acre or more between 1995 and 2000 (Moscovitch, 2009). During the same period, metropolitan regions such as Atlanta, San Diego and Seattle had a smaller percentage of homes built on large lots (18 percent, 7.7 percent and 12.2 percent, respectively) and positive growth in employment.

**Figure 1.3 Large Lot Homes, Employment and Housing Production**



Source: Moscovitch, 2009

In Massachusetts, the average lot size increased by 47 percent between 1970 and 2002 (Audubon Mass, 2003). Communities within 50 miles of Boston had 1.4 acres per home as their average lot size (Glaeser & Ward, 2006a). Fourteen municipalities in Massachusetts had over 1.625 acres as a minimum lot size. These communities covered 10 percent of the region's land area but held only four percent of its population (Glaeser, Schuetz, & Ward, 2006b). A study of 187 cities and communities in eastern and central Massachusetts revealed that an additional acre in minimum lot size raised the median sale price of homes in the locality by 19.5 percent in 2001 (Glaeser, Schuetz, & Ward, 2006b). A one-acre increase in lot size decreased the share of the homes that are affordable to the Greater Boston's residents by between 8 and 20 percent. Moscovitch

(2005) studied how changes in average lot size affect the tradeoffs between the amount of land consumed and home prices in eastern Massachusetts, and he found:

If development followed the smart growth pattern of 0.25 acres per unit instead of the recent pattern of 1.08 acres, it would be possible to roughly double the number of units built. This would result in driving home prices down from \$400,000 to \$293,000, while cutting vacant land consumption almost in half. (p. 2)

Despite this research insight, a majority of Massachusetts communities continue adopting large-lot-zoning. The ongoing practice of large-lot-zoning not only raised the cost of housing but also has put the state's economy in jeopardy (Bluestone, 2006; Moscovitch, 2009).

### **1.3 State's Zoning Reform Policies**

Massachusetts has taken note of the housing and economic implications of the exclusionary zoning regulations, and has responded by enacting several pieces of legislation. The important ones are Chapter 40B, Chapter 40R and Chapter 40S.

#### **Chapter 40B**

The Comprehensive Permit Law (Chapter 40B) was enacted in 1969 in order to address the housing supply problems created by zoning regulations. Under this legislation, if a community does not have at least 10 percent of its housing stock

affordable<sup>2</sup> and if it disapproves a developer's housing proposals that include affordable housing units, then the developer can appeal to the state and the state can override local land-use regulations on behalf of the developer's proposed project. However, communities having at least 10 percent of their housing stock affordable are exempted from Chapter 40B requirements (M.G.L. c. 40B)

The law also requires that the Chapter 40B initiated housing projects should have at least 20 to 25 percent of the units under long term affordability restrictions – at least 20 percent of the units must be affordable to households that earn no more than 50 percent of the area median income, or at least 25 percent of the units must be affordable to households that earn no more than 80 percent of the area median income (Dain, 2005).

To qualify for Chapter 40B, interested developers must apply to the local Zoning Board of Appeals (ZBA) to receive permits for their Chapter 40B housing projects. The ZBA in return can approve the proposed project as submitted, grant conditional approval or deny the application. If the developer is not satisfied with conditional approval or disapproval then he or she is entitled to appeal to the Massachusetts Housing Appeals Committee (HAC). HAC is a five-member board empowered by statute to override ZBA permit conditions and outright denials.

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<sup>2</sup> Affordability is defined by being within the financial reach of households earning no more than 80 percent of median income in the area and eligible for inclusion on the State's Subsidized Housing Inventory.

If HAC finds that the ZBA decision does not meet the local needs, it can vacate the ZBA's decision and issue permits to the developer. HAC has overturned nearly two-thirds of the denials of comprehensive permits by ZBAs in Massachusetts (Fisher, 2007).

In the given context of the prevalence of 'affordable-housing-resisting' type of local zoning regulations in Massachusetts, Chapter 40B has been one of the most effective tools to expand affordable housing in communities. Chapter 40B projects have produced 37 percent of all new affordable housing units in the state and 50 percent of those outside the City of Boston (Bluestone & Heudorfer, 2007). In 37 years (1969-2006), Chapter 40B produced nearly 43,000 affordable residential units in Massachusetts (Gornstein & Verrilli, 2006; Kerfetz, 2001). As of April 2009, only 55 out of 351 communities have met the 10 percent threshold of affordable housing stock, and 296 communities have yet to be approached by Chapter 40B developers<sup>3</sup> (Citizens' Housing and Planning Association, 2009). Despite the existence of Chapter 40B for so many years, the Massachusetts housing market continues to be one of the least affordable in the nation (Bluestone, Billingham, & Davis, 2008).

One explanation offered for this slow progress is that Chapter 40B imposes mandatory regulations for affordable housing production but provides no incentives to communities to offset school costs that might be associated with the settling of low and moderate income families in newly built affordable units. In Massachusetts, the property and excise taxes generated from new single-family homes in 238 of 351 communities

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<sup>3</sup> Developers can take advantage of Chapter 40B only if they wish to.

were found to be insufficient to cover the added schools costs<sup>4</sup> (Bluestone, Carman, & White, 2005). In such situations, either high-tax-paying residents compensate for the deficit or the community must lower the quality of school. Neither of these options is desirable to high-tax-paying residents and therefore, they try their best to resist affordable housing projects in their communities. Communities already facing financial problems were those most worried about the fiscal impact of Chapter 40B (Rosan & Susskind, 2007).

Continuation of the Chapter 40B policy without addressing these alleged fiscal concerns has angered many local residents and communities in Massachusetts. In 2007, a group called the Nonprofit Coalition gathered 31,000 signatures from local citizens for a petition to repeal Chapter 40B. However, the petition fell short of the 66,539 signatures required to put the measure before the voters (Williams, 2007). In 2009, they attempted another petition to repeal Chapter 40B and finally, succeeded in putting the measure on the ballot in November, 2010, by submitting 78, 832 signatures. This clearly shows an emergence of local grievances against fiscally impacting Chapter 40B housing projects.

#### Chapter 40R

Massachusetts took note of these fiscal concerns of Chapter 40B and enacted two more pieces of legislation, Chapter 40R and Chapter 40S, to address the fiscal impacts of denser housing projects. Chapter 40R was enacted in June 2004 by the state to provide monetary incentives to communities that designate a smart growth zoning overlay district

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<sup>4</sup> Explained in detail in the following paragraphs

(Chapter 40R district) and that allow as-of-right densities of at least eight units per acre for single-family homes, 12 units per acre for two and three family homes, and 20 units per acre for multi-family homes (Bluestone & Heudorfer, 2007).

The designated Chapter 40R district must have at least 20 percent of the housing units affordable for and restricted to occupancy by households earning no more than 80 percent of the area median income. Once a district is approved, communities are entitled to receive a one-time payment of between \$10,000 and \$600,000 from the state depending on the number of projected housing units, as permitted under the adopted Chapter 40R district (Bluestone & Heudorfer, 2007). In other words, Chapter 40R encourages development of single-family homes and apartments on smaller lots, and reduces the land cost per home to make housing more affordable to moderate income families.

Chapter 40R was designed to help municipalities create more land zoned for single and multi-family homes at relatively higher densities and should ultimately increase the supply of housing in Massachusetts (Bluestone & Heudorfer, 2007). However, despite the several advantages of Chapter 40R, communities have complained that implementation of the program could have an adverse fiscal impact. By itself, Chapter 40R provides monetary incentives to communities for denser housing, including a share for low and moderate-income families but provides no incentives to offset any possible increase in school costs for children of those families that pay property taxes that

are less than needed to cover average school costs plus the cost of other local public services.

In Massachusetts, according to Jonas (2006), “local officials say the added property tax from a new house—particularly anything short of the supersized ‘McMansions’ that are currently in favor with many zoning boards—does not cover the added education costs that come with children in those homes” (p. 42). Research carried out by Bluestone, Carman, and White (2005) found that the property tax and the excise tax generated from new single-family homes with assessed values of \$550,000 or less and with just about 1.0 school going child per home would not necessarily completely cover the added school costs in two-thirds of the municipalities in Massachusetts (Bluestone, Carman, & White, 2005).

The net school cost not covered by additional property tax averaged \$5,000 per home per year for a modest priced single-family home of \$250,000<sup>5</sup> (Bluestone, Carman, & White, 2005). This net school cost per home per year is a huge burden on Massachusetts communities. Thus, without provision of school cost insurance, implementation of Chapter 40R projects could likely add an extra cost burden to a number of communities adopting and implementing this housing provision.

Of course, in many communities where Chapter 40R is adopted, the number of additional children attending local public schools may be quite small. In this case, the

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<sup>5</sup> The property tax generated by modest priced single-family homes is mostly insufficient to cover the average school cost for children living in those homes.

cost of educating these children is a fraction of the additional property tax and therefore there will be no local claim on additional state aid.

#### Chapter 40S

To fix the school cost problem associated with Chapter 40R, Massachusetts enacted Chapter 40S in November 2005. This legislation creates the Smart Growth School Cost Reimbursement Fund to provide full reimbursement for educational costs over and above those that could be paid out of the added property tax in a Chapter 40R district. Specifically, the reimbursement = (total education cost minus new property tax plus new automobile excise taxes of Chapter 40R district) x 0.52<sup>6</sup>. The last factor takes into account that any added property tax from a 40R development must also cover other municipal costs besides schools.

#### **1.4 Research Rationale and Motivations**

When this research was begun in 2008, there were 24 communities that had adopted 40R. By May 2009, three more communities had done so. According to a build-out analysis, these districts could provide zoning as-of-right for 9,780 units of housing, including 2,100 affordable units (Raitt & Verrilli, 2009). These communities will ultimately be eligible to receive \$36 million in incentive payments: \$9.3 million for initial rezoning and \$26.7 million as bonus unit funds once housing permits are actually issued to a developer.

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<sup>6</sup> The average percent of total local spending on education across the commonwealth is about 52 percent.

The recent housing meltdown may have slowed interest in many communities to initiate Chapter 40R projects. However, as the housing market recovers, more communities are likely to adopt Chapter 40R projects. Bluestone, Billingham and Davis (2008) point out the urgency of such projects in a post-recession period:

“Unless we have zoning in place that will permit developers to match housing supply to expanded housing demand, we will see vacancy rates decline to the point where housing prices begin to rise at rates well above normal inflation” (p. 67)

Before that time occurs, Chapter 40R can be an important tool for developers and communities to match housing supply to expanding housing demand. The expectation was never that all or even that most of the state’s 351 communities would develop Chapter 40R districts. The real expectation was that enough communities would take advantage of the new law so that there would be a surplus of appropriately zoned land for affordable housing in Massachusetts. With a surplus of appropriately zoned land, land cost would come down making it possible for developers to produce more units of affordable housing with little or no subsidy.

The current adoption of Chapter 40R by a relatively small number of communities requires a more in-depth understanding of why some communities have adopted Chapter 40R and others have not in order to motivate more communities to take advantage of the legislation. More specifically, this study will investigate two major questions: What

demographic or socio-economic characteristics matter to the adoption of Chapter 40R?  
Why have some communities adopted Chapter 40R and others not?

To answer these questions, this study uses a mixed research method: quantitative as well as qualitative investigation. The quantitative study analyzes the demographic and socio-economic data of communities to answer the first research question, while the qualitative study involves interviews of town officials to answer the second research question.

Since adoption of Chapter 40R is a very recent phenomenon, we know very little about why some communities are adopting it and others are not. Therefore, this research is quite timely and relevant from a law, policy and society perspective. Past literature shows that communities are resistant to accommodating low and moderate-income housing projects in their jurisdictions. This study will try to discover the characteristics of Chapter 40R adopting and non-adopting communities in Massachusetts. It is important to determine whether monetary-incentive based policies are effective in addressing the high housing costs and associated economic problems of Massachusetts. Recommendations arising from this research will help increase access to housing for moderate income families in Massachusetts communities, enhance desegregation by race and social class, reduce polarization of rich and poor neighborhoods and retain skilled human resources in the state and the vibrancy of the economy.

## Organization of the Dissertation

This dissertation is organized into nine chapters. Chapter 2 highlights the US zoning history, court's role in shaping public policy, interest group politics, state legislative actions and public policy analysis. Chapter 3 describes Massachusetts housing policies and programs which include local governance structure and impact of zoning on housing and state housing policies. Chapter 4 describes two important pieces of Massachusetts legislation enacted for increasing housing supply: Chapter 40R, Chapter 40S, and their comparison with Chapter 40B. Chapter 5 presents factors affecting community adoption of affordable housing. The first section of the literature review describes the general literature related to denser housing policies; the second section reviews the Massachusetts specific literature and the final section reviews the Chapter 40R specific studies. Chapter 6 presents the research hypotheses. Chapter 7 explains the dissertation model. Chapter 8 and 9 present the quantitative and qualitative results respectively. Finally, the 10th chapter lays out the conclusion and policy implications of the research.

## **CHAPTER 2**

### **EXCLUSIONARY ZONING HISTORY AND PUBLIC POLICY ANALYSIS**

This chapter provides a historical background on why denser housing policies are so important to address critical socio-economic problems in the US. The first section of this chapter lays out the evolution and expansion of zoning regulation in the US. The second, third and fourth sections highlight the struggles against exclusionary, they describe the role of courts, interest group politics and state legislatures in shaping public policy, respectively. The final section presents the public policy analysis.

#### **2.1 Zoning History**

Zoning in the United States emerged as a way to address the overcrowding and industrial pollution of cities and communities of the early twentieth century. The idea was to separate incompatible uses to protect human health in the rapidly industrializing cities and communities. The Standard State Zoning Enabling Act of 1926 inspired cities and communities to enact zoning ordinances (US Department of Commerce, 1926). This was a model law for states, and its goal was to promote the “health, safety, morals or general welfare of the community.” (Section 1, p.4)

In particular, the model law states, “The legislative body of cities and incorporated villages is hereby empowered to regulate and restrict the height, number of stories, and size of buildings and other structures, the percentage of a lot that may be occupied, the size of yards, courts, and other open spaces, the density of population, and

the location and use of buildings, structures, and land for trade, industry, residence or other purpose” (Section 3, p.4).

By the mid 1920s, almost all the states and 724 local governments had adopted zoning ordinances in their jurisdictions. The US Supreme Court’s upholding of the zoning power of the village of Euclid, Ohio in 1926 further enabled a large number of local governments to adopt zoning regulations in their jurisdictions. In the early 1920s, the village of Euclid, Ohio, a suburb of Cleveland, passed a zoning ordinance to restrict apartments and businesses in its jurisdiction (King, 1978). In opposition to this, Ambler Realty Company brought a lawsuit against the village.

Ambler Realty claimed that the restrictions reduced the value of land from \$10,000 to \$2,500 and therefore it is a “taking.” The trial court ruled in favor of Ambler Realty, but the US Supreme Court overturned this ruling in 1926 by a vote of 5 to 4. The Supreme Court said the Euclid zoning ordinance is a legitimate exercise of police power and therefore, it did not want to re-interpret the decisions of legislative bodies unless they are arbitrary or beyond the constitutional authority of the legislature (Salsich, 2003).

At that time, the framers of zoning legislation believed that empowering local governments to impose these regulations would solve most of the environmental problems (health, safety and general welfare) of communities, and people would live in peace. The regulations did solve the environmental concerns but exacerbated the housing problems. In the name of general welfare, many communities imposed large-lot requirements, prohibition of mobile homes and multi-family housing and restriction on

floor areas. The courts again supported such community restrictions in many cases. In the early 1940s, courts upheld minimum lot sizes of one to two acres in Massachusetts, New York and Pennsylvania (King, 1978). Likewise, four to five acre lot size requirements were deemed legitimate by courts in New Jersey, Illinois and Connecticut in the 1950s.

These large-lot zoning requirements raised the price of housing in communities. In 1963, it was found that 20 percent of the Federal Housing Administration's lot price increases between 1950 and 1967 were due to increases in lot sizes (Maisel, 1963). Davidoff and Gold estimated that a single-family housing unit in an exclusionary large-lot-zoning community was twice as expensive as those in less exclusionary areas (Davidoff & Gold, 1973a). In New Jersey, it was "found that the price of a single-family home built on a one acre lot was up to twice that of a single-family home built on a lot of less than one-quarter acre" (James & Oliver, 1976). Chapters 1 and 3 describe recent research on lot sizes and their impact on housing costs.

In the 1960s, Gloucester and Mount Laurel Townships of New Jersey completely banned mobile homes in their entire jurisdictions (Moskowitz, 1977). This shattered the housing dreams of many residents who could afford only mobile homes. Likewise, multi-family homes were completely prohibited in many Pennsylvania and New Jersey communities in the early 1970s (Moskowitz, 1977). In 1953, Wayne Township in New Jersey imposed a minimum floor area of 768 square feet for a one-story dwelling, 1,000 square feet for a two story with attached garage and 1200 square feet for a two story with detached garage. In this case (*Lionshead Lake Inc. v. Wayne Township*), the court upheld

the community's right to set minimum floor area. As a result, communities continued imposing floor area restrictions and foreclosed the possibility of lowering housing construction costs by reducing floor area.

Some communities zoned maximum land area (more than required) for parks and open spaces with an intention to reduce the amount of developable land and limit growth (Schill & Wachter, 1995; Frieden, 1979). Others imposed environmental regulations to discourage denser housing development.

The aggregate effect of large-lot zoning, bans on mobile homes and multi-family housing, restrictions on floor area and other environmental requirements was a shortage of affordable homes available to low and moderate-income families and a higher cost of housing in general. As more and more communities adopted such regulations, the shortage of affordable homes expanded from a local to regional level (King, 1978). The ultimate outcome was the exclusion of minorities and low and moderate income families from a large number of communities (Ellickson, 1977).

Exclusionary zoning began in the US after World War II when predominantly white, affluent residents left city centers to live in the suburbs. Philadelphia suburbs gained 700,000 whites between 1950 and 1960, and the city lost 225,000 whites (Sugrue, 2008). Likewise, Chicago suburbs gained over one million whites and the city lost 399,000 whites in the same period. At that time, the first batch of affluent suburbanites worked hard to bring people of similar characteristics to their neighborhoods. They did this to exclude people of other races and incomes, minimize redistribution of tax revenue

to low-income residents, maintain community character and reduce traffic congestion (Mills & Mieszkowski, 1993).

This exclusionary act was also in the interest of local governments because settling more people of ‘similar character’ in their jurisdictions would bring in high-property-tax-paying residents to their communities. So both the affluent residents and the local governments allied and worked together to figure out options that would exclude low-income families and attract only high-property-tax-paying families to their communities.

Initially, affluent suburbanites restricted homeownership through tactics such as racially restrictive covenants and sales contracts and deeds that excluded minorities from communities (Bluestone, Stevenson, & Williams, 2008). Later in the 1960s, as courts made racial discrimination illegal, the affluent suburban residents and local governments endeavored to keep others out of their communities through restrictive zoning regulations (Fischel, 2004). Local governments used their police power<sup>7</sup> to impose large minimum lot size requirements and to ban multi-family homes, thus serving the interests of their affluent residents.

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<sup>7</sup> This power is known as a *police power*, which is the “power of the states and their legislatures to enact regulations over persons and property to prohibit all things inimical to their citizens’ health, safety, morals, and general welfare” (Burke, Barlow, 2009).

In 1968, the Douglas Commission<sup>8</sup> studied the exclusionary acts of the suburban municipalities of the US and outlined the existence of all types of exclusionary devices in their report: “large-lot zoning, the exclusion of multiple-dwelling units, specifications for minimum house-size requirements, the exclusion of mobile homes, and the establishment of excessive subdivision requirements, to which should be added slow-growth and no-growth ordinances.”

The Standard State Zoning Enabling Act of 1926 required that zoning “regulation shall be made in accordance with a comprehensive plan” (Section 3, p.6). Many states incorporated this quote in their zoning legislation (Cullingworth, 1993). The idea behind this language was to ensure that zoning would follow a comprehensive plan that addresses larger planning goals such as the housing needs of all income groups in communities. However, in actual practice, it was interpreted as ‘zoning must be done comprehensively’ instead of ‘zoning should follow the comprehensive plan’ (Cullingworth, 1993). As a result, communities “zoned first and planned later” to justify the zoning (Hoch, 1994). As zoning decisions led the planning, it compromised an important planning goal: making housing accessible to all including minorities and low-income families in communities.

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<sup>8</sup> A presidential Task Force, chaired by former Illinois Senator Paul H. Douglas, was formed in 1968 to study the urban problems of the US. The task force is known as National Commission on Urban Problems. However, it is popularly known as Douglas Commission.

## 2.2 State Court's Role in Shaping Public Policy

When other branches of government fail, courts step in and play a decisive role in setting public policy in the US. Haar (1997) states, "While courts are regarded as a last resort for articulating public policy, persistent and continuous law breaking by the other branches of government necessitates action by the court in a constitutional, democratic state" (p. 646). State courts have played exactly this role in exclusionary zoning cases where low and moderate-income families received very little relief from other branches of government. Paragraphs that follow lay out the history of court cases against large-lot zoning, prohibition of mobile homes and multi-family housing.

### Large-Lot Zoning

In Needham, a suburb of Boston, Massachusetts, a property developer purchased land in June 1941 and wanted to develop this 24.5 acre parcel into 58 lots of sizes ranging from 13,500 square feet (0.31 acre) to 27,000 square feet (0.62 acre) (Moskowitz, 1977). The developer applied to the town. However, in July 1941, the town amended the area zoning, specifying a minimum lot size of one acre. The developer filed a petition to the Land Court to determine the validity and extent of a zoning bylaw that prescribed a minimum area of one acre for house lots in the residential district in which his land was located. The judge of the Land Court ordered the petition dismissed in 1942: *Simon v Needham*. The argument he made was that municipalities have the power to zone as they wish in the public interest:

Municipalities have the right to determine whether the public interests demand an exercise of the power and, if so, to select the measures that are necessary for the protection of such interests. A city or town is justified in asserting the power where the interests of the public require such action and where the means employed are reasonably necessary for the accomplishment of the purpose.

The court further said, “We cannot substitute our judgment for that of the citizens who voted in favor of the amendment.” The court’s upholding of large-lot zoning continued until the late 1950s. After Judge Frederick’s dissent on upholding a ban on mobile homes in Gloucester Township, New Jersey, in 1962, courts began to decide against large-lot zoning practices (explained below under “Prohibition of mobile homes” subsection).

In *Oakwood at Madison, Inc. v. Township of Madison*, two local developers and six individuals who lived outside the Township of Madison, New Jersey, brought a lawsuit in 1972 saying that “one and two-acre minimum lot sizes limited the availability of inexpensive housing” in the Township of Madison. The lower court ruled that the large-lot zoning requirement was unconstitutional.

The presiding judge, Judge Furman, argued that large-lot zoning makes housing expensive and excludes persons in need of affordable homes. He said the police power of the state should enhance general welfare. Addressing the housing needs of all income groups is enhancing general welfare. Since the zoning ordinance including large-lot

zoning restricted affordable homes in communities, it violated the general welfare and therefore Judge Furman said the act is unconstitutional.

Judge Furman also said that “it cannot be maintained that the Legislature in passing the Zoning Act has empowered municipalities to defy the general welfare or to ignore housing need, insofar as such needs are embraced within the general welfare.” The judge also emphasized regional housing needs. In his opinion, “a municipality must not ignore housing needs that is its fair proportion of the obligation to meet the housing needs of its own population and of the region.” The State Supreme Court upheld the ruling of the lower court.

#### Prohibition of Mobile Homes

In *Vickers v. Township Committee of Gloucester Township*, a group of developers known as Vickers applied for permits to develop a trailer park (mobile house park) in an industrial zone in the Township of Gloucester, New Jersey in the early 1960s,—the only zone in the township where trailer parks were allowed. In response, the town amended the zoning ordinance and also banned the development of trailer parks in the industrial zone. The town argued that the banning of trailer parks is necessary to keep the potential industrial zone more attractive to an industrial entrepreneur. The Vickers filed a lawsuit against the township. The trial court upheld the town’s exclusion. The appellate division reversed, saying “surely in the vast rural area, there must be some portion in which the operation of a trailer park would be compatible with the scheme of zoning the township has seen fit to select.” Finally, the New Jersey Supreme Court

declared the town's exclusion of trailer parks valid and argued, "We cannot nullify the township's decisions that its welfare would be compatible with the scheme of zoning the township has seen fit to select." The court also added that a township does not have to zone for all kinds of uses and it can eliminate certain uses that are contrary to its overall development plan.

Justice Frederick W. Hall dissented on the decision and said, "The import of the holding gives almost boundless freedom to municipalities to erect exclusionary walls on their boundaries." He argued that "general welfare does not automatically mean whatever the municipality says it does," and later, that "general welfare transcends the artificial limits of political subdivisions and cannot embrace merely narrow local issues." He emphasized that when a majority of communities adopt exclusionary zoning and cause a regional shortage of homes for low and moderate income families then it is affecting the 'general welfare' of not just of a single community but of the entire region and therefore it is against the principle of zoning. Justice Hall's view resonated in the region and courts started considering the issue from Justice Hall's perspective when making decisions.

### Prohibition of Multi-Family Homes

In the early 1970s, the entire Township of Mount Laurel, New Jersey was zoned for large, single-family homes. A group of low-income, black residents wanted to replace their poor slum area with 36 units of modestly-priced garden apartments. The group applied for a variance but the township refused. In response, advocates for low-income people filed a lawsuit against the Mount Laurel Township through the local chapter of the

National Association for the Advancement of Colored People (NAACP). The case (South Burlington County, NAACP v. Mt. Laurel) went up to the New Jersey State Supreme Court, and the court in 1975 ruled that Mount Laurel's large-lot zoning was discriminatory against low-income populations because it inhibited the ability of developers to build affordable housing. The court required that the township present a comprehensive plan within ninety days with provision for low and moderate-cost housing. However, the community did little to fulfill the court order. Finally, in the early 1980s, another lawsuit was filed by the South Burlington County, NAACP against Mount Laurel. In response, the New Jersey Courts ordered Mount Laurel in 1982 to provide its "fair share" of affordable housing in South Burlington County, NAACP v. Mt. Laurel (Mount Laurel II). Mallach, (2004) notes:

Mount Laurel II also made it clear that, if a town did not have a realistic plan to meet its fair share, the courts could override local actions and grant approvals or a "builder's remedy" to developers who propose to incorporate a "substantial number" of affordable housing units in their projects. In a memorable footnote, the court suggested that 20 percent affordable housing was a "reasonable minimum." (p. 1)

The Mount Laurel II decision prompted many developers to seek a builder's remedy. The builder's remedy worried many suburban townships. As a result, communities leveraged political pressure to develop strategies to gain immunity from the builder's remedy. In response, the state legislatures enacted the Fair Housing Act of

1985. The Act established the Council on Affordable Housing (COAH), which was authorized to define fair share, review municipal fair share plans and provide approval of those plans. If municipalities follow the fair share plan, then, COAH can provide communities immunity from builder's remedy for six years.

As of 2001, 271 municipalities of New Jersey have submitted their fair housing plans to COAH (Mallach, 2004). Nearly 29,000 units of low and moderate-income housing were produced. Half of all these units were affordable to households earning less than 50 percent of the area median income.

In the words of Haar (1997), "The major lesson of Mount Laurel is that judicial action is necessary when the political process becomes so frozen that no other remedy is forthcoming to deal with a systematic and continuing abuse." (p. 646). Litigation efforts made by housing advocates and exclusionary-zoning victims raised the debate for and against exclusionary zoning, generated awareness on the adverse impact of such zoning on housing accessibility, and ultimately, prompted appropriate court decisions and state legislative actions to enable construction of more affordable housing.

### **2.3 Interest Group Politics**

Housing interest groups and social activists have played an important role in influencing the courts and states to act against restrictive zoning regulation in the United States. They used research, public media and litigation in attempts to have affordable housing constructed in the suburbs. Danielson (1976) has described these phenomena in detail. His work sets an important context for this research. This section summarizes

Danielson's research. First, the organizations engaged in the activism are described and finally, their attempts to increase affordable housing are highlighted.

### Social Activism

To open up the enclave of exclusionary zoning in the suburbs, many organizations and activists had worked hard and raised their voice in the past. According to Fried (1971), the National Committee Against Discrimination once concluded:

there can be no effective progress in halting the trend toward predominantly black cities surrounded by almost entirely white suburbs....until local governments have been deprived of the power to exclude subsidized housing and to manipulate zoning and other controls to screen out families on the basis of income and, implicitly, of race. (pp. 50-51)

In the early 1970s, metropolitan newspapers wrote editorials against racial discrimination and said that one group of citizens creating barriers to deny access to homes and opportunities to the other group of citizens is intolerable (Danielson, 1976). Downs (1973), an expert in housing, labeled exclusionary zoning an "arrangement that benefits the wealthy and the middle class at the expense of loading large costs onto the very poor" and as "a gross injustice that cries out for correction" (p. 11).

Schiels & Spector (1972) reported that the NAACP considered suburbs "the new civil rights battleground" and urged blacks "to do battle out in the townships and villages to lower zoning barriers and thereby create new opportunities for Negroes seeking

housing closer to today's jobs at prices they can afford to pay” (p. 305). Unfortunately, they did not have enough political support to battle in local planning commissions and planning boards because lower-income families and minorities were already kept out of most communities by exclusionary policies (Danielson, 1976).

Many social organizations considered litigation a major tool against restrictive suburban housing and land use policies. These included the American Civil Liberties Union, the Lawyers' Committee for Civil Rights under Law, the NAACP Legal Defense and Education Fund and the National Housing and Economic Development Law Project (Danielson, 1976). Other organizations lobbied for changes in federal policies. Those organizations were the Leadership Conference on Civil Rights, the Center for National Policy Review and the Housing Opportunities Council of Metropolitan Washington. Similarly, the National Urban Coalition, the Exclusionary Land-Uses Practices Clearing House and the National Job-Linked Housing Center were engaged in dealing with information related to suburban housing issues (Schields & Spector, 1972).

The League of Women Voters was another powerful organization working to promote affordable housing in the suburbs. With a largely white, high-income suburban membership, the hundreds of chapters of the League of Women Voters were active in the early 1970s to increase access to decent homes for all (Danielson, 1976). The National Committee Against Discrimination in Housing (NCDH) helped fair-housing groups that were trying to expand housing opportunities for middle-income blacks in suburban communities.

In some cases, even the suburbanites felt that they needed affordable homes for the public workers serving those communities. Oliver Quayle and Company (1972) carried out a survey in Westchester County and found that 78 percent of individuals agreed with the statement, "I tend to favor more moderate and low-income housing in Westchester so that public servants such as teachers, firemen, and policemen can live in the communities they serve." (p. 74). They also found that seventy percent supported "more subsidized low and moderate income housing in Westchester to enable our young people to stay here instead of being forced to live elsewhere". Most of the individuals also expressed that priority for low-income housing should be given to those living and working in the suburbs. To respond to the affordable housing needs of people working in the suburbs, Danielson (1976) says:

The Fairfax Board of Supervisors in Virginia approved a series of ordinances in 1971 requiring that 6 percent of the housing in most developments of fifty or more units be priced below \$20,000, and that 9 percent be priced between \$20,000 and \$25,000, provided that federal subsidies were available (p. 5).

Danielson (1976) reports that realizing the housing needs for cops, firemen and teachers, the Planning and Zoning Commission of the affluent Connecticut suburb, Westport, approved "a change in local zoning in 1973 to permit the construction of 400 apartments in scattered sites, with 60 of the units priced within the range of town employees and others with moderate incomes" (p. 6). However, the zoning changes were

strongly opposed and within a month, the forty-member representative town meeting unanimously overturned the decision (Danielson, 1976).

A garden apartment proposal was killed in Bergen County, New Jersey where 1600 local residents signed petitions against the apartment development (Danielson, 1976). At the same time some residents were looking for such affordable garden apartments. Reeves (1971) quotes, the concerns of one resident:

"My daughter will be getting married in a few years and I'd like to see her remain here. A nice little development wouldn't hurt anyone. Give our kids a chance. It's unfair. We had our chance to move out here." (p. 308)

#### Local Confrontations

A public-interest organization called Suburban Action Institute (SAI) made a number of attempts to open up the suburbs to all during the late 1960s. The organization was located in Westchester County, New York and run by Paul Davidoff, a planner and attorney, and Neil Gold, a former staff member of NCDH.

First, SAI carried out research to document various suburban housing and land use issues. Second, it launched awareness programs to suburban employers and opinion leaders. Third, it criticized local zoning ordinances in various forums and media. Fourth, it opposed and filed complaints against 'exclusionary zoning promoting policies.' Fifth, SAI opposed the private corporate agencies' move to locate jobs in suburbs, inaccessible to low and moderate-income families. Sixth, court cases were filed against exclusionary

zoning decisions of dozens of suburban communities of New York in the early 1970s (Danielson, 1976). The organization also litigated against federal grants for sewer and recreational facilities to an exclusionary suburb in Westchester County.

Finally, as litigation alone did not bring satisfactory results, SAI decided to construct its own affordable housing in the suburbs with the help of private developers. SAI established Garden Cities Development Corporation to construct housing.

In 1973, SAI announced a housing project for 8,000 people on 253 acres near Candlewood Lake in New Fairfield, Connecticut (Danielson, 1976). A large number of adults in New Fairfield signed petitions against the project, and the local zoning board unanimously rejected the proposal

In another Connecticut suburb SAI tried to build 160 units of federally subsidized housing on eleven acres of land. This too did not work. The mayor told the press that people are dead-set against the project and the local planning board refused the rezoning request (Danielson, 1976).

During the same period, SAI attempted to build a \$150 million planned community on 720 acres in Mahwah in northern New Jersey. According to Danielson (1976), “Of the 6,000 housing units “in the proposed new community, 2,400 were to be priced for families with annual incomes under \$10,000 with the remainder within reach of those with incomes of less than \$20,000 a year” (p. 13). In response, the mayor of Mahwah stated that extreme liberals were making attempts to divide and ruin the locality (Rubin, 1972). The planning board in Mahwah ultimately rejected SAI’s proposal.

Gradually, SAI's associations with private developers for building suburban housing were questioned. Anti-denser-housing suburbanites urged a federal investigation of the organization's tax-exempt status. SAI was also blamed for using black Americans against suburban zoning practices (Danielson, 1976).

To fight against these charges, SAI tried to build local support. It reached out to suburban churches, builders and housing developers, fair housing activist, and suburban employers of low and moderately skilled workers (Davidoff & Gold, 1970). Unfortunately, SAI received little support from any of these groups. Some of these groups viewed that Suburban Action's radical approach might further worsen the situation. Others worried that SAI's local confrontation might harm their peaceful efforts (Danielson, 1976).

Nonetheless, SAI's work in the suburbs definitely publicized the moral consciousness regarding exclusionary behavior of suburban communities and drew the attention of policy makers. Its attempts would have been more effective had it fought for housing for suburban teachers and police and their children because these comprised a constituency which would be hard for suburbanites to oppose. However, even this tactic did not work in some localities. Without having political clout in decision making in cities and communities, local proponents of affordable housing have no mandate for zoning boards which refused to limit exclusionary zoning.

When housing activists were litigating against large-lot zoning practices of local governments in New Jersey and Pennsylvania in the mid-1960s, SAI was confronting with the suburban communities in the New York and Connecticut to build affordable homes. Both the court cases and social activism against exclusionary zoning have brought the issue to the forefront and many states have since adopted innovative housing policies in the US.

#### **2.4 State Legislative Actions**

While a number of states had been involved in early attempts to encourage their municipalities to permit the development of affordable housing, these efforts were given greater impetus as a result of the 1971 work of Williams and Norman, which documented the extent of exclusionary zoning in northern New Jersey (Meck, Retzlaff, & Schwab, 2003). Their study provided detailed evidence for litigation in the Mount Laurel case in New Jersey. After the famous Mount Laurel ruling against exclusionary zoning, states started paying much greater attention to land use and housing relationships.

Today twenty-four US states have laws that require local governments to incorporate affordable housing in their land use plans and regulations (Meck, Retzlaff, & Schwab, 2003). The most active states in inclusionary zoning<sup>9</sup> are California,

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<sup>9</sup> According to Roberts (1986), “Inclusionary zoning is a means of remedying the economic segregation in housing that has resulted from decades of local governments’ widespread use of large-lot zoning, large minimum house sizes and the near exclusion of multifamily or other affordable housing” (sec. 3A.01). Inclusionary tools are mandatory set aside provisions, density bonuses and waiving or relaxing certain regulatory requirements.

Massachusetts, New York, Connecticut and New Jersey. Other states include Florida, Oregon, Rhode Island and Washington (Burchell & Galley, 2000).

California enacted a Housing Element Law in 1989 which requires that all local governments in California develop a housing plan and designate areas to meet present and future housing needs (Burnett, Khadduri, & Lindenmayer, 2008). The municipalities' housing needs are calculated on the basis of employment levels, commuter patterns, current housing demand, and the availability of residential development sites (Baker, 2005).

The element requires that local governments describe in detail their action plan to implement housing programs. The action plan requires each municipality to elaborate land-use and development control, regulatory concessions and incentives, and use of federal and state financing and subsidies (Morris, 2000). As of December 2007, 80 percent of California local governments (429 out of 535) had complied with the housing element requirements (California Department of Housing and Community Development, 2007). Of the total of 110,799 building permits issued in 2007, 94 percent were issued by housing element compliant communities, according to the Construction Industry Research Board (California Department of Housing and Community Development, 2007). California's success is highly encouraging but it will take some time to see how these achievements will affect housing prices in California.

Oregon passed its Land Conservation Development Act (LCDA) in 1973, which required all communities prepare comprehensive housing plans (Orfield, 2006). Under

this legislation, “a local government may not prohibit from all residential zones, attached housing, multifamily housing, manufactured homes or government assisted housing.” To implement this act the Oregon legislature created a seven member Land Conservation and Development Commission (LCDC). The LCDC is empowered to adopt land use policy through a set of rules or goals. Its Goal 10 requires that plans "encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households and allow for flexibility of housing location, type and density."

In 1978, LCDC enforced Goal 10 in the case of the City of Durham, invalidating a local act that would have doubled the minimum lot size in that municipality. The LCDC is empowered to compel communities to permit affordable housing and it can withhold state grant funds from non-complying municipalities (Baker, 2005).

Oregon is famous for these statewide policies that have helped encourage many denser housing developments in local communities. However, researchers have mixed opinions about the policies' success. In 2005, 55 percent of renter households were paying 30 percent or more of their income on rental housing, according to the American Community Survey (Merced, 2006).

In Florida, local governments are required to prepare and implement a comprehensive growth management plan and include adequate provision for affordable housing. Florida's Growth Management Act of 1985 requires all communities to have a

comprehensive plan for land development, which must be approved by the Florida Department of Community Affairs (Gilroy, Staley, & Stedron, 2007).

The local comprehensive plan is required to consider future land use, conservation, housing needs, and provide for parks and open spaces, along with a report on institutional coordination issues. Despite the enactment of the Growth Management Act for increasing affordable housing in Florida, until the bursting of the housing bubble in 2005, housing costs rose much faster in Florida than the national average. Under the Act, there was inadequate provision for assuring that land set aside for housing matched development needs. Moreover, the regulations actually required higher-cost building design standards. Finally, approval delays added more cost to housing. A study of 56 of Florida's 67 counties revealed despite the Growth Management Act, housing price inflation exceeded 16 percent (Gilroy, Staley, & Stedron, 2007).

In Maryland, a Moderately Priced Dwelling Unit (MPDU) ordinance was passed in 1974 for Montgomery County (Burchell & Galley, 2000). This law requires that any residential development of more than 50 units must set aside 15 percent of the units as affordable in exchange for a density bonus of up to 22 percent. The county produced 10,000 affordable units over the first 21 years of the ordinance (Burchell & Galley, 2000). This success motivated the Maryland legislature to authorize all state counties to enact a similar law. Fifty-one percent of MPDU housing unit purchasers during 1988-1992 were minority households (Montgomery County, 2005). Recently, three of Montgomery County's neighboring jurisdictions, Fairfax and Loudoun Counties in Virginia and Prince

George's County, Maryland, have implemented housing development programs largely based on MPDU.

Many states in the US have adopted innovative policies to increase low and moderate-income housing in communities. California and Maryland have shown some initial success. However, communities' compliance with these state policies largely determines the future of affordable housing production in the US.

## **2.5 Public Policy Analysis**

Addressing exclusionary zoning issues in the US require a very clear and sensible public policy. According to Lowi (1995), there are three types of policies. They are redistributive, distributive and regulatory. Redistributive policy aims to transfer wealth and resources from rich to poor. Distributive policy addresses the needs of a particular group from general tax revenues. Regulatory policy attempts to limit the behavior of the targeted groups. It is also intended to protect the public at large from the negative effect of private activity (Ripley & Franklin, 1991). Zoning is a regulatory policy intended to minimize environmental externalities, "health, safety, morals or general welfare of the community", caused by individual and random decisions of land and building development in cities and towns. In the US, this regulatory policy is largely set by local governments although, as explained above, state laws can and do influence how local governments exercise their zoning powers.

When local problems catch national attention, policy initiation begins from one of the three national branches of governments: Supreme Court, executive branch or Congress (Kingdon, 2003).

The public health problems of cities and towns in the early 20th century caught the attention of the federal government, and in 1926, the US Department of Commerce promulgated the Standard State Zoning Enabling Act. This Act was a model and not a binding for states. Nonetheless, many states responded to the federal initiative by adopting zoning legislation and delegating their zoning power to the local governments.

These local governments, however, have often been allowed to exercise their regulatory authority over zoning under a very general and ambiguous standard of promoting the “health, safety, morals or general welfare of the community.” Such ambiguous policies often do not serve good intentions. They generate conflict due to different interpretations of the policy by different groups. This raises the chances that the powerful or the majority imposes its interpretations at the expense of the poor and minorities. Similar was the situation in the case of local zoning in the US for much of the 20<sup>th</sup> century. At the local level, there has been a disagreement on the “health safety and general welfare” definition. For affluent residents, large lot, big home, large open space, neighbor of similar race and income was the “general welfare”. For low-income families and minorities, the “general welfare” meant affordable homes on smaller lots, access to cheaper transportation and jobs.

The affluent were able to exploit ambiguity to prevail over the minority. The affluent suburban residents, mostly white, influenced local decisions to impose large-lot zoning and ban multi-family housing in communities. As the regulations prescribed no optimum standards for promoting health and safety in communities, local governments increased minimum lot sizes and building floor area requirements bigger and bigger to raise municipal revenue. While doing this, they paid little attention to housing affordability because the majority was too affluent to think about it.

Why did the framers of the model Federal zoning laws and many state zoning laws prefer ambiguity? Often, ambiguous policy is also a vehicle of legislators to shift the responsibility of resolving the controversial topic to the court or lower level government agencies (Horowitz, 1977). In a one-race and one-class dominated society, framers normally show reluctance to go against the majority's will even if that will is unjust to the minority. If they do, they create symbolic policy just to console minorities. On the surface, the ambiguous policies look like it is helping the minority but in actual practice, it favors the majority (Stone, 2002). For minorities, the ambiguous policy means something has been done on their behalf, and for the dominant society, ambiguity means an opportunity for them to manipulate the policy in their favor, through their voting power. In 1949, Congress adopted a national housing goal "a decent home and a suitable living environment for every American family." However, this goal has remained unimplemented for many years because, in many states, local government has not been enlisted to help achieve this goal through zoning regulation.

There are also good reasons for creating ambiguous policies. It provides enough room for dialogues and debates on controversial topics such as affordable housing, so that the courts and local governments can identify more realistic solutions. The framers of zoning enabling laws might have preferred ambiguity to allow conflicting groups to negotiate and compromise (Stone, 2002). However, if the majority does not want to compromise but exclude minorities, the ambiguity policy can do little justice.

The social injustice caused by the ambiguous zoning enabling legislation triggered a series of struggles for policy clarity or reforms in the US. The affected groups and housing advocates gradually raised their voice and looked for all possible ways to get relief including legislative reforms. As no legislative reform came forth to correct the public policy problems of the ambiguous zoning regulations, the minorities relied on courts—the only agency that has the power to interpret existing statutes (Barclay & Birkland, 1998).

The state courts made several attempts to clarify ambiguity of zoning regulations. Some courts said “general welfare” is that ‘decided by the local legislative body’. Others said ‘the local legislative body’s decisions that ignore the housing needs of minorities inside and outside the municipal boundary’ is not “general welfare.” The debate finally established the fact that communities need to have fair share of housing for low-income families in the Mount Laurel II case. Ultimately, these courts’ actions substantially clarified the zoning legislation ambiguity and prompted legislative actions for affordable housing in many states of the US. The various state statutes took many different

approaches to ensuring that local zoning did not interfere with achieving affordable housing goals, but in general the laws can be divided into those that take a deterrent approach and those that take an incentive-based policy approach. Stone (2002) says, “With deterrence, we make it harder or more costly for them to do something we don’t want them to do; with incentives, we make it easier or more rewarding for people to do something we want them to do.” (p. 265).

Deterrent types of affordable housing policies are at work in many states. Florida and Oregon have passed legislation that requires local government to plan for affordable housing. California and New Jersey allocate fair share of affordable housing production to local governments. Massachusetts has passed “anti-snob” zoning law, Chapter 40B which weakens the local government’s power to restrict affordable housing in their jurisdictions (Krefetz, 2001).

Incentive-based policies are also at work in many states and have produced encouraging results. Maryland provides density bonuses to developers interested in producing affordable housing units (Burchell & Galley, 2000). Massachusetts has unique incentive policies, Chapter 40R and Chapter 40S. They are unique in the sense that they provide monetary incentives (instead of density bonuses) to communities (instead of developers) for allowing denser housing development. Number of communities taking advantage of these policies is increasing in Massachusetts.

Even considering both the state court and state legislative response to exclusionary local zoning, the US has paid huge social costs of ambiguous zoning

legislation in the past. Low income families and minorities suffered for generations from it. To clarify the ambiguity, it required years of social activism and court cases, and wastage of time and resources. Had the zoning legislation been clearly defined right at the inception, huge costs of litigation would have been saved and lives of many poor families enhanced.

Unfortunately, even 83 years after the first zoning regulation was enacted in the US, no state and local legislative reform has come forth to eliminate the ambiguity of the zoning regulatory policy: incorporating “a decent home and a suitable living environment for every American family” in the zoning legislation, or, redefining zoning legislation’s goal as promoting “health, safety, moral or general welfare of all including low income and minority families in communities.”

Part of the problem is political. Zoning reform may still be a sensitive issue for the majority. Reforms against the will of the majority are mostly confrontational and politically counterproductive. Thus, policy ambiguity and legislative inaction for possible reforms continue to be a reality, until the size of constituency for affordable housing reaches a threshold.

Nonetheless, the social activism and state court cases have played a huge role to clarify the policy ambiguity, pinpoint injustice and prompt states to take legislative actions for affordable housing policies. Combination of deterrent and monetary incentive based state housing policies is at work. Policy outcomes in the days ahead are contingent upon the quality of policy implementation, follow ups and feed backs.

## CHAPTER 3

### MASSACHUSETTS HOUSING POLICIES

This chapter describes local governance structure, the impact of zoning regulations on housing supply and major housing policy initiatives in Massachusetts.

#### 3.1 Local Governance Structure

Communities in Massachusetts are required to carry the huge burden of funding public schools while exercising only limited taxing power. For this reason, communities are skeptical of any housing policy that could increase their municipal expenses. Massachusetts communities generally consider these institutional constraints when developing zoning regulations. This section provides a brief summary of the forms of Massachusetts local government and their decision-making structure, municipal school costs, property tax limitations, and fiscal zoning practices as a means of gaining insight into local communities' decision processes with regard to affordable housing policies.

##### Forms of Local Government and Their Decision Making Process

Unlike some states in the South and West, counties play a very limited role in Massachusetts; cities and towns are responsible for most of the government functions below the state level (Gornstein & Verrilli, 2006). Historically, Massachusetts has delegated to cities and towns the right to prepare their own zoning ordinances and by-laws. In larger cities, elected officials have the power to approve major zoning and by-

law decisions, while in smaller communities, residents or their elected town meeting representatives are required to vote for any zoning changes (Gornstein & Verrilli, 2006).

Altogether there are 351 cities and towns in Massachusetts. Fifty of them have a city form of government with a city council or board of alderman and usually a mayor (Gornstein & Verrilli, 2006). The remaining 301 have a town meeting form of government (see Table 3.1). Out of those 301, 261 communities have open town meetings where any registered voter resident can take part in the debate and vote on municipal decisions.

The remaining 40 communities have representative town meetings in which only locally elected town meeting members can vote on zoning decisions. A two-thirds majority vote is required to approve any zoning decision in all three categories of communities.

**Table 3.1 Forms of Local Government and Decision Making Structure**

	Form of government	No	Voters	Decisive votes
1	City	50	City council/ BOA and mayor	Two-thirds
2	Open town meeting	261	Registered voter residents	Two-thirds
3	Representative town meeting	40	Elected town meeting members	Two-thirds

Two state laws guide the zoning decisions in Massachusetts. The Zoning Act Chapter 40A prescribes the permissible land use and dimensional requirements for any development, while the Subdivision Control Act of 1953 provides standards for dividing land for streets and open spaces (Gornstein & Verrilli, 2006). Zoning ordinances contain

a map and text. The map shows the boundaries of each district within the town and the text describes the allowable uses, minimum lot sizes and setbacks. In addition, the text also contains the details of the review process, special permits, variances, public notice and hearing requirements, appeals, zoning, planning powers and enforcement procedures.

Chapter 40A, the ‘Zoning Act,’ is the state’s zoning enabling legislation. The statute was originally enacted in 1954 and was revised in 1975. The statute provides cities and towns broad powers to adopt ordinances and bylaws to regulate the use of land, buildings and structures. This power is known as a police power, which is the “power of the states and their legislatures to enact regulations over persons and property to prohibit all things inimical to their citizens’ health, safety, morals, and general welfare” (Burke, Barlow, 2009).

The purpose of zoning in cities and towns, as stated by Chapter 40A, is “to regulate the use of land, buildings and structures to the full extent of the independent constitutional powers of cities and towns to protect the health, safety and general welfare of their present and future inhabitants” (Chapter 40A, Section 1A). However, according to Herr (2000), Chapter 40A is weak in terms of ensuring access to affordable homes to all including minorities and low-income families:

Local planning boards in Massachusetts are directed by statute to prepare master plans. The plans are to contain a housing element to provide “a balance of housing opportunities.” However, there is no sanction for failure to prepare such a plan, or to follow it in such actions as adopting zoning. The Massachusetts courts

have given zoning consistency with a master plan little (though growing) weight in decisions. (p. 3)

As there is no sanction for failure to incorporate “a balance of housing opportunities” in master plans, Massachusetts communities have been compromising the larger planning goals by continuing exclusionary large-lot zoning practices, and causing a shortage of affordable homes in the region.

#### School Costs, Property Tax and Fiscal Zoning

School cost is one of the largest local expenditures in the Commonwealth. Massachusetts communities provide 52.4 percent of their revenue for schools, ten percent more than the national average contribution to schools by local governments (Berger & McLynch, 2005). On the other hand, their ability to generate revenue is limited. Massachusetts state law largely limits communities’ revenue-generating options other than the property tax (Frug & Barron, 2007).

In 1980, the state passed Proposition 2½ by referendum. The law limits the property tax rate to 2.5 percent of the assessed value of property and limits the annual growth in property tax revenue to 2.5 percent, unless residents pass an override allowing a greater increase. In the aftermath of Prop 2 ½, the state helped municipalities pay their bills by providing a substantial amount of state revenue sharing to make up for lost local tax revenue. But as the state was hit by recession, local aid fell over 30 percent while school enrollment rose (Bradbury, Case, & Mayer, 1997). The Proposition 2½ property

tax limitations caused serious financial strains in many Massachusetts communities (Bradbury, Case, & Mayer, 1998).

Moreover, according to a survey by the Massachusetts Taxpayers Foundation, increased health insurance cost for local public employees is consuming 80 percent of the 2.5 percent annual growth in taxes (Baxandall, 2005). Between 2001 and 2005, municipal spending for health insurance rose by 63 percent. That insurance cost eats up most of the limited amount of increased revenue that comes from small increases in the local property tax. In addition, state aid for communities has shown a declining trend in Massachusetts, according to Baxandall (2005):

The recession of the early part of this decade along with cuts in the state income tax rate caused state revenues to plunge by 15 percent in 2002. As a result, per capita local aid including education, which had risen 5.3 percent per year in inflation-adjusted terms between 1992 and 2002, fell by 8.6 percent a year between 2002 and 2004. (p. 2)

When school costs are increasing at the same time as local government's capacity to raise property tax revenue is restrained and state aid is decreasing, there are few options available for communities to manage their increasing school cost burdens other than to adopt a fiscal zoning policy—a policy that addresses the facts of their fiscal situations – rather than one that addresses the housing needs of lower or middle-income families. For example, municipal leaders may be forced to impose large-lot, single

family-zoning-only regulations to try to keep property tax revenues above the incremental costs of municipal services and schools.

This kind of local zoning policy certainly helps to balance the municipal budget, but it also creates a shortage of smaller lots where smaller homes could be economically built. As the fiscally motivated large-lot zoning denies housing development on smaller lots and multi-family housing is zoned out of these communities, housing is apt to become unaffordable to low and moderate-income families, and ultimately, exclusion of these families from communities, in direct opposition to the benign intentions of state housing policy. McGoldrick (2001) calls the metro Boston communities' fiscal zoning practices a compromise of planning principles in the pursuit of financial needs:

According to some planners, local officials most concerned with budgets—selectmen, mayors, city councilors, and municipal managers—may view development differently than planning boards, planners, and citizen groups or boards devoted to other community values such as comprehensive planning, conservation, housing, and historic preservation. Thus local development decisions, embodied in zoning and other regulations and practices, are often governed more by fiscal concerns than by resource protection or other sound planning principles. (p. 7)

In summary, local governments' decision-making processes, school cost liabilities and property tax limitations have serious implications for fiscal zoning, which produces large-lot-only zoning regulations and the subsequent shortage of affordable homes for

low and moderate-income families. The next section details these implications for Massachusetts housing policy as actually practiced in local communities.

### **3.2 Impact of Zoning Regulation on Housing Supply**

This section describes various types of restrictive zoning regulations in Massachusetts communities and their deleterious impact on housing supply and the general state economy. Massachusetts communities have adopted a number of restrictive zoning regulations to discourage denser housing development in their jurisdictions, as well as bureaucratic procedures to slow the growth of the supply. There are several categories of these restrictive regulations and policies: Large minimum lot requirements, prohibitions on multi-family housing, a tedious permitting and regulatory process, growth caps, and age-restricted housing.

#### **Large Minimum Lot Requirements**

The average lot size is 1.4 acres per home for communities within 50 miles of Boston (Glaeser & Ward, 2006a). Fourteen municipalities in Massachusetts have minimum lot sizes greater than 1.625 acres, accounting for 10 percent of the region's land but only 4 percent of its population (Glaeser, Schuetz, & Ward, 2006b). The Pioneer Institute for Public Policy Research and Harvard's Rappaport Institute for Greater Boston examined land use regulations in 187 cities and communities in eastern and central Massachusetts in early 2006.

The data revealed that large minimum lot size was the most important constraint on the use of land. An additional acre in minimum lot size, on average, raised the median sales prices of homes in the locality by 19.5 percent in 2001 (Glaeser, Schuetz, & Ward, 2006b). As average minimum lot sizes increased by one-quarter of an acre between 1980 and 2002, 10 percent fewer houses were permitted. A one-acre increase in lot size decreases the share of the homes that are affordable to Greater Boston's residents by between eight and 20 percent (Glaeser, Schuetz, & Ward, 2006b).

Dominance of large-lot-homes was one of the main reasons that Greater Boston had the lowest level of housing production and employment growth compared to similar metropolitan regions (Moscovitch, 2009).

#### Prohibitions on Multi-Family Housing

Thirty-four communities in Boston metropolitan areas have prohibited multi-family housing (Schuetz, 2006). More than 80 communities in Greater Boston have zoned between 91 percent and 100 percent of their land for single-family housing (Glaeser, Schuetz, & Ward, 2006b). Prohibition of multi-family housing and dominance of only-single-family homes in communities causes a shortage of affordable homes for low and moderate income families.

#### Permitting and Regulatory Processes

The permitting process is cumbersome and time consuming in Massachusetts. Multiple stages of approval, as well as regulatory requirements, increase the time and costs of

development projects. It was found that the increase in time to obtain permits was strongly associated with rising land and housing prices in the metropolitan areas of the US, including Boston (Glaeser & Gyourko, 2003).

### Growth Caps

Communities apply growth caps to limit the number of new units that can be built during a given year or phase schedules to limit the number of units per year that can be built within a single subdivision (Dain, 2005). Fifty-four out of 187 cities and towns of Massachusetts within 50 miles of Boston were found to have used such growth limitations (Glaeser, Schuetz, & Ward, 2006b). Local governments justify growth caps as a way to regulate housing development in line with the availability of local services and environmental resources. However, it may also have served communities' hidden agenda of limiting the expansion of low and moderate-income homes.

### Age-Restricted Housing

Many communities also adopt age-restricted housing for adults 55 years of age and older. In eastern Massachusetts, 64 communities permit age-restricted multi-family housing (Dain, 2005). They do this to decrease the number of child-bearing families in the communities, in an attempt to limit the burden of school costs. This is something that has led to the creation of a more childless and elderly society in Massachusetts, which in the long-run could be adverse to the economic growth of the state.

The region-wide impact of these restrictions has been significant in Massachusetts. Housing prices more than doubled in the Boston metropolitan area between 1980 and 2004, and the median sales price for existing single-family homes was the highest in the nation in 2004 (Glaeser, Schuetz, & Ward, 2006b).

Massachusetts's gap between high housing costs and residents' income is one of the highest in the nation—third amongst 50 states (Citizens' Housing and Planning Association, 2006). The ultimate effect of high housing prices and inadequate housing supply was below-average job growth and a net loss of younger, college-educated workers to other states (Gornstein & Verrilli, 2006). Thousands of residents left Massachusetts between the period 2000 and 2005 (Bluestone, Billingham, & Davis, 2008).

In many suburban communities, teachers, firemen, and policemen often cannot afford to live in localities where they serve (Stockman, 1992). In 2006, a former selectman from Marshfield, Massachusetts, Jim Fitzgerald, said, "Marshfield has gotten so expensive that only 'CEO types' can afford housing being built there, not the teachers, fisherman and guys banging nails" (Jonas, 2006).

Restrictive zoning regulations also tend to exclude minorities from the majority of suburban communities. In Massachusetts, 82 percent of the population is non-Hispanic white and their median income is 1.5 times higher than the non-Hispanic black and twice that of Hispanic households (US Census Bureau, 2006). The majority of blacks and Hispanics cannot afford suburban homes built on large lots. As a result, minorities live in

central cities and non-Hispanic whites in the suburbs. The facts demonstrate that discrimination along racial lines is exacerbated by restrictive zoning policies that tend to ‘restrict’ lower-income families to cities and non-suburban communities. The existence of such separation of racial and economic communities is not conducive to a perception of fairness and objectivity in Massachusetts housing policies.

It is anticipated that if the housing supply does not catch up with the post-recession housing demands, then it is most likely that the Greater Boston will experience a rapid rise in housing prices again, and lose its competitive edge in the US metropolitan economy (Bluestone, Billingham, & Davis, 2008).

### **3.3 State Housing Policies**

In the face of all of these housing supply challenges, especially for low and middle-income families, Massachusetts has taken several steps to increase affordable housing since the early 1970s. It has enacted legislations, invested resources and allowed communities to operate housing authorities, and passed executive orders for housing production. This section presents the overview of these initiatives.

#### **Chapter 40B**

In 1969, Massachusetts enacted its most successful legislation to encourage the development of affordable housing -- the Comprehensive Permit Law (Chapter 40B) to break the suburban barriers to affordable housing and to provide housing for returning Vietnam veterans (Witten, 2001). The Massachusetts Senate in 1967 commissioned the

Legislative Research Council to investigate whether localities used zoning power unjustly (Stockman, 1992). The council determined that suburban zoning practices seriously impeded the supply of low and moderate-income housing in Massachusetts and urged legislative action.

Massachusetts legislators responded, introducing several bills to restrict local zoning powers. A joint Committee on Urban Affairs emphasized the need for a legislative step: “The Committee. . . . has found that there is an acute shortage of decent, safe and low and moderate cost housing throughout the Commonwealth. . . . Unless shortsighted controls can be avoided, regional needs considered, and the whole process of building made faster, both suburb and city will suffer together.”<sup>10</sup>

Out of the work of the commission, Chapter 40B was crafted and enacted. Chapter 40B is also known as an “anti-snob” zoning law. This means weakening the local government’s power to restrict affordable housing in their jurisdictions (Krefetz, 2001).

### *Legislative Provisions*

Under this legislation, if a community does not have at least 10 percent of its housing stock deemed affordable<sup>11</sup> and if it disapproves a developer’s housing proposal that includes affordable housing units, then the developer can appeal to the state and the

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<sup>10</sup> Mass. Regs. Code tit. 760, 30.01(2) (1991)

<sup>11</sup> Affordability is defined as being within the financial reach of households earning no more than 80 percent of median income in the area and eligible for inclusion on the State's Subsidized Housing Inventory.

state can override local land-use regulations on behalf of the developer's proposed project. However, communities having at least 10 percent or more of their housing stock affordable are exempted from Chapter 40B requirements.

This law makes it easier for housing developers to build higher density, more affordable housing, as well as multi-family homes despite the preexistence of single-family-only or low density zoning in communities. It allows developers to ask the state to modify or overturn adverse local permit decisions.

To qualify for this law, a developer's proposed project must have at least 20 to 25 percent of the units under long-term affordability restriction. This means that at least 20 percent of the units must be affordable to households earning below 50 percent of median income, or 25 percent of the units must be affordable to low-income households which earn no more than 80 percent of the area median income (Dain, 2005).

The Act has two important parts. First, it describes the process of application and second, the process for appeal. The law provides that any limited dividend<sup>12</sup> and nonprofit organizations interested in affordable housing projects can make a single application to the local zoning board of appeals. Within thirty days the board must hold a public hearing. The board has the power to issue a comprehensive permit and must do so within 40 days of the closing of the hearing. If the zoning board fails to convene a

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<sup>12</sup> Limited Dividend Organization – means any entity which proposes to sponsor a Project under M.G.L. c.40B, §§ 20 through 23; and is not a public agency or a nonprofit; and is eligible to receive a subsidy from a subsidizing agency after a Comprehensive Permit has been issued and which, unless otherwise governed by a federal act or regulation, agrees to comply with the requirements of the Subsidizing Agency relative to a reasonable return for building and operating the Project.

hearing within 30 days or issue a permit within 40 days after the hearing, a comprehensive permit is deemed granted. If the application is denied or granted with conditions that make the project “uneconomic”<sup>13</sup>, the developer applicant may appeal to the state Housing Appeals Committee (HAC).

### *Approval Process*

The process of obtaining a Chapter 40B approval begins when an interested developer is applying to the local zoning board of appeals (ZBA) for a permit for his or her proposed Chapter 40B housing project. The ZBA in return can approve the proposed project as submitted, it can make conditional approval, or it can entirely disapprove the application.

If the developer is not satisfied with conditional approval or disapproval then he or she is entitled to appeal to the Massachusetts Housing Appeals Committee (HAC)<sup>14</sup>. In the case that the HAC finds that the ZBA decision does not meet local needs, it can vacate the ZBA's decision and issue permits to the developer. Nearly two-thirds of the denials of comprehensive permits by ZBAs have been overturned by the HAC in Massachusetts, so it is an important component in the actual enforcement of the state's affordable housing policy (Fisher, 2007).

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<sup>13</sup> If the conditions imposed by communities make the project costly and unprofitable.

<sup>14</sup> HAC is an administrative body established within the Department of Housing and Economic Development. Chapter 40B created the Housing Appeals Committee (HAC), a five-member board empowered by statute to override ZBA permit conditions and outright denials. HAC should begin a formal administrative hearing within twenty days and a decision must be made within thirty days of the hearing.

A city or town can deny a permit if there is a “valid health, safety, environment, design, open space, or other local concern” that outweighs “regional housing need.” Cities and communities are also exempted from Chapter 40B mandatory provisions if one of the following applies: (1) at least 10 percent of its housing consists of subsidized low and moderate-income housing; (2) at least 1.5 percent of land zoned for residential, commercial, and industrial use is used for such housing; or (3) a proposed development would, within one calendar year, result in the start of such housing on more than 0.3 percent of the town's land zoned for residential, commercial or industrial use or on more than 10 acres, whichever is larger (Stockman, 1992).

In the first 37 years of its existence, from 1969 to 2006, Chapter 40B produced nearly 43,000 affordable residential units (Gornstein & Verrilli, 2006). However, this is only three times more than what Greater Boston is required to produce (13,400 units) per year between 2008 and 2012 in order to keep home prices below the general inflation rate (Bluestone, Billingham, & Davis, 2008).

### Housing Authorities

In 1969 Massachusetts enacted 121B of Massachusetts General Law (Housing and Urban Renewal), which enables all cities and towns in Massachusetts to operate housing authorities, and codified all previous housing laws from 1935 to 1969

### Local Initiative Program

The Local Initiative Program (LIP) was established by the Legislature in 1990 to stimulate the production of affordable housing opportunities by fostering cooperation between municipalities and housing developers. The program provides technical assistance to developers and municipalities seeking to develop housing that serves households at or below 80 percent of the area median income within mixed-income (market-rate and affordable) housing developments.

Massachusetts also provides funding opportunities to for-profit and non-profit developers to build affordable rental housing projects for families and individuals with annual incomes at or below 80 percent of area median income. In addition, the state provides for rental assistance and public housing operating subsidy programs.

### Community Preservation Act

The Community Preservation Act (CPA), enacted in December 2000, allows cities and towns in Massachusetts to vote to raise local property taxes in order to acquire and protect open space, preserve historic buildings and landscapes, and create and maintain affordable housing. It also provides significant state matching funds to participating communities. The CPA created a municipal Community Preservation Fund (CPF) for open space and historic preservation and affordable housing. Sixty-six Greater Boston municipalities have adopted CPA and 38 of these have allocated some funds for housing under the program.

## District Improvement Financing

Chapter 43 of the Acts of 2003 provides District Improvement Financing (DIF) to municipalities for infrastructure works. The DIF can play an important role in promoting affordable housing development in communities with limited sewer, water supply and road infrastructures. This requires state's commitment for more DIF in infrastructure deficient communities.

## Loans and Grants

Massachusetts also has below-market, publicly-funded loans and grants in its Priority Development Fund (PDF) for low and moderate-income housing development programs. The PDF is channeled through the Commonwealth's Department of Housing and Community Development (DHCD) for affordable rental housing production and planning assistance.

The DHCD has worked with the Metropolitan Boston Transit Authority (MBTA) for housing projects on MBTA-owned properties. The DHCD and the MBTA also assist municipalities in 'smart growth' education and transit-oriented development.

## Executive Order 365

The Commonwealth's Executive Order 365 of 1996, "Planning for Growth," has assisted regional and municipal planners and encouraged them to promote development where infrastructure is in place. The Executive Office of Environmental Affairs of 1999

has provided funding to municipalities to develop a build-out analysis of their land so that they can act strategically in land use decisions.

#### Financial Assistance for Planning

The state has also provided financial assistance to municipalities for planning. Executive Order 418 (2000) has provided \$30,000 grants to municipalities for planning for housing, open space, economic development and transportation. As of 2009, 220 municipalities of Massachusetts have prepared community development plans using these grants. Communities often hired consultants to prepare reports.

The planning reports suggest methods for adopting inclusionary zoning, mixed use zoning and other measures but generally have failed to provide the guidelines to achieve them. Because external consultants prepare the plans, the local constituency (elected officials and planning staffs) tends not to pay sufficient attention to implementing those suggestions (Dain, 2007).

Massachusetts' various housing initiatives described above have made a remarkable contribution to affordable housing production. However, the housing shortage caused by restrictive zoning is so pervasive that it has almost overshadowed the positive contributions made by these initiatives.

In western US cities, home prices rise along with the growth of employment and population. However, in Greater Boston, home prices rise despite a decline in employment and internal net out-migration (Moscovitch, 2009).

This clearly reflects that prices are being determined by nonmarket forces, specifically by “artificial restrictions on housing supply” caused by zoning regulations. Zoning policies must change if there is to be a significant increase in the housing supply for low and moderate-income families.

## CHAPTER 4

### CHAPTER 40R AND 40S: A NEW ERA IN MASSACHUSETTS HOUSING POLICY

This chapter describes a brief history of Chapter 40R and Chapter 40S, providing how the idea for this approach to housing legislation evolved, its main features, and local adoption process. In January 2003, Edward Carman prepared a white paper on the housing supply problems of Massachusetts and proposed legislative change. The white paper was further expanded by a group including Edward Carman, Eleanor White of Housing Partners, Inc. and Barry Bluestone from the Dukakis Center for Urban and Regional Policy at Northeastern University, working under the aegis of the newly-organized Commonwealth Housing Task Force. In October 2003 a report called “Building on Our Heritage: A Housing Strategy for Smart Growth and Economic Development” was released by the Commonwealth Housing Task Force (CHTF)<sup>15</sup>. Bluestone, Carman, and White (2003), in the “Building on Our Heritage” report, noted:

There is a high price to be paid for the state’s housing shortage. The housing crisis in the Commonwealth is not just an affordability issue for low and moderate-income families, but also an economic issue that affects the well-being of all residents of the state. The human capital of the area – a unique and essential asset

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<sup>15</sup> The CHTF is an ad hoc group engaged in improving the housing situation in Massachusetts. Its members come from housing organizations, the business community, organized labor, the Urban Land Institute, The Boston Foundation, Citizens’ Housing and Planning Associations, academic institutions, elected and appointed officials and others.

because of Boston's high tech businesses and its educational, research, and medical institutions – is being compromised because young scientists, engineers, doctors, and business people find it difficult to afford, even with substantial salaries, the purchase price on homes that meet their family needs” (p. 2)

The report stressed that large-lot zoning in many of the region's cities and towns is the main reason for insufficient housing supply and high housing costs in Massachusetts. To address this issue, the report proposed a policy which would provide fiscal incentives to municipalities to rezone land for denser housing development (Bluestone, Carman, & White, 2003). More specifically, the report made two recommendations:

The state provide financial and other incentives to local communities that pass Smart Growth Overlay Zoning Districts and allow the building of single-family homes on smaller lots and the construction of apartments for families at all income levels. The state increase its commitment to fund affordable housing for families of low and moderate income (p. 2)

The report anticipated that 33,000 new housing units could be produced by implementing the recommendations in a period of 10 years. According to Bluestone, Carmen, and White (2003), the strategies were designed to “allow the Commonwealth to increase funding for affordable housing, to reduce development of sprawl, to increase the amount of open space, and to enhance opportunities for historic preservation and neighborhood revitalization” (p. 2). In response to this report, a CHTF Legislative

Advisory Committee was formed under the leadership of Lawrence DiCara to propose actual legislation. After deliberations in the Senate and House, Chapter 40R was finally passed by the full legislature of Massachusetts and signed by Governor Mitt Romney in June 2004 (Bobrowski, 2009). In March 2005, regulations for Chapter 40R were released by the State's Department of Housing and Community Development.

#### **4.1 Chapter 40R: Smart Growth Zoning Legislation**

Chapter 40R provides monetary incentives to communities “that designate a smart growth zoning overlay district (40R district) and that allow as-of-right densities of at least eight units per acre for single family homes, 12 units per acre for two and three family homes, and 20 units per acre for multi-family homes” (Bluestone & Heudorfer, 2007).

The designated 40R district must have at least 20 percent of the housing units affordable for, and restricted to occupancy by, households earning no more than 80 percent of the area median income. Once a district is approved, communities are entitled to receive a one-time payment of between \$10,000 and \$600,000 from the state depending on the number of projected housing units, as permitted under the adopted 40R district.

A municipality may adopt a “smart growth zoning district” in any eligible location for residential use as-of-right (no special permit required) and also permit business, commercial and other uses consistent with primary residential uses. The eligible locations for “smart growth zoning districts” are as follows: 1) areas near transit stations,

including rapid transit, commuter rail and bus and ferry terminals; 2) areas of concentrated development, including town and city centers, other existing commercial districts in cities and communities and existing rural village districts; or 3) areas that by virtue of their infrastructure, transportation access, existing underutilized facilities and/or location make highly suitable locations for residential or mixed use smart growth zoning districts” (M.G.L. Chapter 40R).

#### Initial Step for Chapter 40R Adoption

While a municipality can begin the process of adopting Chapter 40R, normally, the Chapter 40R process begins when a developer shows an interest in an area of a community where a Chapter 40R project might be feasible<sup>16</sup> (see Table 4.1). To begin the process, communities must first hold a public hearing to gather comments and concerns from the community on the developer’s Chapter 40R project proposal (Bobrowski, 2009).

#### Receiving Letter of Eligibility from DHCD for Chapter 40R

After the initial public hearings, communities must apply for a letter of eligibility from the DHCD. The application for the letter of eligibility for smart growth zoning district must include: 1) The boundaries of the proposed district 2) The developable land area within the proposed district 3) Other residential development opportunities for infill housing and the residential reuse of existing buildings and under-utilized buildings within

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<sup>16</sup> Even if a developer has not shown an interest for Chapter 40R, interested communities themselves can begin the Chapter 40R process and receive approval for Chapter 40R districts from the DHCD. Brockton, Haverhill and Reading belong to this category.

already developed areas 4) A comprehensive housing plan, and 5) A copy of the proposed smart growth district ordinance or bylaw and evidence that shows that the proposed district satisfies minimum requirements for a smart growth district (Raitt & Verrilli, 2009). In addition, most communities take advantage of the ability to establish Design Guidelines for future development within the district.

**Table 4.1 Sequence of 40R Approval Process**

	Steps to be followed for 40R approval
1.	Developer approaches municipality for 40R or municipality takes the initiative
2.	Municipal chief executive official holds public hearing on 40R issues
3.	Municipality submits application to DHCD for preliminary letter of eligibility
4.	DHCD provides preliminary letter of eligibility to the municipality
5.	Municipality acquires two-thirds majority vote from its legislative body
6.	Municipality acquires approval from Attorney General
7.	Municipality acquires final approval from DHCD
8.	Municipality becomes eligible to receive incentive payments

#### Minimum Requirements for Eligibility from DHCD

The minimum requirements for the proposed district are as follows. First, the proposed district should be in an eligible location as described above. Second, the proposed zoning ordinance should permit a mix of housing such as for families, individuals, persons with special needs or the elderly. Third, the developable land in the proposed district must allow at least 20 units per acre for multi-family housing, 8 units per acre for single-family and 12 units per acre for two and three family buildings.

Fourth, the proposed district may not exceed 15 percent of the total land area in the municipality, with the exception that the department may approve a larger land area if such an approval serves the goals and objectives of the legislation. In addition, the total

land area of all approved smart-growth zoning districts in the municipality may not exceed 25 percent of the total land area in the municipality and the proposed housing density must not overburden infrastructure as it exists or is planned.

Fifth, the zoning ordinance for the proposed district (see Figure 4.1) must provide that in housing projects of 12 units or more (and for the newly-constructed or rehabilitated district housing units in total), not less than 20 percent of the residential units will be affordable (housing affordable to those earning less than 80 percent of the median income, and subject to an affordability restriction lasting for at least 30 years). The zoning ordinance must permit infill housing on existing vacant lots and additional housing units in existing buildings, consistent with neighborhood building use patterns, and consistent with building, fire and safety codes.

**Figure 4.1 40R District at North Andover, Massachusetts**



Sixth, the district must not be subject to any limitation on the issuance of building permits for residential uses or any local moratorium on the issuance of such permits. There can be no restriction on age or any other occupancy restrictions in the district, although individual housing developments may be restricted for the elderly, disabled or other specific special needs, provided that not less than 25 percent of the housing units in such a project will be affordable housing. All projects must comply fully with federal, state and local fair housing laws.

Finally, design standards may complement the adjacent buildings and structures and not conflict with the comprehensive housing plan or any master plan for the community. The design standards may not add unreasonable costs to residential or mixed-use development or unreasonably impair the economic feasibility of proposed projects.

#### DHCD's Letter of Eligibility and Local Approval

After a community submits all the documents that comply with the legislation's minimum requirements, the DHCD makes a decision on the letter of eligibility within 60 days of the submittal of application. If the DHCD issues a letter of denial, the municipality can reapply, and it will be considered as a new application.

Once the municipality receives a letter of eligibility from the DHCD, within three years, the municipality must formally adopt the Smart Growth Zoning Bylaw. The local approval requires a two-thirds majority of the legislative body of the local government or

the local resident voters. The municipality must submit proof of local adoption to the DHCD.

Within 30 days of the receipt of proof of local adoption, the DHCD provides the final letter of approval to communities. The letter of approval outlines the amount of the zoning incentive payment and the time frame for payment.

#### Chapter 40R Monetary Incentive Payments

The zoning incentive payments are made to Chapter 40R approved communities based on the following criteria: 1) \$10,000 for up to 20 new housing units allowed in the district, 2) \$75,000 for 21-100 units, 3) \$200,000 for 101-200 units, 4) \$350,000 for 201-500 units and 5) \$600,000 for 501 or more units. Additionally, a one-time density bonus of \$3,000 for each unit of new construction/ substantial rehabilitation will be awarded upon issuance of a building permit.

In addition, DHCD and the executive offices of environmental affairs, transportation and administration and finance can use a methodology that awards bonus “points” to municipalities with approved smart growth zoning districts or other zoning policies that encourage affordable housing production when they apply for discretionary funding awards from those agencies.

If no construction in the smart-growth zoning district has taken place within three years of the date of the zoning incentive payment (Section 9), the municipality must repay all monies paid to it under this chapter. (A bill has been proposed to the state to

repeal this provision given the paucity of developers willing to consider home construction in the current economic climate.) In addition, each year the municipality must provide to the DHCD an annual report that outlines the progress of the district in achieving the goals of the statute. DHCD administers the smart growth zoning district program and is responsible for review and reporting of data (Heacock, Hoffman, Kleyman, & Kuykendall, 2007).

The Commonwealth has created the Smart Growth Housing Trust Fund to pay monetary incentives to communities who adopt Chapter 40R (M.G.L. Chapter 10, Section 35BB). The fund is secured from the sale of surplus land, direct appropriations, or sanctions on communities. Without requiring further appropriation, available funds are to be disbursed by the department in accordance with the provisions of M.G.L. Chapter 40R.

#### **4.2 Chapter 40S: School Cost Reimbursement Legislation**

Chapter 40R's monetary incentive provisions provided a new approach to encourage communities regarding higher density housing development. However, the original legislation failed to deal with the potential cost to municipalities of housing development that increased school costs. Chapter 40R districts have the potential to attract low and moderate-income families into the higher density housing. As these families tend to pay property taxes that may fall below the average school costs of their children, communities may face a fiscal deficit without additional incentives or ameliorations.

In Massachusetts, it was estimated that “the net cost to the typical community, based on a modest priced single-family home with a \$250,000 assessment, will average \$5,000 per home per year” (Bluestone, Carman, & White, 2005). These costs can represent a huge burden to communities and therefore, communities are less likely to adopt Chapter 40R without addressing the issue of school costs. Although the original legislative proposal, following the CHTF report, included a provision holding communities harmless from any increase in school costs, that provision was stripped out during the legislative process.

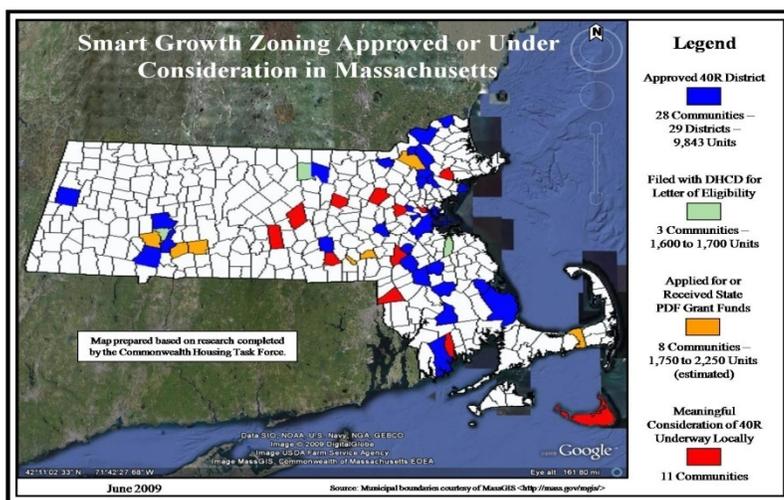
To respond to these concerns, and with the strong support of CHTF, the Commonwealth enacted Chapter 40S in November 2005. Chapter 40S provides state funds to meet the school cost deficit caused by school students residing in new housing units built in Chapter 40R districts (Bluestone, Carman, & White, 2005). The school cost reimbursement = (total education cost minus new property tax plus new automobile excise taxes of Chapter 40R district) x 0.52,<sup>17</sup> plus additional Chapter 70 aid. Chapter 40R-adopting municipalities are entitled to Chapter 40S funding if they meet these criteria. They apply for the Chapter 40S funding based on the number of public school students residing in new housing units built in a smart growth zoning district. According to Heacock, Hoffman, Kleyman, & Kuykendall, (2007):

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<sup>17</sup> The average percent of total local spending on education across the commonwealth is about 52 percent.

Following the approval of a smart growth zoning district under Chapter 40R, DHCD provides the municipality, Department of Education (DOE), the division of local services within the Department of Revenue and the Registry of Motor Vehicles with an address list of all new development within each smart growth zoning district. The municipality then provides a list of eligible students from the local schools to the DOE. The DOE then certifies all students listed who are living in new smart growth districts and uses the 40S formula to calculate the actual payment. (p. 29)

**Figure 4.2 40R Adopting Communities as of June 2009**



Source: Commonwealth Housing Task Force, 2009

Finally, based on these records, smart growth school cost reimbursement is made to municipalities. As of May 2009, 27 communities of Massachusetts have adopted Chapter 40R (see Figure 4.2). However, none of the Chapter 40R adopting communities

have yet taken advantage of Chapter 40S incentive payments since no housing developments have been completed at this point (Raitt & Verrilli, 2009).

### **4.3 Comparative Assessment of Chapter 40B and Chapter 40R**

Compared to Chapter 40B, Chapter 40R provides for more participation at the local level and resourceful in incentivizing communities allow the development of denser housing. A developer interested in Chapter 40B requires only a “project eligibility letter” from a subsidizing agency. After receiving the eligibility letter, the developer is required to submit a single application to the local zoning board of appeals. The ZBA is empowered to grant all local approvals necessary for the projects after consulting with other relevant boards and carrying out some hearing sessions, but does not require a local legislative body to vote approval. Chapter 40R requires a letter of eligibility from the DHCD as well as two-thirds approval from local legislative body (see Table 4.2). This allows for greater local participation in the project approval process.

Chapter 40B does not specify density limits in housing projects, but Chapter 40R clearly specifies design standards and a density range for single-family and multi-family housing units, and the community may provide development guidelines to developers. Chapter 40B does not stipulate any guidelines as to eligible locations for housing developments. Bobrowski (2009) mentions, “The subsidizing agencies have routinely issued (Chapter 40B) project eligibility letters for Greenfields as well as Brownfields, for forested hillsides as well as village centers.” (p. 7). In the case of Chapter 40R, housing

can be built only in “eligible locations”: an area near rapid transit, an area of concentrated development or a “highly suitable location.”

**Table 4.2 Chapter 40R and Chapter 40B Characteristics**

Provisions	40R	40B
Local Site Plan Review	*	
Design Standards	*	
Fixed Densities Allowed	*	
Local Legislative Approval Needed	*	
Planning Board Site Plan Review Process	*	
Streamlined Permitting		*
Ability for a Municipality to Deny a Project	*	If SHI <sup>18</sup> < 10%
Payment from State for Creating Land Zoned for Denser Housing	*	
School Cost Reimbursement	*	
Cap on Developer’s Profit		*
High Bond for Plaintiffs Opposing the Project	*	

Chapter 40B imposes a cap on a housing developer’s profits but Chapter 40R does not. Chapter 40B provides no monetary incentives for the local community. Chapter 40R provides monetary incentives for denser housing development, and school cost insurance for public school children living in those housing units. Compared to Chapter 40B, Chapter 40R requires a huge bond be posted by any plaintiff wanting to reverse the approval of a housing project. Section 11 of Chapter 40R mentions:

(h) A plaintiff seeking to reverse approval of a project under this section shall post a bond in an amount to be set by the court that is sufficient to cover twice the estimated: i) annual carrying costs of the property owner, or a person or entity carrying such costs on behalf of the owner for the property as may be established;

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<sup>18</sup> Subsidized Housing Inventory

plus (ii) an amount sufficient to cover the defendant's attorney fees, all of which shall be computed over the estimated period of time during which the appeal is expected to delay the start of construction.

Bobrowski (2009) considers this “a powerful incentive for developers to use Chapter 40R” (p. 7). The above-mentioned requirements heavily discourage abutting property owners to litigate against approved Chapter 40R project, and thus provide more certainty to the developer.

More importantly, Chapter 40R has the ability to supplement Chapter 40B projects. Chapter 40B projects can take advantage of Chapter 40R's monetary incentives and school cost insurance if the Chapter 40B project site meets Chapter 40R's development criteria and qualifies for state approval (Makofsky, 2006). To qualify, communities must submit their application for approving the Chapter 40B site as a Chapter 40R district to the DHCD before the Chapter 40B comprehensive permit is issued.

Chapter 40R and S are innovative policy initiatives for addressing the housing and economic problems of Massachusetts. Instead of imposing mandatory regulations, these legislations provide monetary incentives to communities for their voluntary participation in denser housing development projects. Communities' response to these policy initiatives will determine the extent of low and moderate-income housing development in Massachusetts. The current challenge is to make sure that these policies succeed in encouraging communities for more affordable housing production.

## **CHAPTER 5**

### **FACTORS AFFECTING COMMUNITY ADOPTION OF AFFORDABLE HOUSING**

This chapter reviews community characteristics that may matter in the adoption of affordable housing or denser housing projects. The first section presents a review of literature related to denser housing policies. The second section looks at the case of Massachusetts. The third section presents reviews specific to Chapter 40R studies. Finally, the fourth section presents a summary of this chapter.

#### **5.1 General Literature**

A review of the literature has identified a number of community characteristics that may affect the adoption of low and moderate-income housing policy. They are income, race, the rate of homeownership, housing value, political party affiliation, the amount of developable land, and provision of a town planner in communities.

Income plays a crucial role in adoption and non-adoption of growth policies such as Chapter 40R, according to a number of studies. Nguyen (2007) studied 422 cities in California and found that the affluent cities were the ones having more anti-growth policies. Likewise, Shlay and Rossi (1981) found that more affluent suburban communities were the ones having more restrictive zoning regulations. High income communities believe that moderate and low income families are often associated with crime (Koebel, Lang, & Karen, 2004). They also believe that low income families may

generate property tax below the average municipal costs, and fear that this may lead to redistribution of school resources to the disadvantaged students (Mills & Mieszkowski, 1993). As affluent communities favor anti-growth policies, and are better off with property tax revenues and local public services, they might not be interested in taking advantage of Chapter 40R monetary incentives.

Race is another factor that has been shown to determine whether a community is receptive to denser housing projects. Pendall (2000) studied data from 1,510 jurisdictions in 25 of the largest metropolitan areas in the United States to test the connection between anti-growth policies (low-density-only zoning, moratorium, urban growth boundaries and permit caps) and the racial composition of the communities.

He compared the change in racial variables between 1980 and 1990 and found that anti-growth policies were all associated with lower proportions of blacks and Hispanics in 1990 after controlling for black concentrations in 1980 at the local and metropolitan level (Pendall, 2000). The black and Hispanic percentage of the total population were 0.8 and 0.5 percentage points lower respectively in communities adopting more anti-growth policies (low-density-only zoning regulations) in the 1980s. Whites perceive that racially mixed neighborhoods are likely to increase in crime rates (Ellen, 2000). Thus, they oppose denser housing policies that open up housing opportunities for minority residents.

Third, housing value is the other important predictor of growth policies. High home-value communities have been found to adopt anti-growth policies (Katz & Rosen,

1987). Anti-growth communities in general do not permit housing development that allows settlement of moderate and low-income families (Shlay & Rossi, 1981).

Fourth, the homeownership rate in a community can play a key role in influencing local policy decisions. Sixty percent of housing units in the US are owner-occupied. For the vast majority of Americans, home is their single largest asset (Fischel, 2001). Thus, they fear falling home values due to economic uncertainty and neighborhood change. To avert any act that may cause home value decline, homeowners actively participate in the municipal decision making process. Homeowners often believe that resettling by low and moderate-income families in their community will lower the value of their homes (Lee, Dennis, & Susan, 1999). The property value research of Goetz, Lam & Anne (1996) in Minnesota as cited by Nguyen (2005) shows, “[F]or every 100 ft. closer to a public housing unit or a privately owned, publicly subsidized housing unit, a (residential) property’s value decreased by \$46 and \$82, respectively, than if it was not.” (p. 21).

Fifth, party affiliation too can affect low and moderate income housing policy adoption. Lewis (2002) asked local officials of 471 cities in California to assess the likelihood of city incentives for single family residential, multi-family residential, light industrial, heavy industrial, retail, office and mixed use development on the scale of one to seven (one very unlikely and seven very likely) and regressed this score with demographic variables including the percentage of registered Democratic voters. He found that Democratic Party strength was positively related to the multi-family housing incentive scores (Lewis, 2002). On the other hand, in communities with a majority of

Republicans, there is greater opposition to low and moderate-income housing initiatives because they believe more in the notion that the settling of low and moderate-income families in communities will dilute the quality of services in communities or cause a redistribution of property tax revenue.

Sixth, availability of developable land is the other factor that is likely to influence the decision to adopt policies encouraging the development of low and moderate-income housing. To discourage affordable homes, anti-growth communities mostly eliminate developable land by zoning a maximum portion of their land for special purposes (Shlay & Rossi, 1981).

Finally, the provision of a town planner in communities also influences local policy choices. Fleischman (1989) examined the rezoning requests of 2,290 applications in 1984 in the Atlanta Metropolitan Statistical Area (18 counties and 33 municipalities). He reviewed the recommendations of planning staff, number of speakers for and against the application at public hearings, number of letter and petition signatures supporting or opposing the application, and roll call votes of both the planning commission and elected governing body.

Fleischmann (1989) found that the elected officials adopted over two-thirds of the planning staff's recommendations on municipal rezoning applications (Fleischmann, 1989). When public input in public hearings was thin, elected officials relied more on what planning staffs recommended for making a decision. Elected officials working part-time did the same due to lack of time for studies and analysis of the cases. This shows

that what community planners recommend to their elected officials largely turns out to influence local policy.

## **5.2 Massachusetts-Specific Literature**

Massachusetts-specific literature identifies six major characteristics that may have an influence in affordable housing decision making. They are age of population, Chapter 40B's impact, school expenditure growth, property tax rates, overrides, and school enrollment growth. Each of these characteristics is described below. Ninety-six communities of the 351 in Massachusetts have provisions for age-restricted, multi-family and single-family subdivisions (Dain, 2005). These age-restricted policies are adopted to restrict child bearing population and reduce potential school costs. Shrinking of the share of the 25-54 age group population in these communities is very likely because of the housing restrictions on younger families.

In Massachusetts, Chapter 40B requires that at least 10 percent of housing units be affordable in each community but provides no compensation for any cost burden that might be created as a result of the settling of low and moderate-income families in those affordable units. The low and moderate-income families who qualify to live in Chapter 40B projects may generate property taxes below the average cost of services and negatively impact municipal budgets.

Thus, communities often try their best not to have Chapter 40B projects in their jurisdictions to avoid the associated fiscal impact. In Dartmouth, according to Bobrowski (2009), “[w]hen Chapter 40R became an option, the Chapter 40B application was

shelved.” (p. 6). In 2007, 31,000 signatures from local citizens were gathered for a petition to repeal Chapter 40B (Williams, 2007). In 2010, a repeal measure will be on the Massachusetts ballot.

School expenditure growth indicates the financial health of a community. In Massachusetts, Bradbury and colleagues found that school expenditure declined in financially-stressed communities (Bradbury & Case, 1997). Thus, for school-expenditure-declining communities, it is hard to implement housing policies that allow more families with school-going children to live in those communities.

The major source of revenue for most communities in Massachusetts is the property tax. Thus, the communities’ degree of freedom to raise property taxes largely determines how resourceful and generous they are in allowing different kinds of housing projects. In Massachusetts, Proposition 2½, enacted by referendum in 1980, mandates that communities cannot levy more than 2.5 percent of the total full and fair cash value of all taxable real and personal property (Bradbury & Case, 1997). In addition, communities cannot increase their levy limit by more than 2.5 percent per year. By 1990, two-thirds of the 351 communities had reached their levy limit (Bradbury & Case, 1997). In this context, communities are very skeptical about allowing housing development that might adversely impact their fiscal position.

Massachusetts communities can pass an override to raise the tax beyond the limit set by Proposition 2½. Communities passing a large number of overrides in the late 1980s and early 1990s were the ones that were closer to the 2.5 percent tax levy limits, or those

that were financially-stressed (Cutler, Elmendorf, & Zeckhauser, 1999). An increase in the number of overrides indicates financial needs of a community, either for raising the standards of local services or for dealing with fiscal deficits. Thus, for high override communities, housing policies that add fiscal burden are less desirable.

School enrollment declined by three to four percentage points in financially stressed communities in Massachusetts in the 1990s (Bradbury, Case, & Mayer, 1998). Bradbury and her colleagues found that “families with children” were “moving out of communities that have run up against their tax limits and chasing communities that have excess capacity to support schools because they are below their mandated tax limit.” As communities experiencing low school enrollments are mostly resource poor, they are less likely to adopt a policy that may affect their quality of public services. For instance, denser housing policy allows settlement of low income families in communities who may generate property tax revenue below the average cost of services. .

### **5.3 Chapter 40R Specific Studies**

This section presents three Chapter 40R-specific studies. The first part presents the Metropolitan Area Planning Council’s survey on communities’ response to Chapter 40R, which was carried out shortly after the enactment of Chapter 40R. The second part presents the summary of a Master’s Thesis on Chapter 40R submitted to Tufts University in 2007. The third part presents the May 2009 status report on Chapter 40R prepared by the Citizens’ Housing and Planning Association and Metropolitan Area Planning

Council. The fourth part presents a review of Chapter 40R related articles in local news media of Massachusetts. Finally, the last part presents a summary of the section.

#### Initial Survey of Chapter 40R

The Metropolitan Area Planning Council (MAPC) carried out an opinion survey of communities shortly after the enactment of Chapter 40R in June 2004. From September through November 2004, the MAPC provided an overview of Chapter 40R to each of its eight sub-regional councils and asked attendees to answer four questions related to Chapter 40R (Samokar, 2004). Three of them are relevant to this research: Is your community likely to establish a Chapter 40R district? What aspects of the program do you find appealing? What concerns do you have over the legislation? Sixty communities responded to these questions. The respondents were planning staffs, planning board members or selectmen. Communities' responses to these questions were as follows.

Compared to rural ones,<sup>19</sup> urban communities were more interested in considering Chapter 40R projects. Nine communities' respondents said that they needed more information before they would consider Chapter 40R. Some communities said that Chapter 40R might be useful only in selected sites. Chapter 40R's appeal to most of the communities was its monetary incentives, allocation of density standards for development and its applicability to rehabilitation and redevelopment projects.

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<sup>19</sup> The eligible locations for Chapter 40R projects as mentioned in the legislation are the area near a rapid transit station, an area of concentrated development or, a highly suitable location. Thus many rural communities can qualify for Chapter 40R projects under the second and the third criteria, if not first.

Communities not interested in Chapter 40R adoption gave four main reasons for their lack of interest. First, the densities prescribed by Chapter 40R were seen as simply too high for some suburban communities. Second, they feared that the state might not be able to administer the complexity of the Chapter 40R projects. Third, they expressed their lack of confidence in the state's ability to pay future incentive payments. Finally, some communities said they do not have the infrastructure to support higher density.

#### Masters Thesis on Chapter 40R

A Master's Thesis on Chapter 40R completed in 2007 examined communities under various stages of adoption of Chapter 40R as of October 2006 (Glynn, 2007). The communities were of three types: 1) those that applied for Chapter 40R and had been approved, or were ready for approval—Chelsea, Kingston, North Reading, Norwood and Plymouth 2) those that inquired with DHCD about Chapter 40R but had not yet applied—Brockton, Lakeville, Northampton, Pittsfield and Southborough and 3) those that had not applied for Chapter 40R—Medford, Northborough and Westborough. Glynn interviewed town planners and housing experts to understand the reasons for adoption or non-adoption of Chapter 40R.

He identified several reasons for Chapter 40R adoption. First, Chapter 40R can help meet Chapter 40B's affordable housing requirements with the least fiscal impact. Second, the zoning provisions of Chapter 40R allow housing projects in smaller lots of downtown areas. Third, it limits abutters' ability to appeal against Chapter 40R projects, minimizes chances of project delays and provides confidence to developers. Abutters are

required to post a substantial bond in order to initiate an appeal against Chapter 40R. Fourth, it offers ready-made, package zoning that is easier to administer by small offices. More importantly, it provides monetary payments to communities that adopt a Chapter 40R district. The non-adopting communities gave two main reasons for their non-adoption of Chapter 40R. First, Chapter 40R eliminates the communities' power to issue special permits for site plan review and second, there is a lack of confidence in the state's ability to fund Chapter 40R monetary incentives.

#### Recent Status Report on Chapter 40R

In June 2009, the Citizens' Housing and Planning Association (CHAPA) and the Metropolitan Area Planning Council (MAPC) prepared a draft report on Chapter 40R projects in Massachusetts. The report revealed that as of May 2009, 27 communities<sup>20</sup> in Massachusetts had adopted Chapter 40R districts (see Table 5.1). Nearly 60 percent of the Chapter 40R-adopting communities were low-income<sup>21</sup> Half of them were older cities and most of the Chapter 40R districts were created to revitalize their downtown (see APPENDIX- 9).

Seventy percent of Chapter 40R-adopting communities had affordable units at less than 10 percent of their total housing stock, which is below the Chapter 40B threshold. None of the Chapter 40B-complying, high-income communities had adopted

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<sup>20</sup> Communities interested in Chapter 40R should apply to the Massachusetts DHCD in order to receive a letter of eligibility, and as of May 2009, 27 communities had received the final letter of eligibility.

<sup>21</sup> State's median income of \$58,315 in 1999 is considered as a threshold to determine low income communities.

Chapter 40R. In nine communities, a Chapter 40B proposal was turned into a proposed Chapter 40R district and was approved.

**Table 5.1 Status of Chapter 40R in Massachusetts Communities as of May 2009**

SN	Chapter 40R Project Status as of May 2009	Project Characteristics
A.	Total Number of approved Chapter 40R Districts	27
	Number of communities	27
1.	Total Land	1,201 acres
2.	Total Developable Land	495 acres (41%)
3.	Total Zoned Units	9,780
4.	Zoned units in cities (10)	4,598 (47%)
5.	Zoned units in towns (17)	5,180 (53%)
B.	Districts having construction	9
1.	Type of municipality	All old towns
2.	Total units built or under construction	1,127
3.	Rental	1,060 (94%)
4.	Owner-occupied	67 (6%)
5.	3 Bedroom units	5%
6.	2 Bedroom units	49%
7.	1 Bedroom units	46%

Source: Raitt & Verrilli, 2009

In six communities, developers applied for Chapter 40B as a strategy to pressure communities for faster approval of their already-lodged Chapter 40R applications. Those communities were Amesbury, Lakeville, Dartmouth, Sharon, Easton and Kingston. The potential threat of Chapter 40B's fiscal impact was a strong factor that led communities to consider monetary-incentive based Chapter 40R very seriously. In 80 percent of the communities, the Chapter 40R process began only after a developer showed an interest.

The majority of the Chapter 40R-adopting communities had access to public transportation<sup>22</sup>.

Seventy-eight percent of the communities had created their Chapter 40R districts in sites such as industrial areas, mills, state hospitals, factories, commercial properties and sand pits (see Table 5.2 and APPENDIX- 9). These sites do not attract affluent neighbors in their adjoining properties.

Thus, adoption of Chapter 40R was possible in the above-mentioned sites mainly because they did not have affluent neighbors. As the majority of the adopted Chapter 40R sites were located in politically less-sensitive areas, opening up politically sensitive suburban residential sites for denser housing development is the next task ahead.

More than half a dozen communities considered Chapter 40R, but eventually dropped the idea for various reasons (Raitt & Verrilli, 2009). Those communities were Hingham, Newbury, Auburn, Hudson, Holden, West Newbury, Shrewsbury and Randolph. The reasons for dropping the idea were lack of sufficient votes to approve Chapter 40R, concern over school overcrowding, higher density standards and inadequate public sewer facility.

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<sup>22</sup> Chapter 40R districts must be located accessible to rapid transit or commuter rail stations, an area of concentrated development or a highly suitable location. The sites located in 'area of concentrated development' or 'suitable location' may not have a transit station but still qualify for Chapter 40R projects. For example, North Reading is one town for which a Chapter 40R project is not accessible by public transportation.

**Table 5.2 Location Characteristics of Approved Chapter 40R Sites**

	Municipality	Site characteristics
1	Lawrence	Mills site
2	Chelsea	Vacant Mill complex
3	Holyoke	Commercial and institutional
4	Pittsfield	Church and business site
5	Boston	State Hospital
6	Lowell	Downtown property
7	Brockton	Inner downtown sites
8	Northampton	State Hospital
9	Westfield	Vacant land, Business zone
10	Haverhill	Mill, Factory and vacant sites
11	Dartmouth	Amusement Park
12	Amesbury	Industrial and vacant sites
13	Kingston	Sand and Gravel pit
14	Plymouth	Industrial and retail site
15	Grafton	Old Mill site

Source: Raitt & Verrilli, 2009

In summary, Chapter 40R's monetary incentives, and clear cut design standards were the important provisions that motivated communities to adopt Chapter 40R. The legislation's ability to provide a fiscally responsible alternative to meet Chapter 40B's requirements also attracted many communities to the Chapter 40R idea.

Communities that did not adopt Chapter 40R cited the following reasons: lack of adequate information about Chapter 40R, lack of confidence in state's ability to provide funding, insufficient local infrastructure and a concern over density. Interestingly, the majority of the Chapter 40R approved sites were located only in locations least desirable to affluent, single-family homeowners.

## Local News Media Reporting on Chapter 40R

Local media play a key role in highlighting local concerns on municipal policy decisions. They are instrumental in exposing different voices and concerns of local people. The media is also good at documenting the actions and reactions of elected officials and planning staffs on local policy decisions. This section summarizes the media's reporting on Chapter 40R/40B debates, working family housing concerns, communities' financial needs and the roles of various actors, including developers, town planners and elected officials.

Chapter 40R was compared to and contrasted with Chapter 40B in town hall meetings. As cited by Lucas (2007), a resident, Cindy J. from North Andover, said in a town hall meeting, "I don't want Chapter 40B. I want Chapter 40R because I want everything else that goes with it". In Lakeville, a town councilor said "Chapter 40R is Chapter 40B with a check" before the town meeting (Lakeville Town Meeting Video). In the same meeting, local residents asked whether affordable units produced from Chapter 40R would be credited for Chapter 40B's affordable unit requirements.

In North Andover, a developer used a Chapter 40B application as a strategy to pressure the community to speed up an earlier application on Chapter 40R. The developer persuaded the town leaders to apply for Chapter 40R first and after some time also lodged an application for a 300-unit Chapter 40B project. As reported by Lucas (2007), the planning board chairman Richard N., in a town meeting, said, "The choice is between Chapter 40R or the 300-unit Chapter 40B". He contrasted the monetary-incentive based

Chapter 40R with the fiscally-impacting Chapter 40B project and urged the community to go for Chapter 40R.

Some elected officials expressed housing affordability problems in their communities during Chapter 40R related town hall meetings. According to Kelley (2007), Kingston selectmen Paul Gallagher said, “I moved to Kingston 17 years ago because I could afford to but some one in his position today would not be able to do that.” Thus, he argues that Chapter 40R is required to make homes more affordable.

The importance of Chapter 40R monetary incentives were often emphasized in town hall meetings. According to Kelley (2007), Judy Barrett, an independent Chapter 40R-fiscal-impact analyst in Kingston said, “Kingston is facing a \$1.2 million deficit, if overrides are not passed the town has to cut services but if Chapter 40R is adopted, it has the potential to bring a \$600,000 incentive payment and \$3,000 for each unit of construction.”

Developers’ skills to secure local cooperation were pointed out in the media. In Norwood, a developer agreed to preserve an existing church and create a remembrance garden in the proposed Chapter 40R site in order to secure support for project approval (Adams, 2007). In Kingston, a developer provided resources for Chapter 40R technical studies and off-site route development. He worked actively at the local level to convince people and provided transportation services to voters so that a sufficient number of voters would show up for town approval. As a result, 11,305 voters showed up and passed Chapter 40R by 925 votes to 341 votes (73 percent) on April 11, 2007 (The Kingston

Observer, 2007). The media has also indicated town planners' and elected officials' roles in Chapter 40R adoption. Adams (2007) writes:

“A developer John Iredale approached Norwood for denser housing development, the prevailing zoning did not accommodate his demand and eventually the town planner floated the idea of Chapter 40R as a way out to develop the land. The developer agreed to carryout a Chapter 40R project and developed 15 condos on the site. (p. 1).

Lucas (2007) from the Eagle-Tribune of North Andover, reported that the Chairman of the Board of Selectmen, Tom Liccirdello, took a strong stand to adopt Chapter 40R at a time when the finance committee wanted to delay by asking for more time for additional studies. According to him, in a town meeting, Liccirdello said, “Selectmen do think it is ready ... the time has come. Tonight is the night”. Because of the firm stand and deliberation of the chairman, the meeting voted against more studies and passed Chapter 40R that night.

#### **5.4 Summary of Literature**

The general literature shows that income, race, homeownership rate, housing value, party affiliation, availability of developable land and provision of town planner play a role in the adoption of low and moderate-income housing policies. The Massachusetts-specific literature shows that population age group, Chapter 40B, school expenditure growth, property tax rates, overrides and school enrollment growth may also play a role in the adoption of housing policy.

The Chapter 40R specific studies revealed that Chapter 40R's monetary incentives, and clear cut design standards motivated communities to adopt Chapter 40R. The legislation's ability to provide a fiscally responsible alternative to meet Chapter 40B's requirements also attracted many communities to the Chapter 40R idea.

The major reasons for non-adoption of Chapter 40R were lack of information, lack of confidence on state's ability to provide funding, insufficient local infrastructure and a concern over density. The majority of the Chapter 40R projects are located in non-residential sites that are not attractive to affluent single-family homeowners.

Our review of local news media stories shows that communities have concerns over the fiscal impact of housing projects and are weighing the advantages of Chapter 40R projects against Chapter 40B in town hall meetings. Elected officials and planning staffs have taken firm actions for adopting Chapter 40R. Developers have also played an instrumental role in garnering local support for Chapter 40R town approvals.

## **CHAPTER 6**

### **HYPOTHESES**

The literature reveals a number of factors that might affect a community's propensity to support or oppose the development of low and moderate-income housing. These are related to household income, home value, race, existing affordable housing stock, homeownership, school expenditure growth, property tax rates, overrides, population of age 25-54, school enrollment growth, the party affiliation of registered voters, the availability of developable land, and whether a municipality has a professional town planner. Based on these reasons, thirteen hypotheses were framed and each of them is separately explained below. Multi-collinearity issues between independent variables that measure each hypothesis are addressed in Chapter 8.

H1: Communities having more affluent residents are less likely to adopt Chapter 40R/S

Higher income communities will tend to favor anti-growth policies and resist affordable housing projects (Nguyen (2007). Residents in these communities believe that moderate and low income families are often associated with crime (Koebel, Lang, & Karen, 2004). They also believe that settling of low income families in their jurisdictions will generate property tax revenue below the average municipal costs and dilute public services. Thus it is expected that affluent communities are less likely to adopt Chapter 40R.

**Table 6.1 List of Research Hypothesis**

	<b>Social Class Related Hypotheses</b>
H1:	Communities having more affluent residents are less likely to adopt Chapter 40R
H5:	Communities having high home values are less likely to adopt Chapter 40R
H2:	Communities having more non-Hispanic white population are less likely to adopt Chapter 40R
H6:	Communities having higher number of affordable housing units are less likely to adopt Chapter 40R
H4:	Communities having higher homeownership rates are less likely to adopt Chapter 40R
	<b>Public Finance Related Hypotheses</b>
H7:	Communities experiencing school expenditure growth are likely to adopt Chapter 40R
H8:	Communities having high property tax rates are likely to adopt Chapter 40R
H9:	Communities experiencing more overrides are likely to adopt Chapter 40R
	<b>Other Hypotheses</b>
H3:	Communities having more child bearing population are likely to adopt Chapter 40R
H10:	Communities experiencing high school enrollment growth are likely to adopt Chapter 40R
H11:	Communities having more liberal voters are likely to adopt Chapter 40R
H12:	Communities having more developable land are likely to adopt Chapter 40R
H13:	Communities equipped with planning expertise are more likely to adopt Chapter 40R

H2: Communities having higher home-values are less likely to adopt Chapter 40R

The majority of high home-value communities tend to adopt anti-growth policies (Katz & Rosen, 1987). They mostly oppose housing development that allows settlement of moderate and low-income families. Thus, communities having higher home-values are less likely to adopt Chapter 40R.

H3: Communities having a larger proportion of non-Hispanic white population are less likely to adopt Chapters 40R and S

Pendall (2000) found that white-dominated suburban communities were the ones having more anti-growth policies in the US. White suburban communities believe that moderate and low income families are often associated with crime (Ellen, 2000). Thus, it

is expected that communities having higher percentage of white population are less likely to adopt Chapter 40R.

H4: Communities having affordable housing units closer to Chapter 40B's threshold (10 percent of the total housing stock) are less likely to adopt Chapter 40R

Chapter 40B empowers developers to apply for housing projects that do not have at least 10 percent of their housing stock as affordable. Thus, communities having affordable housing units less than the 10 percent are subject to Chapter 40B requirements. Communities subject to Chapter 40B like to avoid Chapter 40B housing projects because of the potential fiscal impact. Communities having affordable housing-units way below the 10 percent threshold are likely to have greater fiscal impacts compared to those closer to the threshold because they are required to produce more affordable housing-units and accommodate greater number of low and moderate-income families in communities. However, if communities act fast and adopt Chapter 40R before any Chapter 40B developer shows up, they can take advantage of Chapter 40R and S monetary incentives and escape the fiscal impact of Chapter 40B. Side by side, they get credit from the affordable units produced by Chapter 40R projects. Thus, communities having affordable housing-units way below the Chapter 40B threshold are likely to adopt Chapter 40R.

H5: Communities having higher homeownership rates are less likely to adopt Chapter 40R and 40S

While homeowners can insure their homes against fire and theft, they have no instrument to insure against a decline in home value caused by any changes or

development in adjoining properties (Fischel, 2001). Thus, homeowners are often very critical of any local decisions that might conceivably depreciate their home value. These homeowners and potential homebuyers may believe that development of affordable homes will bring minorities, who are often associated with crime, into communities (Mills & Mieszkowski, 1993). Because of this perception, they believe that homebuyers would not bid higher prices for homes abutting affordable housing projects and therefore home prices will generally decline (Lee, Dennis, & Susan, 1999). Thus, homeowner-dominated communities are less likely to adopt Chapter 40R.

H6: Communities experiencing an increase in school expenditure growth are likely to adopt Chapter 40R

Growth in school expenditure is an indication of communities' financial strength as compared to those communities that have no growth. Affluent parents try to move to those communities where school expenditure growth is higher. These communities are less worried about student growth because of their better financial position. Communities having higher school expenditure growth are likely to adopt Chapter 40R because they are fiscally less restrained and can receive Chapter 40R and S monetary incentives.

H7: Communities having high property tax rates are likely to adopt Chapter 40R

Communities that have run up against their property tax limits (reached their levy ceiling that is \$25 per thousand, the maximum tax rate a community can levy) are the ones having more financial strain because they have no room to increase their tax unless they pass an override (Bradbury & Case, 1997). This implies that the higher the tax rate

the more a community is financially constrained and therefore more likely to take advantage of Chapter 40R and S monetary incentives.

H8: Communities attempting a greater number of overrides are likely to adopt Chapter 40R

Communities passing a large number of overrides were the ones closer to 2.5 percent tax levy limits in Massachusetts. In other words, high override communities are financially stressed. As high override communities are more financially stressed, they are more likely to adopt Chapter 40R to take advantage of the associated monetary incentives.

H9: Communities having a high number of child-bearing households are more likely to adopt Chapter 40R

In Massachusetts, 96 communities have provisions for age-restricted multi-family and single-family subdivisions (Dain, 2005). Conversely, communities with a large share of the 25-54 age-group population are likely to be less exclusionary and have more school-going children. As these communities are likely to have more school going children and to be burdened by school costs, they are likely to take advantage of Chapter 40R monetary incentive payments and Chapter 40S's school cost insurance.

H10: Communities experiencing high school enrollment growth are likely to adopt Chapter 40R

Financially well-off parents move to communities that have more revenues to run schools. As a result, financially better-off communities experience more school enrollments. Communities experiencing school enrollment growth are likely to adopt Chapter 40R because they are financially better-off plus they can take advantage of Chapter 40R monetary incentives and school cost insurance funds.

H11: Communities having more Democratic voters are likely to adopt Chapter 40R and S

Democrats generally embrace liberal policy and favor low and middle-income housing policies (Marcuse, 2001). They are also likely to have positive attitude toward low and moderate-income housing development in communities (Lewis, 2002). On the contrary, most Republicans are conservative in ideology and oppose low and moderate-income housing initiatives and redistributive policies (Marcuse, 2001). Thus, communities having more registered Democrats are more likely to adopt Chapter 40R.

H12: Communities having more developable land are likely to adopt Chapter 40R

In Greater Boston, Winthrop has just three acres of developable land and Cambridge has 4,561 acres (Massachusetts Executive Office of Environment Affairs, 2002). The lack of availability of developable land may be a real constraint for new housing development projects, or it may be an excuse for not allowing low and moderate-income housing projects. Anti-growth communities mostly eliminate developable land by zoning a large part of it for special purposes (Shlay & Rossi, 1981). Hence, it is expected that communities having more developable land are likely to adopt Chapter 40R.

H13: Communities equipped with planning expertise are more likely to adopt Chapter 40R

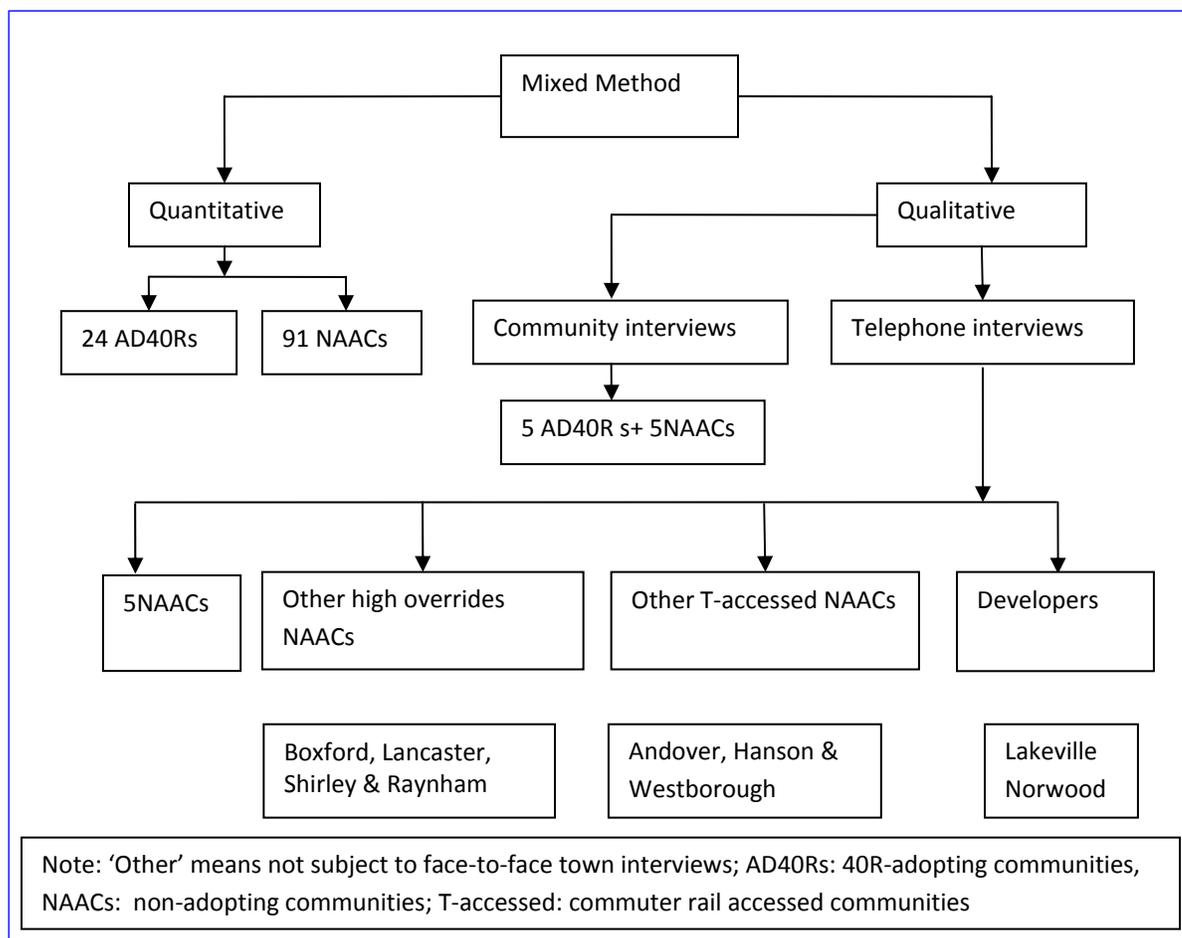
Many Massachusetts communities do not have town planner professionals. The Chapter 40R process is complex and generates various social and environmental concerns. Chapter 40R requires professionals who can understand the law, analyze the site context, examine density, prepare bylaws and coordinate work with developers. In the absence of such professionals, it is hard for communities to consider Chapter 40R. Fleischman (1989) found that the majority of zoning decisions in communities were based on what planning staffs recommended. One of the main objectives of Chapter 40R is addressing the housing needs of disadvantaged groups and working families. Assuming responsibility to plan for the needs of disadvantaged groups is one of the prime duties of town planners, according to the American Institute of City Planners Code of Ethics and Professional Conduct (1991). Town planners, by profession, are trained to design housing policies and be positive towards housing needs of disadvantaged groups. Thus, communities having a professional planner position are more likely to adopt Chapter 40R.

## CHAPTER 7

### DISSERTATION MODEL

The dissertation followed a mixed method, quantitative as well as qualitative, to investigate the research question, as shown in the Figure 7.1 (Creswell, 1994).

**Figure 7.1 Research Strategy**



Massachusetts communities are the units of analysis of this research. Quantitative analysis was carried out to understand the relationship between community characteristics and the probability of adopting Chapter 40R. Qualitative analysis was done to better understand the reasons why particular communities adopted or did not adopt Chapter 40R. The first section of this Chapter describes the quantitative analysis and the second section describes the qualitative.

## **7.1 Quantitative Analysis**

The quantitative analysis is described under three main subheadings. They are selection of communities for study, operational definition of variables and hypothesis testing.

### **Selection of Communities**

Massachusetts has a total of 351 communities. Twenty-four Chapter 40R-adopting-communities and all the adjoining, non-adopting counterparts were selected<sup>23</sup> for the purpose of this study. Altogether, there were 115 communities under study: 24 Chapter 40R adopting and 91 adjoining-non-adopting (see Appendix-3). The list of Chapter 40R-adopting communities was acquired from the Commonwealth Housing Task Force Quarterly Report and DHCD web site, and the list of 91 adjoining, non-adopting communities were identified from a map of Massachusetts.

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<sup>23</sup> Communities that had adopted Chapter 40R as of October 2008 are included in this study.

## Operational Definition of Variables

To answer the research question, 14 hypotheses were framed, as discussed in detail in Chapter 6. The dependent variable of this research is Chapter 40R adoption (Yes=1 and No= 0). There are 14 independent variables which represent various community characteristics. Each of these variables corresponds to one of the 14 hypotheses. These variables were deployed to test each of the corresponding hypotheses.

Variations in the value of the independent variable might have an impact on the dependent variable. The direction and degree of variations of the value tells whether or not the relationship between the independent and dependent variable is as expected by the hypothesis. The operational definition defines the value of variables. The paragraphs that follow present the operational definitions of each of the 14 independent variables.

MHHINCOME is the median household income of the community. Likewise, PERCENTWHITE is the percentage of the total population that is non-Hispanic white. POP25\_54 is the proportion of the total population that is in the child-bearing age group of 25-54 (see Table 7.1).

OWNEROCH is the percentage of owner-occupied housing units and RMHPRICE is the real median housing value in each community. Data for all the above mentioned variables were drawn from the Boston Renaissance Resource Kit (2000). SHIUNITS is the percent of affordable housing units in each community. The 2007 subsidized housing inventory data from the Massachusetts Department of Housing and

Community Development is used for this purpose. This will provide the status of compliance of Chapter 40B's 10 percent threshold of affordable units in communities.

**Table 7.1 Operational Definition of Variables**

	<b>Hypothesis</b>	<b>Variables</b>	<b>Measurement</b>	<b>Data Source</b>
		ADOPT Chapter 40R/S <sup>24</sup>	Yes=1, No=0	
1	Resident's affluence (-)	MHHINCOME	Median household income, per \$10,000	BRRK, 2000
2	N-H White (-)	PERCENTWHITE	% White Non-Hispanic	BRRK, 2000
3	Child bearing population (+)	POP25_54	% Population 25-54 age group	BRRK, 2000
4	Homeownership (-)	OWNEROCH	% Owner-occupied housing units	BRRK, 2000
5	Home value (-)	RMHPRICE	Real median housing value, per \$100,000	BRRK, 2000
6	Affordable housing (-)	SHIUNITS	Subsidized housing units in percentage	MDHCD, 2007
7	School Expenditure (+)	SCHOOLEXPGR	% change in school expenditure in Dollars 2000-2007	MDOR, 2007
8	Property tax (+)	PROPTAXRATE	Dollars per thousand	MDOR, 2007
9	Town's financial stress (+)	OVERRIDES	No of overrides attempted	MDOR, 1990-99
10	Student's growth (+)	SCHOOLENRGR	Average enrollment growth 1993-99 in %	MDOE
11	Democrats (+)	DEMOCRAT	% registered	MDHCD, 1994
12	Republicans (-)	REBPUBLIC	% registered	MDHCD, 1994
13	Developable land (+)	DEVLAND	Land in acres per 1000	MEOE, 2002
14	Planning expertise (+)	TOWNPLANNER	Provision of town planner (yes=1 otherwise 0)	Municipal web site

SCHOOLEXPGR is the percentage change in school expenditure in dollars between 2000 and 2007. PROPTAXRATE is the 2007 property tax rate in dollars per thousand. OVERRIDES, is the number of override attempts in each community between 1990 and 1999. The data is drawn from Massachusetts Department of Revenue.

<sup>24</sup> ADOPT Chapter 40R/S is the dependent variable.

SCHOOLENRGR is the percentage change in average student enrollment between 1993 and 1999 and the data is drawn from the Massachusetts Department of Education.

DEMOCRAT is the percentage of registered democratic voters in each community. REPUBLIC<sup>25</sup> is the percentage of registered Republican voters in each community. The 1994 registered voters' data were drawn from the Massachusetts Department of Housing and Community Development (MDHCD)

DEVLAND is a measure of the additional developable land in acres in communities. Data is drawn from the Massachusetts Executive Office of Environment (MEOE, 2002). Finally, planning expertise of each community is measured by a variable TOWNPLANNER (Yes = 1 and No = 0). Municipal website data were used to ascertain which communities have a professional planner.

### Methods of Analysis

A number of steps were taken to further analyze the data and test the hypotheses posed in the last chapter. First, the data set of one dependent variable and 14 independent variables for 115 communities was entered into the SPSS software package. Second, descriptive statistics of the communities were reviewed. Third, scatter plots of all the independent variables were analyzed. Finally, a logistic regression model was prepared to test the hypotheses as described below in detail. A logistic regression model was chosen

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<sup>25</sup> Pearson correlation coefficient between DEMOCRAT and republic is -0.528, below the high correlation coefficient range of 0.7 to 1.0, and DEMOCRAT and REPUBLIC are not used in the same regression equation.

because the dependent variable is binary (Chapter 40R-adoption = 1 and Chapter 40R-non-adoption = 0). The equation for the regression model is as follows:

Let Y be the binary variable having two values: AD40R = 1 and Non-AD40R = 0; P be the probability of Y being 1 or P(Y=1), and MHHINCOME...TOWNPLANNER be a set of 14 independent variables. The logistic regression of Y on MHHINCOME...TOWNPLANNER, estimates parameter values of B0, B1...B14 through the maximum likelihood method for the following equation.

LOGIT (P) =

B0+B1\*MHHINCOME+B2\*PERCENTWHITE+.....+B14\*TOWNPLANNER

P(Y=1) =

EXP (B1\*MHHINCOME+B2\*PERCENTWHITE+.....+B14\*TOWNPLANNER)

To test whether or not the relationship between the independent and dependent variables is as expected by the hypotheses, independent variables were logistically regressed against the dependent variables. The regression results display the sign of the coefficients and the level of significance of each of the 14 variables. The sign (+ or -) of the coefficients (B1...B14) of the independent variables determines whether the results are as expected by the hypotheses or not. The level of significance of each of the variables tells how strongly the result supports or rejects the hypothesis. In this analysis, we seek a significance level of 0.05 or less to claim that a hypothesis is likely confirmed.

## 7.2 Qualitative Analysis

Community town planners were interviewed for the purpose of qualitative analysis. Town Administrators were interviewed in communities that did not have a town planner. The purpose of the interview was to understand communities' reasons for the adoption or non-adoption of Chapter 40R. Face-to-face conversation and telephone calls were the two forms of interviews deployed for the purpose of this research.

### Face-to-Face Interviews

First, for the face-to-face interviews, six out of the 24 Chapter 40R-adopting-communities<sup>26</sup> were randomly selected. They were Dartmouth, Kingston, Lakeville, North Andover, North Reading and Norwood. However, because of resource limitations, the farthest community, Dartmouth was dropped and only five communities, Kingston, Lakeville, North Andover, North Reading and Norwood were selected for interview.

Next, for each of the five selected Chapter 40R-adopting communities, one adjoining, non-adopting community that was relatively close in population size was also picked for the purpose of interview (see Appendix-1). This made a total of 10 interviewee communities: five Chapter 40R-adopting and five non-adopting (see Table 7.2). Interviews were carried out at the municipal offices during the period between December 9, 2008 and January 13, 2009.

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<sup>26</sup> The total number of Chapter 40R-adopting communities was 24 as of October 2008

**Table: 7.2 Communities Selected for Face-to-Face Interviews**

SN	Chapter 40R-adopting-communities	Chapter 40R-non-adopting-communities
1.	Kingston	Carver
2.	Lakeville	Freetown
3.	North Andover	Methuen
4.	North Reading	Middleton
5.	Norwood	Canton

For Chapter 40R-adopting communities, the first question asked was, “What motivated you to consider Chapter 40R?” For Chapter 40R-non-adopting ones, the first question asked was, “Is your community considering Chapter 40R adoption?” Then, “If not, why?” In addition, the Chapter 40R-non-adopting communities were asked whether each of the 14 independent variables (discussed in section 7.1) was a major factor for non-adoption of Chapter 40R (see Appendix-2). The reasons and stories were carefully listened to and recorded. Relevant follow up questions were posed during the interview. In addition, questions related to working family housing demand, local tax base and adequacy of municipal services were also posed in an attempt to understand the overall housing context of the interviewed community. Chapter 40R project sites of Lakeville and North Reading were observed at the time of the community visits for the interviews.

#### Telephone Interviews

Follow-up telephone calls were made to the interviewed town planners and town administrators for additional information. The majority of the Chapter 40R-non-adopting communities that were interviewed face-to-face did not have access to public

transportation<sup>27</sup>. Thus, to see how public-transportation-accessed Chapter 40R-non-adopting-communities were responding to Chapter 40R, three additional communities accessed by commuter rail were selected for telephone interviews (Table 7.5). They were Andover on the Haverhill line, Westborough on the Worcester line and Hanson on the Kingston line.

**Table 7.3 T-accessed Chapter 40R Non-adopting-adjoining Communities (NAACs)**

SN	T-accessed NAACs	Population	MBTA commuter line	Adjoining Non-AD40R
1.	Andover	31,247	North Station-Haverhill	North Andover (27,202) <sup>28</sup>
2.	Westborough	17,997	South Station-Worcester	Grafton (14,894)
3.	Hanson	9,495	South Station-Kingston	Kingston (11,780)

First, the populations of Chapter 40R-adopting and non-adopting communities accessed by commuter lines were reviewed and then, the Chapter 40R-non-adopting communities similar in population size and nearer to the adopting communities were selected for telephone interviews. Town planners were the interviewees in these communities.

Besides town planners, a couple of developers were telephoned to understand their perspective on Chapter 40R. Chapter 40B developers from Middleton and Canton were telephoned in an attempt to understand how they view Chapter 40R as a policy, but they could not be contacted. The Chapter 40R developer from Kingston refused to

<sup>27</sup> Communities without access to public transportation can also adopt Chapter 40R if their location qualifies as 'area of concentrated development' or 'highly suitable location.'

<sup>28</sup> The figure in parenthesis is population.

communicate. A developer from the City of Methuen (who had applied for Chapter 40R but failed to receive approval) could not be contacted. The developer from North Reading was not accessible.

Only Chapter 40R-developers from Lakeville and Norwood were available for interview. The questions posed to them were, “What led you to consider Chapter 40R?” and “How do you view the difference between Chapter 40R and Chapter 40B projects?”

To enrich the interview information, Chapter 40R related local news from North Andover, Kingston and Norwood was reviewed (see Section 5.3). A video tape of Lakeville community meeting related to Chapter 40R deliberation and voting was observed.

The limitations of the study are as follows. Not all 24 Chapter 40R-adopting communities were interviewed. This interview covered only town planners and town administrators and not other staffs or elected officials and community residents. For this reason, interview information may have some planner or administrator biases.

This research has a number of strengths. It has used various methods to increase the validity of community interview. Community visits and face-to-face interviews with town planners and town administrators provided first hand information on the issues. Field observation of some of the Chapter 40R projects provided a visual image of the subject.

Telephone calls for follow-up information added further clarification on what matters in the adoption of Chapter 40R. Telephone interviews of commuter-rail accessed Chapter 40R-non-adopting communities provided new information on communities' response to Chapter 40R. Likewise, interviews with developers added more knowledge on how they view Chapter 40R as a policy. Finally, review of Chapter 40R related articles in local news media provided additional resources to cross verify research information.

## CHAPTER 8

### QUANTITATIVE RESULTS

Quantitative results in this chapter are based on descriptive data, simple logistic regression, and multiple-logistic-regression. According to the descriptive statistics as presented in Table 8.1, the communities in this study are quite diverse. Median Household Income across all 115 communities was just under \$63,000 with a range of \$28,496 to \$146,585. On average, nearly 90 percent of the population in these communities was non-Hispanic white ranging from a low of 34 percent to a high of 99.6 percent.

The 25-54 age groups represented 46 percent of the population in these communities on average, with a range of 38 to 54 percent. On average, the share of owner-occupied households was 73 percent with one municipality as low as 29 percent and several at 90 percent or more. The average real median housing value in these communities was \$216,955 with a range from just \$101,501 to over \$625,000. The percentage of subsidized housing units in communities was nearly 7 percent on average, with a range from virtually none to 21 percent. The average school expenditure growth in communities between 2000 and 2007 was nearly 39 percent with a range of 8 to 95 percent.

**Table 8.1 Descriptive Statistics**

Variables	N	Mean	Std. Deviation	Range	Minimum	Maximum
Dependent						
AD40R	115	0.21	0.41	1	0	1
Independent						
MHHINCOME (in \$10,000)	115	6.2883	1.9972	11.8089	2.8496	14.6585
PERCENTWHITE	115	89.7	11.7	65.6	34	99.6
POP25_54 (Percent)	115	45.8	3.1	16.5	37.9	54.4
OWNEROCH (Percent)	115	73.5	16.7	68.2	29	97.2
RMHVALUE (\$100,000)	115	2.16955	0.956	5.25179	1.01501	6.2668
SHIUNITS (Percent)	115	6.53	0.04	21.3	0	21.3
SCHOOLEXPR (Percent)	115	38.81	17.79	86.6	8.4	95
PROPTAXRATE (/ \$1,000)	115	10.35	1.973	12.2	3.36	15.56
OVERRIDE (Number)	115	5.08	7.87	52	0	52
SCHOOLENRGR (Percent)	115	14.40	14.16	126.84	-43.64	83.20
DEMOCRAT (Percent)	115	33.80	13.64	68	3.7	71.7
REPUB (Percent)	115	14.61	5.28	28.5	5.6	34.1
DEVLAND (in 1,000 acres)	114	5.129	5.126	29.04	0.003	29.043
TOWNPLANNER (Yes = 1)	115	0.521	0.501	1	0	1
Valid N (list wise)	114					

The average property tax rate across these 115 communities was \$10 per thousand with a range of \$3 to \$16 per thousand. On average, the number of overrides attempts made in communities between 1990 and 1999 was 5 with a range of 0 attempts to an extraordinary 52. The percent change in average school enrollment between 1993 and 1999 in communities was about 14 percent on average, but with a remarkable range from minus 43 percent to 83 percent. Democratic registered voters were nearly 34 percent on average, with a range of 4 to 72 percent. The figure for registered Republican voters was 15 percent with a range of 6 to 34 percent. On average, the developable land in

communities was 5,000 acres with a range of 3 acres to 29,000 acres. Nearly half of municipalities in the sample had a town planner.

A closer look at the data on the provision of town planners in communities revealed that 83 percent of Chapter 40R-adopting communities had a provision for a town planner in their administration (see Table 8.2). On the other hand, more than half of the Chapter 40R-non-adopting communities had no town planner. Seventy-five percent of Chapter 40R-adopting and 81 percent of Chapter 40R-non-adopting communities had affordable units below the Chapter 40B's threshold of ten percent. A scatter plot analysis showed that none of the communities with a median household income greater than \$100,000, a record of override attempts greater than 10 and registered Republican voters over 23 percent were among the adopters of Chapter 40R (see APPENDIX- 4).

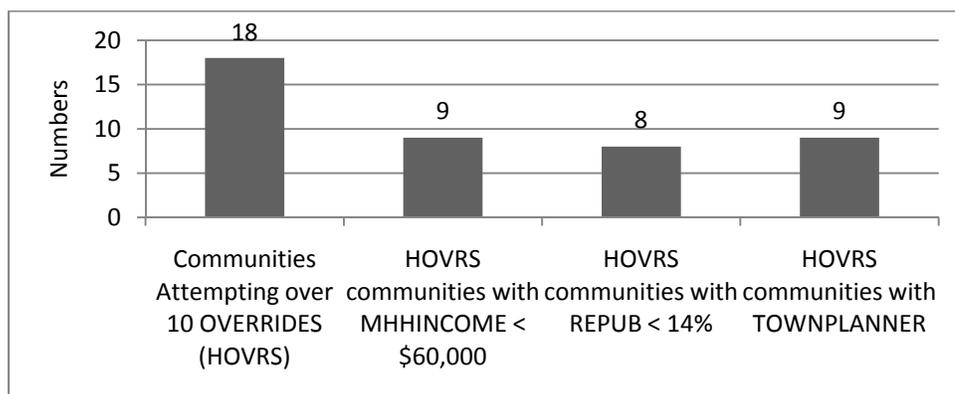
**Table 8.2 Characteristics of Communities under Study**

	Chapter 40R-Adopting communities	Chapter 40R-Non-adopting communities
MHHINCOME >\$100,000	0 (0%)	7 (100%)
MMHINCOME <\$100,000	24 (22%)	84 (77.7%)
OVERRIDES >10	0(0%)	18 (100%)
OVERRIDES <10	24 (24.7%)	73 (75.3)
REPUB >23	0(0%)	8 (100%)
REPUB <23	24 (22.4)	83 (77.6%)
TOWNPLANNER	20/24 (83.3%)	40/91 (43.9%)
SHIUNITS ≥10%	6 /24(25%)	17/91 (19%)

Among the 18 high-override attempting communities, half of them were low income, half of them had a town planner and 44 percent of them had fewer Republican voters (see Figure 8.1). The results of the high-override attempting communities raised a

question as to why financially stressed communities such as these are not taking advantage of Chapter 40R's monetary incentives. To understand why such a diverse high override-attempting communities are not taking advantage of Chapter 40R, telephone interviews of these communities were conducted, and the information is presented in Chapter 9.

**Figure 8.1 Characteristics of High Overrides-Communities (HOVRS)**



### 8.1 Simple Logistic Regression

The simple logistic regression result demonstrated that five variables, TOWNPLANNER, PERCENTWHITE, OWNEROCH, OVERRIDES and SHIUNITS, had a statistically significant relationship (p-value ranging from .002 to .094) with the dependent variable (see Table 8.3). The coefficients of the three variables, TOWNPLANNER, PERCENTWHITE and OWNEROCH, had the expected sign.

**Table 8.3 Simple Logistic-Regression Results**

SN	Independent variables	Expected	Simple logistic regression		
		Sign	B (sig.)	S. E.	Exp (B)
1	TOWNPLANNER	+	+1.852 (.002)	.587	6.375
2	PERCENTWHITE	-	-.038 (.032)	.017	.963
3	OWNEROGH	-	-.024 (.073)	.013	.977
4	OVERRIDES	+	-.095 (.082)	.055	.909
5	SHIUNITS	-	+.089 (.094)	.053	1.093
6	MHHINCOME	-	-.167 (.212)	.134	.846
7	DEVLAND	+	+.048 (.251)	.042	1.049
8	DEMOCRAT	+	+.018 (.285)	.017	1.018
9	POP25_54	+	-.080 (.289)	.075	.923
10	RMHVALUE	-	-.179 (.502)	.267	.836
11	REPUB	-	-.010 (.825)	.044	.990
12	SCHOOLEXPGR	+	-.003 (.832)	.013	.997
13	SCHOOLENRLGR	+	+.002 (.878)	.016	1.002
14	PROPTAXRATE	+	-.003 (.979)	.117	.997

On the contrary, the remaining two variables, OVERRIDES and SHIUNITS, did not show the expected signs. In the first case, it was expected that communities attempting a larger number of overrides would be more likely to adopt Chapter 40R. In the second case, it was expected that communities having a higher number of affordable housing units would be less likely to adopt Chapter 40R. However, in both the cases, the result showed the opposite. Some of the explanations for this are presented in the concluding paragraph below.

The nine variables that were not statistically significant in this logistic regression were MHHINCOME, DEVLAND, DEMOCRAT, POP25\_54, RMHVALUE, REPUB, SCHOOLEXPGR, SCHOOLENRGR and PROPTAXRATE. Out of these, six variables, MHHINCOME, DEVLAND, DEMOCRAT, RMHVALUE, REPUB and

SCHOOLENRGR, had the expected sign, but were below significance at the 10 percent confidence level.

The simple logistic regression results showed that communities with a town planner are extremely likely to adopt Chapter 40R. Communities having a higher percentage of non-Hispanic white population, a higher number of owner-occupied housing units and experiencing a larger number of override attempts are less likely to adopt Chapter 40R.

It may be the case that the high overrides-attempting-communities are not prepared to take Chapter 40R incentive payments in exchange for a policy that allows low income housing in communities. Or, they are not interested in Chapter 40R's modest incentive payments because they are looking for a larger amount of money to raise the standard of services. Their override attempts may not be motivated by fiscal desperation but by a desire for higher standards for services, and therefore has little impact on their desire to adopt Chapter 40R. The results also showed that communities with a larger number of affordable housing units are more likely to adopt Chapter 40R (even though the level of significance was at just .094). It may be the case that communities closer to Chapter 40B's ten percent threshold of affordable units might want to close the gap and get exempted from Chapter 40B threat.

## 8.2 Multiple-Logistic-Regression

A multiple logistic-regression model was run by using the five significant variables from the simple logistic regression. The five variables were TOWNPLANNER, PERCENTWHITE, OWNEROCH, OVERRIDES and SHIUNITS.

**Table 8.4 Multiple Regression Results**

SN	Independent variables	1	2	3	4
1	TOWNPLANNER	+1.745 <sup>29</sup> 0.594 (.003)	+1.813 .608 (.003)	+1.976 .628 (.002)	+1.975 .628 (.002)
2	PERCENTWHITE	-.030 .018 (.103)	-.042 .029 (.142)	-.062 .032 (.052)	-.063 .035 (.074)
3	OWNEROCH		+.012 .022 (.310)	+.035 .025 (.164)	+.035 .027 (.193)
4	OVERRIDES			-.117 .064 (.070)	-.118 .065 (.071)
5	SHIUNITS				-.009 .096 (.924)

By adding one variable at a time to TOWNPLANNER (the one with the highest level of significance), the multiple-logistic-regression model was built and run (see Table 8.4). The result indicated that only TOWNPLANNER, PERCENTWHITE and OVERRIDES consistently demonstrated a high level of significance in most of the equations. With this group of variables, turn-by-turn, the remaining 11 variables were

<sup>29</sup> In each cell, the first figure represents the coefficient of variable (B), the second represents the standard Error (S.E.) and the third level of significance

added and a logistic regression was run to identify the best fit model for predicting the dependent variable (adoption or non-adoption of Chapter 40R). Table 8.5 presents some of the best-fit models.

**Table 8.5 Best Fit Model**

SN	Independent variables	1	2	3	4	5
1	TOWNPLANNER	+1.852 .587 (.002)	+1.745 0.594 (.003)	+1.751 .599 (.003)	+1.839 .611 .003	+1.943 .621 (.002)
2	PERCENTWHITE		-.030 .018 (.103)	-.027 .019 (.152)	-.034 .020 .094	-.057 .026 (.032)
4	OVERRIDES			-.084 .055 (.125)	-.096 .056 (.087)	-.124 .065 (.057)
5	SCHOOLEXPR				.019 .016 (.228)	
6	DEMOCRAT					-.045 .027 (.098)
	-2LOG LIKELIHOOD	105.052	102.47	99.19	97.75	96.2
	NAGELKERKE R SQ.	.164	.195	.233	.250	.267

From the multiple logistic regression results, the model (5) with TOWNPLANNER, PERCENTWHITE, OVERRIDES and DEMOCRAT turned out to be the best fit because in this case, all the variables showed the highest level of significance, the lowest value for the likelihood ratio, and the highest R-square (see Table 8.5). This outcome is also consistent with the correlation matrix because it too excluded the highly collinear independent variables, MHHINCOME, RMHVALUE, REPUB, OWNEROCH and SHIUNITS, as indicated by the correlation matrix (see APPENDIX- 5). The results

of the above mentioned best fit model are used to predict the outcome of the dependent variable.

A number of steps were taken to address the issues of multi-collinearity in the regression model. First, only those independent variables that showed strong association with the dependent variable in the simple regression model were selected and used for the purpose of multiple-regression (see Table 8.3 and 8.4). Second, the multiple-regression was done by adding one independent variable at a time, in the order of the highly significant variable first. Third, from each of the multiple regression model results, variables that showed persistently strong association with the dependent variable were shortlisted (see Table 8.4). Finally, with the group of these short-listed independent variables, all the remaining variables were added turn by turn and the regression results of each turn, was recorded (see APPENDIX- 6, 7 and 8). From the results of each of these models, the best fit model (that shows relatively higher level of significance of all the independent variables in the model, lowest value for the likelihood ratio, and the highest R-square) is selected for the purpose of interpretation (see Table 8.5). The paragraphs that follow interpret the best-fit model, as identified above, for predicting the research outcome.

Among the four statistically significant variables, the first two variables, TOWNPLANNER and PERCENTWHITE, show the expected sign and the remaining variables, OVERRIDES and DEMOCRAT, show otherwise (see Table 8.6). The sign of the coefficient and the higher level of significance of the first variable,

TOWNPLANNER, confirm the hypothesis that communities having a provision for a town planner are extremely likely to adopt Chapter 40R. A community with a town planner is 32 percent<sup>30</sup> more likely to adopt Chapter 40R than the communities without a town planner, other things being equal.

The coefficient of the second variable, PERCENTWHITE, also shows the expected sign: communities having higher percentage of non-Hispanic whites are less likely to adopt Chapter 40R. The level of significance in this case is 0.032. It shows that a one unit increase in percentage of non-Hispanic white population decreases the odds that the community will adopt Chapter 40R by 5.5 percent  $[(1-.945) \times 100 = 5.5]$ . The variable OVERRIDES also showed a high level of significance at 0.057. However, its coefficient did not show the expected sign, as indicated by the hypothesis.

**Table 8.6 Multiple-Regression Results**

SN	Independent variables	B	S.E.	Sig.	Exp (B)
1	TOWNPLANNER	+1.943	.621	.002	6.979
2	PERCENTWHITE	-.057	.026	.032	.945
4	OVERRIDES	-.124	.065	.057	.883
6	DEMOCRAT	-.045	.027	.098	.956

It shows that a one unit increase in the number of override attempts decreased the odds that a community will adopt Chapter 40R by 11.7 percent  $[(1-.883) \times 100]$ . Chapter

<sup>30</sup> Probability of a community adopting Chapter 40R =  $1.943 \times (1-.21) \times .21 = 0.322$ ; 1.943 is estimated coefficient of TOWNPLANNER, and 0.21 is the mean value of dependent variable Chapter 40R adoption

9 presents why financially-stressed, high-overrides communities are not taking advantage of Chapter 40R monetary incentives.

Finally, the variable DEMOCRAT also did not show the expected sign, but it was not statistically significant. The sign of the coefficient showed that communities with a greater percentage of registered Democratic voters are less likely to adopt Chapter 40R. It is likely that even the Democrats are not interested in Chapter 40R for the reason that it allows settling of new low income families in communities and puts fiscal burden on local services other than school costs.

Both the results of simple and multiple-logistic-regression confirmed the sign of the coefficients and the statistical significance of the variables TOWNPLANNER, PERCENTWHITE and OVERRIDES. This shows that communities are extremely likely to adopt Chapter 40R if they have a professional town planner. They are very unlikely to adopt if they have a higher percentage of non-Hispanic whites and less likely to adopt if they have experienced a high number of override-attempts.

## **CHAPTER 9**

### **QUALITATIVE RESULTS**

This chapter presents the results of the face-to-face and telephone interviews with the town planners and town administrators and telephone interviews with developers. The first section describes the response of Chapter 40R-non-adopting communities, the second describes the response of Chapter 40R-adopting communities, the third presents the developers' response on Chapter 40R and the final section presents the conclusion.

#### **9.1 Chapter 40R-Non-Adopting Communities**

The majority of the respondents from Chapter 40R-non-adopting communities said that income, race, age, homeownership, home value, Chapter 40B, school expenditure growth, property tax rate, overrides, school enrollment growth, registered Democrat, registered Republicans and availability of developable land are not factors responsible for non-adoption of Chapter 40R in their community. Instead, they suggested five major reasons why communities have failed to adopt Chapter 40R. These were local concerns about denser housing development, lack of a professional town planner, lack of awareness on Chapter 40R's advantages, lack of confidence in Chapter 40R's funding sources, lack of availability of local services, and lack of access to public transportation.

Regarding race, the qualitative results differed from the quantitative: As mentioned above, the majority of the interviewees responded that the race is not a factor for non-adoption of Chapter 40R in their communities. Whereas, quantitative results

showed that white-dominated communities are less likely to adopt Chapter 40R. The interviewees were professional planners and administrators and they may not necessarily represent the local residents' views. Their source of response is largely their project approval experiences. The approval process may not show racial prejudice openly, and mostly it is hidden under the rhetoric of environment or community character. This may be the reason why planning staffs did not see the racial motives behind adoption of Chapter 40R. The following paragraphs and later part of Section 9.2 elaborate this finding in detail.

#### Local Concerns on Denser Housing Development

Local concerns about denser housing development were driven by two major factors: a fear of a decline in home values and fear of degradation of community character. Three out of five communities reported that their residents are concerned about denser housing projects. One town planner said that local residents believe that denser housing projects negatively affect their property value. For this reason, the community residents had opposed affordable housing in the past<sup>31</sup>. Another town's town administrator also said that new homeowners had opposed abutting, denser housing projects in the past.

Another town planner suggested that her city is very close to meeting Chapter 40B requirements and therefore there is less pressure to adopt Chapter 40R and secondly,

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<sup>31</sup> The community is dominated by Democrat voters. Freetown has 30 percent registered Democrat voters as opposed to 11 percent Republicans.

the residents are more vocal on maintaining their community's rural character. In this city, a developer had shown an interest in a Chapter 40R project on an eight-acre site. However, the developer abandoned the project due to local opposition.

The Mayor of this city suggested that the developer present his idea directly to the neighborhood to test how they would respond to the idea. The developer hosted a neighborhood meeting. However, the district council and neighboring residents opposed, saying that the project will increase traffic in the area and raise the per-capita tax-revenue due to an inflow of low-property-tax-generating families in the neighborhood. In addition, they also wanted to maintain the rural character of the area. Ultimately, the developer abandoned the idea.

#### Town Planner Provisions in Communities

Two out of five Chapter 40R-non-adopting communities that were subject to interview did not have a professional town planner. Lack of resources was the reason cited for not having town planners. Another city had only a part-time town planner. A developer's attempt for a Chapter 40R district had failed in this city. The city's town planner said that she was not involved in the Chapter 40R project discussions. The Director of Community Development, who was not a planner, mainly handled the project. Nonetheless, even two of the towns interviewed having full-time town planners had not initiated any Chapter 40R projects. The town planners from these towns provided three main reasons for their non-adoption of Chapter 40R: lack of sewer and water

facilities, lack of access to public transportation, and rural towns needing more time to accept new ideas.

#### Awareness and Confidence on Chapter 40R Incentives

Compared to Chapter 40B, Chapter 40R is recent legislation and therefore some communities do not fully understand its advantages and have not gained confidence in it. One town planner said that the community had not yet thought about Chapter 40R incentive payments as an alternative to overrides. Town administrators from two of the interviewed municipalities asked the researcher to explain about Chapter 40R at the beginning of the interview.

One town administrator said that the Chapter 40R monetary incentives could be an alternative to overrides and believed that Chapter 40R is better than Chapter 40B in terms of fiscal impact, but lacked confidence in the state's ability to fund Chapter 40R monetary incentives.

Even communities, looking for options to raise financial revenue, such as those attempting large number of overrides, did not take advantage of Chapter 40R monetary incentives. Quantitative analysis in Chapter 8 revealed that communities attempting a high number of overrides are less likely to adopt Chapter 40R. It was surprising to see that communities willing to raise revenue are not taking advantage of Chapter 40R monetary incentives. To dig further into the reasons, telephone interviews of an additional four Chapter 40R-non-adopting communities attempting a large number of overrides (ten or above) were carried out. It was found that their reasons for non-adoption

of Chapter 40R were similar to what was found above: local concern about denser housing and lack of awareness or confidence in Chapter 40R.

One town planner said that the community is a very conservative ‘two-acre-zoning’ type of community not interested in inviting more affordable housing units (see Table 9.1).

**Table 9.1 Override Attempting Communities and Non-adoption of Chapter 40R**

SN	Communities having override attempts >10 (1990-1999)	Communities’ response for not taking advantage of Chapter 40R incentives
1	Freetown	Not yet discussed much about it
2	Middleton	Lack of confidence on Chapter 40R monetary incentive
3	Boxford	Not interested in the Chapter 40R monetary incentive
4	Lancaster	Need for overrides have reduced since 2000
5	Shirley	Chapter 40R not yet discussed as a substitute for overrides
6	Raynham	Want monetary incentive without denser housing

Another said that they have made no override attempts after 1999 and thus are not interested in Chapter 40R monetary incentives (the override data used by this study was from 1990-1999). This suggests that communities’ lack of awareness on the advantages of Chapter 40R and their disinterest in revenue-generating-options that invite more low and moderate-income housing (such as Chapter 40R) are playing a key role in non-adoption of Chapter 40R.

#### Lack of Availability of Local Services

Two other town planners mentioned that they do not have adequate local services to support Chapter 40R projects. One suggested that his town does not have adequate

staff to administer Chapter 40R projects. Another said that a limited public sewer and water supply facility is a big obstacle. The community's water shortage was considered a main obstacle to Chapter 40R adoption in another non-adopter. This reflects the common problems of Massachusetts communities. One-hundred thirty-eight towns in Massachusetts have no public sewers (Bluestone & Heudorfer, 2007).

#### Lack of Access to Public Transportation

Only two out of the five interviewed communities had access to public transportation. On the other hand, those Chapter 40R-non-adopting communities accessed by public transportation were faring well in the process of Chapter 40R adoption. Telephone interviews of three additional Chapter 40R-non-adopting communities accessed by commuter rail revealed a number of community characteristics favorable for Chapter 40R adoption.

All of the three T-accessed, Chapter 40R-non-adopting communities had town planners actively engaged in denser housing development policies. The town planner from one town told that the town is working on preparing documents to approve a Chapter 40R district on its own property, even before a developer has shown an interest. Another said that she has identified a site near a railway station and is planning to put the issue before the upcoming meetings. A third said that the community has already implemented Transit Oriented Development (TOD) projects and the community is close to Chapter 40B's 10 percent requirements

In summary, the interviews show that communities' concern over home value decline, changes in community character and dilution of local services were the main reasons for non-adoption of Chapter 40R. Lack of full engagement of a professional planner in Chapter 40R has a role in non-adoption of Chapter 40R. Lack of adequate awareness and confidence on Chapter 40R monetary incentives also play a role in non-adoption of Chapter 40R. Inadequate water and sewers in communities is an important setback for Chapter 40R adoption. Finally, the access to public transportation is also an important factor that makes Chapter 40R viable in communities.

## **9.2 Chapter 40R-Adopting-Communities**

The face-to-face interview of representatives from Chapter 40R-adopting-communities revealed a number of characteristics that matter in the adoption of Chapter 40R. These characteristics are grouped into three categories. The first category is the Chapter 40R-enabling factors for communities, second is the Chapter 40R-enabling factors for developers and the third is the local factors for Chapter 40R adoption. Each of these categories is described below under separate subheadings. Developers' information presented below is drawn from town planners' interview responses and telephone interviews.

### **Chapter 40R Enabling Factors for Communities**

The interviews identified two critical Chapter 40R enabling factors for communities: the fact that Chapter 40R permits communities to proactively establish design standards and that Chapter 40R provides monetary incentives to ease the fiscal

situation in towns and cities. Three of the five community respondents said that the clear cut design standards for denser housing development and mixed-use development were the major attraction of Chapter 40R. One town planner said that Chapter 40R's clear-cut housing density provisions were the major attractions for the community. Another town planner said that the provision for some commercial and retail activities in Chapter 40R districts makes Chapter 40R unique from Chapter 40B. He said that this provision has provided an opportunity to expand commercial as well as residential activities and increase the tax base in the community. Still a third expressed that Chapter 40R is a useful state policy tool for multi-family housing development, even on a small site.

For some communities, Chapter 40R monetary incentive payments were the major attraction. The town planner of a relatively affluent adopter said that despite its well-off residents, tax revenue is not abundant enough to fully fund all the services the town would like to offer. Therefore the Chapter 40R monetary incentive was one of the reasons for adopting Chapter 40R. A town administrator in another adopting community said that the community has received nearly a million dollars in 40R funds, which is significant for a small community. Most of the Chapter 40R-adopting communities collected over 84 percent of their property taxes from residential properties. They said that they are interested in expanding the commercial tax base because commercial properties consume less resources compared to residential properties. This shows that communities' financial needs can influence Chapter 40R adoption.

The interviews also made it clear that the existence of Chapter 40B encouraged adoption of Chapter 40R. The threat of Chapter 40B was an important push factor for Chapter 40R adoption in several communities. Two which had Chapter 40B projects in the pipeline opted instead to pursue Chapter 40R adoption (see Table 9.2). They persuaded the Chapter 40B developers to switch over to Chapter 40R projects. As the developers agreed to switch over from Chapter 40B to Chapter 40R, the communities expedited the process and passed Chapter 40R unanimously at the town meeting.

**Table 9.2 Chapter 40R District Approval Votes and Project Status in the District**

	Communities	Project types	Chapter 40 district approval votes	Status of projects
1	North Andover	Chapter 40R	415-5 (98%)	Not yet started
2	North Reading	40B converted 40R	Unanimous	Completed
3	Kingston	Chapter 40R	925-342 (73%)	Not yet started
4	Lakeville	40B converted 40R	Unanimous	Under construction
5	Norwood	Chapter 40R	Two-thirds majority (minimum requirement)	Completed

Communities not approached by a Chapter 40B applicant were slower in the Chapter 40R approval process because there was no ‘immediate threat of Chapter 40B’ action. Town planners from these communities said that they needed more time to gather residents’ support. Town meeting approvals in these communities were not unanimous as they were in towns “threatened” by a Chapter 40B project (see Table 9.2).

However, these communities made maximum use of “future threat of Chapter 40B” rhetoric to convince local residents in town meetings to support Chapter 40R. Developers also used the ‘threat of Chapter 40B’ to expedite Chapter 40R approval. In

one town, a developer lodged a Chapter 40B application as a strategy to pressure the town for faster approval of his earlier Chapter 40R application.

#### Chapter 40R's Enabling Factors for Developers

One 40R developer from Norwood said that Chapter 40R is appealing to developers for two main reasons. First, the traditional practice of special permit and variances was subject to challenges by anyone, but Chapter 40R allows as-of-right development. Second, Chapter 40R has no cap on profits, unlike Chapter 40B. In addition, another said that without Chapter 40R's district zoning provisions and clear-cut density guidelines, he would not have been able to carryout a project on a 0.75 acre parcel. He said that the prevailing zoning would allow no more than two duplexes on the site. According to him, the land was so costly that two duplexes would simply not cover the total development cost. It was probably because of these enabling factors of Chapter 40R that developers were willing to switch over from Chapter 40B to Chapter 40R in some communities, as mentioned above.

#### Local Factors for Chapter 40R Adoption

As noted throughout the findings, the major distinguishing factor among Chapter 40R-adopting communities was the existence of a professional town planner and the planner's role in materializing Chapter 40R projects. Indeed, when the town committee initially dismissed Chapter 40R without any conclusion, the town planner stepped in and played a very proactive role until it was passed at the town meeting. In one town, a developer wanted to develop her 30 acres of industrial property and approached the town

for Chapter 40R project approval. The town initiated discussions with residents and the developer presented proposed project before the residents of the town which formed a committee to proceed further.

However, the committee could not reach a consensus. The opposing groups said that the project would generate too much traffic. Some committee members wanted more studies; others questioned the establishment of a residential project on an industrial site. Ultimately the committee was dismissed. In this kind of gridlock situation, the town planner, with the support from the Town Manager and Board of Selectmen, reinitiated dialogue with local community and ultimately revived the project.

The planner consulted key residents personally and collectively and gradually educated them about the advantages of Chapter 40R. As soon as the planner found a substantial number of residents who were positive towards Chapter 40R, he pushed forward the schedule for voting for Chapter 40R approval. Finally, with the strong support of the Chairman of the Board of Selectmen, he was able to pass Chapter 40R by 415 votes to 5 votes in August 2005.

In another town, the planner said that the town managers and elected officials were not initially knowledgeable about the Chapter 40R concept. He had to spend some time to inform them about it, explaining the advantages of Chapter 40R in order to get their support<sup>32</sup>. Another planner said that he not only explained Chapter 40R to the

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<sup>32</sup> A Chapter 40R developer from Norwood said in a telephone interview that the Town Planner was friendly, positive and was able to convince the Town Manager and elected officials on the Chapter 40R idea. He also said that the Planner worked closely with his lawyer to prepare a Chapter 40R bylaw.

developer but also advised him to play a strongly proactive role in convincing town officials and residents in order to secure town approval for Chapter 40R.

The sensitivity of a site was the other important local factor for Chapter 40R adoption in communities. The majority of the approved Chapter 40R sites were located in an area less-objectionable to affluent, single-family homeowners. One town placed its Chapter 40R site in a sand pit area adjoining the commuter rail station. Another placed theirs right next to its commuter rail station. Still another used a site once zoned only for industrial property. Still a fourth converted an abandoned state rehabilitation center site surrounded by commercial use. A number of towns that tried to site 40R zones in existing residential neighborhoods ran into trouble with residents.

The study by Citizens' Housing and Planning Association (CHAPA) and the Metropolitan Area Planning Council (MAPC) on Chapter 40R showed that 78 percent of the Chapter 40R-adopting communities had created their Chapter 40R-districts on properties such as industrial sites, mills, state hospitals, factories, commercial property, a sand pit, a state rehabilitation center, an amusement park, a drive-in-theater, church property, and T-station office parks—see APPENDIX- 9 (Raitt & Verrilli, 2009). All these sites belonged in predominantly non-Hispanic white communities. Why did these predominantly white communities adopt Chapter 40R?

Such sites were least attractive to 'affluent single-family homeowners mainly whites', and least likely to have neighbors of similar character. The single-family homeowners try their best to avoid living near such sites. Homes abutting such properties

are likely to experience a decline in home value (Lee, Dennis, & Susan, 1999). Those who accepted to be a neighbor of such sites did so because they were more tolerant towards the character of the adjoining property and they did not oppose a Chapter 40R proposal.

It is most likely that because the majority of these communities chose Chapter 40R sites in locations less sensitive to ‘single-family-affluent-white-homeowners’, they were able to adopt Chapter 40R. Over 40 years ago, Wilson (1968) noticed this fact. He said local decisions are affected by the type of reaction an adjoining property-owner makes on a developer’s proposal (Wilson, 1968).

### **9.3 Conclusion**

At the local level, adoption of Chapter 40R largely depends upon the provision of a town planner, the selection of politically less-sensitive sites, a community’s awareness of Chapter 40R advantages, a community’s confidence in the state’s ability to fund Chapter 40R, and the availability of water and sewer in communities.

## CHAPTER 10

### CONCLUSION AND POLICY IMPLICATIONS

My research identified a number of major enabling factors that encouraged communities to consider Chapter 40R zoning districts, including Chapter 40R's clear-cut design standards, monetary incentives and Chapter 40B's fiscal disincentives. For developers, the lack of a cap on profits for Chapter 40R housing projects (like the one imposed by chapter 40B) was one of the main reasons for considering Chapter 40R. Access to public transportation was the other factor that made Chapter 40R more viable in communities.

Whether or not a community adopts Chapter 40R largely depends upon various community characteristics. Quantitative results revealed three important characteristics: town planner provision in communities, non-Hispanic white population and Proposition 2½ overrides-attempting communities. Paragraphs that follow describe each of these findings.

First, communities having a town planner position were extremely likely to adopt Chapter 40R. This finding was also supported by the qualitative results. The interviews found that town planners were skillful in steering the 40R-adoption process through the turmoil of town meeting approvals. They educated local residents and elected officials on the advantages of Chapter 40R, motivated developers to work with local community and seek their support and finally, mediated with elected officials, developers and local residents to forge a common ground to move ahead in the Chapter 40R adoption process.

They were also instrumental in coordinating with the DHCD and other line agencies and getting necessary support and approval.

Second, according to the quantitative analysis, communities with a larger non-Hispanic white population were less likely to adopt Chapter 40R. However, the qualitative results did not support this. A majority of the interviewed communities said that race is not a factor for non-adoption of Chapter 40R. Nonetheless, they also said that concern about changes in community character is one of the prime factors for non-adoption of Chapter 40R. Often, communities put forward ‘like to preserve community character arguments’ to serve their hidden agenda of maintaining racial homogeneity through zoning regulations (Stockman, 1992). In a broader sense (out of a complete sample of 115 communities), race is a factor as shown by the quantitative results. However, it is also a fact that 20 out of 24-Chapter 40R-adopting communities had predominantly non-Hispanic white population (89 percent).

This suggests that race is a factor but its influence on local (denser-housing) policy decisions is site specific. If the proposed sites for Chapter 40R districts are located in an area less sensitive to the affluent white population, those sites will face less opposition and likely to receive approval. For example, the majority of the approved Chapter 40R districts were located in properties such as state hospitals, a state rehabilitation center and factories (Raitt & Verrilli, 2009). Others were approved on sand pits, near train-stations and non-residential properties. It is most likely that because the majority of the Chapter 40R districts were proposed in locations less sensitive to ‘single-

family-affluent-white-homeowners’, communities were able to adopt Chapter 40R. Reactions of adjoining property-owners play a role in making local decisions (Wilson, 1968). This fact will remain true until we see enough 40R districts located in, suburban residential neighborhoods, ‘non-Hispanic white sensitive’ locations.

Third, communities attempting a greater number of overrides were less likely to adopt Chapter 40R. This is contrary to what was expected. The expectation was that the communities attempting a large number of overrides would adopt Chapter 40R to ease their financial stress through Chapter 40R monetary incentives. However, they did not do so. In interviews, the high-overrides communities offered three main reasons for their non-adoption (see Section 9.1): lack of awareness about Chapter 40R advantages, lack of confidence in the state’s ability to provide Chapter 40R monetary incentives, and a lack of interest in Chapter 40R’s incentive payments that allow denser housing projects.

Ted Carmen, one of the principle authors of Chapter 40R, provided another important reason. According to him, the Chapter 40R’s one-time payment is too little, for affluent communities, compared to what they derive from overrides. For these communities, the goal is not to ease financial burden (through one-time Chapter 40R monetary incentives) but to raise large amount of money to raise the standards of their services and schools through overrides.

In conclusion, adoption of Chapter 40R largely depends upon the provision of a town planner in the community, selection of politically less-sensitive sites, communities’

awareness of Chapter 40R advantages, communities' confidence in the state's ability to fund Chapter 40R and availability of water and sewer in communities.

#### Policy Implications: Improvements to Chapter 40R

The study reveals six policy changes that could be made to Chapter 40R that would encourage more communities to adopt Chapter 40R zoning districts. First, providing resources to communities to hire full-time town planners or other assistance with navigating the 40R adoption process is critical for the adoption of Chapter 40R. The state can hire town planners, train them in administering Chapter 40R projects, and provide them in communities that are potentially ripe for Chapter 40R. The first batch of ripe communities are those that are accessed by public transportation but do not have a town planner position. Alternatively, the state can attach a 'town-planner-provision' as a string to certain priority development funds for communities. For instance, a community is required to have a town planner to qualify for the funds.

The absence of a planner is a major impediment to adoption of Chapter 40R because the staff and resources of smaller communities are not sufficient to administer the complex and often controversial Chapter 40R approval process. Thus, in addition to providing planning resources, the state should also consider reaching out to more communities with priority development funds and assist them in administering Chapter 40R.

Second, identifying sites that are less susceptible to opposition by abutting neighbors is important for a smooth adoption of Chapter 40R. Communities or

developers should consider the neighbor's characteristics as one of the major criteria for site selection. Based on this criterion, communities and developers can prepare a strategic map showing appropriate locations for Chapter 40R districts in communities.

Third, the communities that are less proficient in understanding Chapter 40R provisions need more education about Chapter 40R advantages, including both monetary incentives and design standards. Since Chapter 40R is recent legislation, communities and residents know less about it as compared to Chapter 40B. Arranging Chapter 40R site visits for these communities and facilitating their interaction with the Chapter 40R project officials can build confidence in Chapter 40R adoption. Organizing workshops where officials from Chapter 40R-adopting communities present their experiences to the non-adopting ones is another way to raise awareness on Chapter 40R.

Similarly, more and more developers should be informed and educated about the advantages of Chapter 40R and trained on how to win the hearts and minds of community officials and residents to acquire community approval for Chapter 40R. Presentations about Chapter 40R projects by experienced developers in the developer's association can encourage more developers to consider Chapter 40R.

Fourth, to gain communities' confidence in the state's ability to fund Chapter 40R, the state needs to provide a secure, long-term dedicated source of funds to cover 40R and 40S. States can explore possibility of delegating taxing power to communities such as business tax to raise funds for Chapter 40R. Proponents of Chapter 40R are also considering setting aside income tax of residents living in Chapter 40R district as a

source of funds for Chapter 40R monetary incentive payments. Commonwealth of Housing Task Force and broader coalition of affordable housing advocates should work for creating a sustainable Chapter 40R fund strategies.

Fifth, communities interested in Chapter 40R but facing shortage of water and sewer need to receive the state's priority funds for upgrading services. State should incorporate this element in their municipal infrastructure funding strategy. As the State's economy improves and development pressure increases, the priority infrastructure funding in Chapter 40R interested communities will play an instrumental role in producing denser housing units.

The final policy area that needs attention is access to public transportation. Compared to rural communities, the commuter rail accessed communities were more positive towards Chapter 40R and well equipped with professional expertise. A small incentive might be sufficient to prompt these communities to adopt Chapter 40R. For example, a priority for more grants (technical assistance in planning) or Chapter 40R orientation workshops could be one of those prompting factors. For communities not having access to public transportation, a public transportation expansion policy may be necessary for creating conducive environment for Chapter 40R.

Currently, success has been made in adopting Chapter 40R largely in industrial and institutional sites. The primary planning goal of Chapter 40R is also to open up residential suburbs for affordable housing development. This requires developing

strategies to make sure that Chapter 40R adoption takes place in suburban residential neighborhoods, and not just in industrial sites.

#### Future Research

One of the most important research questions identified in my research is why Massachusetts communities attempting a high number of Proposition 2½ overrides have not taken advantage of Chapter 40R monetary incentive payments. To fully understand the reasons, a detailed interview with all the high-override-attempting communities is essential. A detailed analysis of the characteristics of abutting property-owners of approved and disapproved Chapter 40R districts is important to see how that matters to the adoption of Chapter 40R. Evidence of working-family housing-needs in communities can justify adoption of Chapter 40R projects. Thus, it is essential to carryout studies to determine working-family housing demands in communities in order to leverage arguments in favor of Chapter 40R advocacy.

#### Policy Implications: Beyond Chapter 40R

In Massachusetts, Chapter 40A directs local planning boards to prepare a master plan that ensures “a balance of housing opportunities”. However, without a mandatory requirement, a concrete result on housing production is difficult to achieve from communities (Herr, 2000). This demands an amendment to the Massachusetts zoning enabling statute to make a housing element a mandatory requirement for communities in order to take advantages of state funds. Then only, planning will lead to zoning, and more work on housing production will appear on the ground.

My research also reveals a number of policy implications for addressing the larger policy questions of exclusionary zoning. First, to protect the interests of minorities in a one-race or one-class dominated society, the objectives of zoning legislation should be clear and as specific as possible so that the dominant group will have little room to manipulate the policy on their behalf and at the expense of minorities. States should play a key role in making their zoning legislations less ambiguous, and direct their local governments to do the same.

Second, it is important that “a decent home and a suitable living environment for every American family” be incorporated in state zoning enabling legislation through necessary amendments. In addition, the zoning legislation should clearly state that the purpose of zoning is to promote the “health, safety, moral or general welfare of all including low income families and minorities in communities”. A new federal housing / land use law should be passed to mandate states to incorporate these goals in their zoning legislations. Politically, this may be less feasible today but when policy windows open this will be the most effective affordable housing policy to propose. Until these reforms are feasible, nurturing and expanding pro-affordable housing political constituency in communities is a desirable option.

Third, non-property-tax based public school financing policies are essential for relieving zoning-regulations from the municipal revenue generating responsibilities and engaging them more in planning and affordable housing development. Briffault (1988) suggests “reducing the local role in school financing would ease local tax burdens and

reduce incentive to zone out lower-income residents.” (p.119). States should consider policy reforms to reduce the local role in school financing.”

Fourth, regarding the problems related to the large lot zoning regulations, state policies are still tangential. It is critically important to speak up on this issue and open up a dialogue on what is the optimum lot size and zoning standards for decent and affordable homes. Developing optimum lot size models and supporting justifications is essential to argue against large lot zoning. Both deterrent and incentive policies should be in place to discourage large lot zoning practices. States could pass legislation to provide monetary incentives to communities those reduce their minimum lot-sizes, and impose fees to those enlarge.

To sum up, encouraging and strengthening local governments’ capacity to administer Chapter 40R, and ensuring sustainable funds for Chapter 40R monetary incentive payments is critically important. State and local zoning reforms are equally essential to create conducive environment for Chapter 40R. In particular, “health, safety, moral or general welfare of all including low income families and minorities in communities” should be the key goal of state and local zoning legislations.

## APPENDIX- 1

### Selection of Communities for Interviews

Town/City	Population 2000	Selected NAAC	Type <sup>33</sup>
<b>KINGSTON</b>	11,780		AC
CARVER	11,163	<i>Carver</i>	NAAC
DUXBURY	14,248		NAAC
PEMBROKE	16,927		NAAC
PLYMOUTH	51,701		AC
PLYMPTON	2,637		NAAC
<b>N. ANDOVER</b>	27,202		AC
ANDOVER	31,247	<i>Interested</i>	NAAC
BOXFORD	7,921		NAAC
LAWRENCE	72,043		NAAC
METHUEN	43,789	<i>Methuen</i>	NAAC
MIDDLETON	7,744		NAAC
N. READING	13,837		AC
<b>Norwood</b>	28587		AC
CANTON	20,775	<i>Canton</i>	NAAC
SHARON	17,408		NAAC
WALPOLE	22,824	<i>Interested</i>	NAAC
WESTWOOD	14,117		NAAC
	9,821		
<b>LAKEVILLE</b>			AC
BERKLEY	5,749		NAAC
FREETOWN	8,472	<i>Freetown</i>	NAAC
MIDDLEBOROUGH	19,941		NAAC
ROCHESTER	4,581		NAAC
TAUNTON	55,976		NAAC
<b>NORTH READING</b>	13,837		<b>AC</b>
ANDOVER	31,247		NAAC
MIDDLETON	7,744	<i>Middleton</i>	NAAC
NORTH ANDOVER	27,202		AC
READING	23,708		NAAC
WILMINGTON	21,363		NAAC
LYNNFIELD	11,542		AC

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<sup>33</sup> 1) AC means Chapter 40R-adopting-communities; 2) The bolded municipalities are the randomly selected ACs for interview; 3) NAAC means Chapter 40R non-adopting-adjoining-communities; 4) The communities in italics are NAACs selected for interviews; 5) Interested means communities interested in Chapter 40R

## **APPENDIX- 2**

### Interview Questions

#### **A. Questions for Chapter 40R-Adopting Communities**

- 1) What inspired your community to adopt Chapter 40R project?
- 2) Whose role was critical in securing town approval for Chapter 40R projects?
- 3) What matters to the adoption of Chapter 40R?
- 4) Did your community initiate Chapter 40R without any developer's interests?
- 5) What is the current status of Chapter 40R project in your community?
- 6) What are the opportunities and challenges of your community?

#### **B. Questions for Chapter 40R Non-Adopting Communities**

“Your community did not consider adopting Chapter 40R – the Smart Growth Zoning Overlay District Law – despite the law’s promise of increased local aid and insurance against increased school costs due to the development of additional housing. I am interested in learning a little more about why you think the community did not choose to apply for Chapter 40R.”

- 1) One possibility is that your community is relatively affluent and therefore does not need the added local aid. Would this explain why the community did not try to adopt Chapter 40R?

- 2) Has the amount of developable land in your community contributed to not applying for Chapter 40R? Please explain.
- 3) Another possibility for explaining why your community did not apply for Chapter 40R is the affluence of your community. Was there concern that lower cost “affordable” housing would undermine the character of your community or the value of existing homes? If so, please explain.
- 4) Your community is not very diverse. Is there any concern in your community that adopting Chapter 40R could change the racial or ethnic composition of neighborhoods in your community?
- 5) Your community is relatively young with a good number of families headed by someone between the ages of 25 and 54. Do you think the age the community’s population was a factor in not applying for Chapter 40R? If so, why?
- 6) Most the families in your community are homeowners rather than renters. Do you think this factor was responsible for your community not applying for Chapter 40R? If so, why?
- 7) Your community has not reached the Chapter 40B threshold of 10 percent affordable housing. Accordingly, it could be a target for a Chapter 40B housing development. Chapter 40R would be one way to help meet the 10 percent threshold so that your community would not be subject to Chapter 40B. Yet, your community did not apply for Chapter 40R – the Smart Growth Overlay District law. Was this because your community does not worry about a possible Chapter 40B development?

- 8) Or: Your community has reached the Chapter 40B threshold of 10 percent affordable housing. Is that why your community felt no need to apply for Chapter 40R? Please explain.
- 9) School expenditures have risen quite rapidly in your community. Chapter 40S, the School Cost Insurance Plan in the Commonwealth which accompanies Chapter 40R might help meet some of the costs of your schools. Yet your community did not apply for Chapter 40R and therefore is not eligible for the school cost insurance plan. Why do you think your community did not take advantage of Chapter 40R in order to take advantage of Chapter 40S?
- 10) New housing built under Chapter 40R would generate more property tax revenue for your community, yet your community did not apply for Chapter 40R. Did property tax considerations play any role in the decision not to apply?
- 11) Your community has applied for a large number of Prop 2 ½ overrides. It would seem that if your community was trying to raise more revenue, Chapter 40R might help both by increasing taxable property and increasing state aid. Yet your community did not apply for Chapter 40R. Was the community concerned that Chapter 40R would generate more service needs than property tax revenue?
- 12) Your community already has high school enrollments. Did this factor play any role in the community not applying for Chapter 40R? Please explain.

Or:

13) School enrollments in your community are relatively low. Was there any concern in community that a Chapter 40R development could add students to your public schools and increase stress on the school system?

14) Relative to other communities in Massachusetts, your community has a relatively high proportion of registered Republicans. Do you consider your community to be relatively conservative and therefore not inclined to apply for Chapter 40R?

Or:

15) Your community is overwhelmingly composed of registered Democrats.

Nonetheless, it did not apply for Chapter 40R which was unanimously supported by Democrats in the Massachusetts House and Senate. Other communities with large numbers of registered Democrats applied and received Chapter 40R funds from the state. Why do you think your community did not?

16) Many communities that have a community planner applied for Chapter 40R. Your community has such a planner, but still did not apply for Chapter 40R. Why do you think this is so?

**C. Chapter 40R Developers**

1) Why did you consider Chapter 40R projects?

2) Why you did not go for Chapter 40B?

Or:

3) Why you agreed to switch over from Chapter 40B to Chapter 40R?

4) What are the strengths and weaknesses you noticed in the Chapter 40R provisions?

**APPENDIX- 3**

## List of Towns included in the Quantitative Analysis

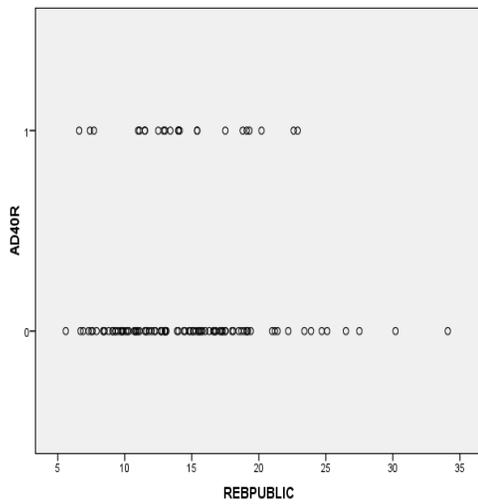
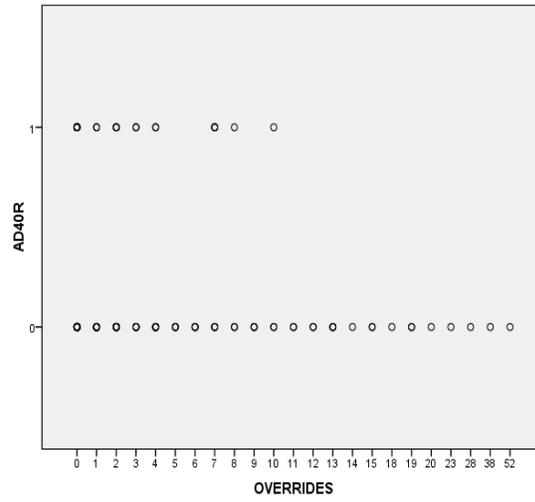
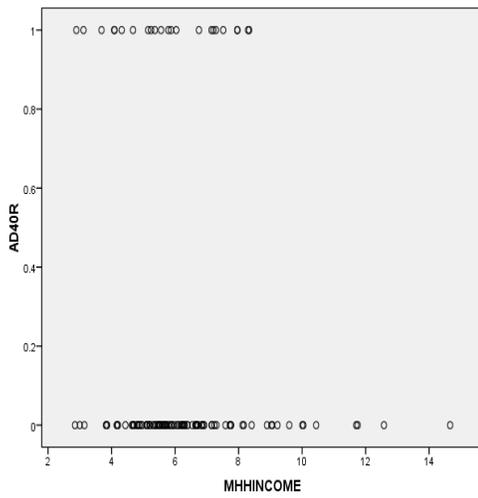
<b>AMESBURY</b>	<b>GRAFTON</b>	<b>NORTHAMPTON</b>
MERRIMAC	MILLBURY	Williamsburg
NEWBURYPORT	NORTHBRIDGE	Westhampton
SALISBURY	SHREWSBURY	Hatfield
WEST NEWBURY	SUTTON	Hadley
<b>BELMONT</b>	UPTON	Easthampton
Arlington	WESTBOROUGH	<b>N. ANDOVER</b>
Cambridge	<b>HAVERHILL</b>	ANDOVER
Lexington	Merrimac	BOXFORD
Waltham	West Newbury	LAWRENCE
Watertown	Groveland	METHUEN
<b>BOSTON</b>	Boxford	MIDDLETON
Brookline	Methuen	NORTH
		READING
Cambridge	<b>KINGSTON</b>	<b>NORTH</b>
		<b>READING</b>
Milton	CARVER	ANDOVER
Newton	DUXBURY	MIDDLETON
Quincy	PEMBROKE	NORTH
		ANDOVER
<b>BRIDGEWATER</b>	PLYMOUTH	READING
Westbridge	PLYMPTON	WILMINGTON
Eastbridge	<b>LAKEVILLE</b>	LYNNFIELD
Halifax	BERKLEY	<b>NORWOOD</b>
<b>BROCKTON</b>	FREETOWN	CANTON
ABINGTON	ROCHESTER	SHARON
AVON	TAUNTON	WALPOLE
EAST	<b>LAWRENCE</b>	WESTWOOD
BRIDGEWATER		
EASTON	Andover	<b>PLYMOUTH</b>
STOUGHTON	Methuen	CARVER
WEST	North Andover	KINGSTON
BRIDGEWATER		
<b>CHELSEA</b>	<b>LUNENBURG</b>	WAREHAM
BOSTON	ASHBY	<b>READING</b>
EVERETT	FITCHBURG	Lynnfield
REVERE	LANCASTER	Wakefield

WINTHROP	LEOMINSTER	Stoneham
<b>DARTMOUTH</b>	SHIRLEY	Woburn
FALL RIVER	TOWNSEND	Wilmington
FREETOWN	<b>LYNNFIELD</b>	N Reading
NEW BEDFORD	LYNN	<b>WESTFIELD</b>
WESTPORT	NORTH	Russel
<b>EASTON</b>	READING	Montgomery
Brockton	PEABODY	Southampton
Foxborough	READING	Holyoke
Mansfield	SAUGUS	West Springfield
Norton	WAKEFIELD	Agawam
Raynham	<b>NATICK</b>	Southwick
Stoughton	DOVER	Granville
Taunton	FRAMINGHAM	
Westbridge	SHERBORN	
	WAYLAND	
	WELLESLEY	

Note: Bold communities are Chapter 40R adopting, and others are adjoining non-adopting ones

### APPENDIX-4

### Scatter Plot Analysis



## APPENDIX- 5

### Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AD40R (1)	1														
MHHINCOME (2)	-0.12	1													
PERCENTWHITE (3)	-0.22	0.38	1												
POP25_54 (4)	-0.1	-0.03	0.2	1											
OWNERROCH (5)	-0.17	0.6	<b>0.8</b>	0.05	1										
RMHVALUE (6)	-0.06	<b>0.9</b>	0.08	-0.1	0.2	1									
SHIUNITS (7)	0.16	-0.39	<b>-0.7</b>	-0.2	-0.7	-0.1	1								
SCHOOLEXPR (8)	-0.02	0.38	0.27	0.24	0.48	0.19	-0.4	1							
PROPTAXRATE (9)	-0	0.1	0.05	0.05	0.14	-0	-0.1	0.14	1						
OVERRIDES (10)	-0.16	0.19	0.15	0.17	0.33	0.01	-0.3	0.22	0.13	1					
SCHOOLENRGR (11)	0.01	0.23	0.02	0.04	0.15	0.16	-0	0.16	-0	0.15	1				
DEMOCRAT (12)	0.1	-0.47	<b>-0.6</b>	-0.2	<b>-1</b>	-0.1	<b>0.7</b>	-0.5	-0.2	-0.3	-0.1	1			
REPUB (13)	-0.02	<b>0.7</b>	0.36	-0.1	0.56	0.48	-0.4	0.43	0.3	0.17	0.18	-0.5	1		
DEVLAND (14)	0.11	-0.18	0.22	0.05	0.23	-0.4	-0.2	0.06	-0.1	0.16	0.07	-0.3	0.01	1	
TOWNPLANN (15)R	0.32	-0.01	-0.2	-0.1	-0.3	0.13	0.2	-0.2	-0	-0.1	-0.1	0.21	0.05	0.01	1

## APPENDIX- 6

### Regression Model: 1

Independent Variables	1	2	3	4	5	6	7	8	10	11	12	
TOWNPLANNER (.002) <sup>34</sup>	.003	.003	.003	.003	.003	.004	<b>.003</b>	.004	.003	<b>.003</b>	.003	.003
PERCENTWHITE (.032)	.103	.142	.152	.282	.235	.123	<b>.080</b>	.131	.082	<b>.077</b>	.092	.103
OWNEROCH (.073)		.578										
OVERRIDES (.082)			.125									
SHIUNITS (.096)				.999								
MHHINCOME(.212)					.549							
DEVLAND(.251)						.137						
DEMOCRAT(.285)							<b>.429</b>					
POP25_54 (.289)								.635				
REPUB (.825)									.552			
SCHOOLEXGR (.832)										<b>.432</b>		
SCHOOLENRLGR (.878)											.511	
PROPTAXRATE (.979)												.983
-2LOG LIKELIHOOD	102. 47	102. 16	99.1 9	102. 47	102. 09	99.17	<b>101. 83</b>	102. 25	102. 12	<b>101. 86</b>	102. 05	102. 47
NAGELKERKE R SQ.	.195	.198	.233	.195	.199	.200	<b>.202</b>	.197	.199	<b>.202</b>	.200	.195

<sup>34</sup> The figure in the parenthesis shows the level of significance when each independent variable is separately regressed with the dependent variable.

## APPENDIX- 7

### Regression Model: 2

	1	2	3	4	5	6	7	8	10	11	12
TOWNPLANNER (.002)	.003	.003	.003	.003	.002	.003	.003	.003	.003	.003	.003
PERCENTWHITE (.032)	.077	.177	.094	.315	.196	.091	.091	.098	.075	.074	.077
SCHOOLEXPR (.832)	.432	.549	.228	.399	.282	.416	.654	.398	.551	.488	.432
OWNEROC (.073)		.057									
OVERRIDES (.082)			.087								
SHIUNITS (.096)				.761							
MHHINCOME(.212)					.356						
DEVLAND(.251)						.128					
DEMOCRAT(.285)							.636				
POP25_54 (.289)								.570			
REPUB (.825)									.764		
SCHOOLENLGR (.878)										.589	
PROPTAXRATE (.979)											.981
-2LOG LIKELIHOOD	101.86	101.80	97.75	101.77	100.96	98.51	101.63	101.54	101.77	101.57	101.86
NAGELKERKE R SQ.	.202	.203	.250	.203	.213	.208	.205	.206	.203	.205	.202

## APPENDIX- 8

### Regression Model: 3

	1	2	3	4	5	6	7	9	10	11	12
TOWNPLANNER (.002)	.003	.003	<b>.002</b>	.003	.002	.004	.003	.003	.003	.003	.003
PERCENTWHITE (.032)	.080	.135	<b>.032</b>	.214	.110	.118	.094	.078	.091	.085	.080
DEMOCRAT(.285)	.429	.568	<b>.098</b>	.363	.247	.589	.417	.553	.636	.491	.426
OWNEROCH (.073)		.948									
OVERRIDES (.082)			<b>.057</b>								
SHIUNITS (.096)				.640							
MHHINCOME (.212)					.310						
DEVLAND (.251)						.166					
POP25_54 (.289)							.611				
REPUB (.825)								.803			
SCHOOLEXPR (.832)									.654		
SCHOOLENRLGR (.878)										.602	
PROPTAXRATE (.979)											.936
-2LOG LIKELIHOOD	101.83	101.83	<b>96.22</b>	101.61	100.72	98.87	101.57	101.77	101.63	101.56	101.83
NAGELKERKE R SQ.	.202	.202	<b>.267</b>	.205	.215	.204	.205	.203	.205	.205	.202

## APPENDIX- 9

### Characteristics of Approved Chapter 40R Sites

	Municipality	Site characteristics
1	Lawrence	Mills site
2	Chelsea	Vacant Mill complex
3	Holyoke	Commercial and institutional
4	Pittsfield	Church and business site
5	Boston	State Hospital
6	Lowell	Downtown property
7	Brockton	Inner downtown sites
8	Northampton	State Hospital
9	Westfield	Vacant land, Business zone
10	Haverhill	Mill, Factory and vacant sites
11	Dartmouth	Amusement Park
12	Amesbury	Industrial and vacant sites
13	Kingston	Sand and Gravel pit
14	Plymouth	Industrial and retail site
15	Grafton	Old Mill site
16	Lunenburg	Drive-in movie theater
17	Norwood	Church property
18	Bridgewater	Rental complex
19	Easton	Located behind commercial property
20	Natick	Former Paper Board Factory
21	Lakeville	Office Park at T-station
22	North Andover	Industrial and commercial
23	North Reading	State rehabilitation center
24	Reading	Institutional use
25	Belmont	Church, parking lot
26	Lynnfield	Golf course and recreational use
27	Sharon	Property owned by private companies

Source: Raitt & Verrilli, 2009

## APPENDIX- 10

## Chapter 40R Adopting Communities as of May 2009

S.N.	40R Adopting Communities	MHHINCOME <sup>35</sup>	SHIUNITS	Total land Acres	Developable Acres (DA)
1	<i>LAWRENCE</i> <sup>36</sup>	2.8924	14.5%	34.1	34
2	<i>CHELSEA</i>	3.1175	17.2%	2.8	2.7
3	<i>HOLYOKE</i>	3.1464	21.3%	152	4
4	<i>PITTSFIELD</i>	3.6853	9.4%	10.7	10.7
5	<i>BOSTON</i>	4.0961	19.9%	42	18
6	<i>LOWELL</i>	4.85	13.3%	2.5	2.5
7	<i>BROCKTON</i>	4.0835	12.8%	60	47
8	<i>NORTHAMPTON</i>	4.3213	11.7%	16.6	9
9	<i>WESTFIELD</i>	4.6761	7.0%	22.2	15.3
10	<i>HAVERHILL</i>	5.1508	9.1%	53	3.9
11	<i>DARTMOUTH</i>	5.2448	8.4%	40.7	23.3
12	<i>AMESBURY</i>	5.3651	11.1%	52	9.1
13	<i>KINGSTON</i>	5.5588	4.8%	109	69.6
14	<i>PLYMOUTH</i>	5.6515	4.4%	56.8	33.6
15	<i>GRAFTON</i>	5.7903	5.3%	13.7	10
16	<i>LUNENBURG</i>	5.8723	1.9%	9	9
17	<i>NORWOOD</i>	6.0385	6.0%	0.8	0.8
18	<i>BRIDGEWATER</i>	6.7514	3.2%	128	26
19	<i>EASTON</i>	7.1468	3.0%	60.7	18
20	<i>NATICK</i>	7.21	6.8%	5	5
21	<i>LAKEVILLE</i>	7.2865	8.5%	11	10.4
22	<i>N. ANDOVER</i>	7.5173	5.9%	169	26.5
23	<i>N. READING</i>	7.9549	2.8%	46	21.7
24	<i>READING</i>	7.9649	8.4%	10	8.9
25	<i>BELMONT</i>	8.2994	3.2%	1.5	1.5
26	<i>LYNNFIELD</i>	8.3336	2.8%	80.3	65.1
27	<i>SHARON</i>	9.2256	6.3%	11.6	9.3

<sup>35</sup> Median household income (MHHINCOME) data are taken from the Boston Renaissance Resource Kit, 2000

<sup>36</sup> Communities in italics are cities and the remaining are towns

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