State Zoning Legislation and Local Adaptation:
an evaluation on the implementation of Massachusetts Chapter 40R Smart Growth Legislation

by

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Master of Applied Economics
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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

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Abstract

The Smart Growth Zoning Overlay District Act (M.G.L. Chapter 40R, the Legislation) was issued in March 2005 with the mission to substantially increase the supply of housing, especially for low- and moderate-income households, and to incentivize Smart Growth land development patterns. Municipalities participate in this program by voluntarily adopting a Smart Growth zoning district in their local zoning ordinance/by-laws which allows dense housing development as-of-right. Participating municipalities will receive a Zoning Incentive Payment upon creating the district, based on the additional number of housing units allowed as-of-right under 40R compared with base zoning, and a Density Bonus Payment for each new unit built in the district. They will also have priority when competing for other state discretionary subsidies. As of December 2013, thirty-three 40R Smart Growth Overlay Districts (40R District) have been approved in thirty-two Massachusetts communities, with an aggregate area of 1,436 acres, and a total number of 12,350 Future Zoned Units; another three 40R districts are pending or under review. Ten 40R Districts have projects (or project phases) that have been built and put into use.

This study aims to give a diagnostic evaluation on the current and potential effectiveness of the Legislation in achieving the goals of facilitating quality housing production and promoting Smart Growth. The evaluation is set in the context of housing development and land planning in Massachusetts, which is also the background of the Legislation, and based on four 40R cases from four different municipalities, each of which has adopted local zoning ordinance/by-laws, created a 40R district, and completed development under 40R. In each case, the Smart Growth qualities of the development are evaluated against a set of qualitative criteria developed from the Smart Growth principles outlined in the Legislation, with reference to prevailing Smart Growth standards used in the profession and feedback from 40R’s implementers. The role of 40R in leading to these development results are then analyzed, which highlights the prospect of 40R’s application and impact in the future.
The main conclusions are:

Generally speaking, 40R plays an important role in helping communities achieve their own vision of Smart Growth and housing production by resolving the site, financial, or other development obstacles that are imbedded in the local development context and base zoning. This success is achieved through incentive-based stakeholder cooperation, an indispensable part of the entire 40R zoning and (project) permitting process. Also, the Legislation provides a very general and broad description of Smart Growth principles, and therefore each community may interpret and define Smart Growth standards according to local needs. Being flexible, adaptable and context-sensitive is key to creating opportunities where various stakeholders find common interests in establishing partnerships around 40R. Moreover, when used appropriately, 40R as a zoning tool, could potentially have larger impacts in facilitating Smart Growth and housing production over a longer period than other policies that are based on a single project.

However, in some cases, being flexible and sensitive to local context seems to have gone too far, and as a result, offset some of the benefits promised by 40R, such as housing being in close proximity to jobs and amenities, streamlining the permitting process, etc. The reasons for this drawback come from both 40R itself and the context in which 40R operates. Some requirements of 40R are too vague and allow a zoning district or project to gain 40R status and incentive payments even though it fails to meet most of the Smart Growth principles outlined in the Legislation. The recent amendment to the 40R Regulations tries to solve this problem by setting more straightforward and explicit requirements; the results of these changes remain to be seen. In terms of barriers, there are general concerns about and oppositions to Smart Growth from the neighborhood, local government, and development community, who tend to use their power as stakeholders to resist Smart Growth policies. They are particularly resistant to a zoning policy like 40R for fear that it will allow Smart Growth types of development as-of-right. The home-rule tradition and a lack of regional planning for Smart Growth land use further weaken the legislative and regulatory foundations of 40R. 40R has limited leverage to overcome these context barriers; its effectiveness in facilitating Smart Growth will remain confined by the development context at least in the near future.

**Key words:** Smart Growth, Zoning, Chapter 40R, Massachusetts

**Thesis Supervisor:** Terry S. Szold

**Title:** Adjunct Professor of Land Use Planning
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1. Introduction

1.1 Background of 40R legislation and its overall implementation

The Smart Growth Zoning Overlay District Act, Chapter 149 of the Acts of 2004, codified as M.G.L. Chapter 40R, was issued in March 2005. It aims to substantially increase the supply of housing, especially those for low- and moderate-income households, and to encourage compact, mixed-use, pedestrian-friendly, and environmental-friendly development patterns, by increasing the amount of land zoned for dense housing and providing a subsidy to decrease project costs.

40R encourages municipalities to create dense residential or mixed-use Smart Growth zoning districts including a high percentage of affordable housing units located near transit stations, in areas of concentrated development such as existing city and town centers or commercial districts, and in other “highly suitable locations” – those that are highly suitable for residential or mixed use development by virtue of their infrastructure, transportation access, and existing underutilized facilities. Projects must be developable under a community’s Smart Growth zoning adopted under Chapter 40R, either as-of-right or through a limited plan review process akin to site plan review. Upon state review and approval of a local overlay district, communities become eligible for payments from a Smart Growth Housing Trust Fund, as well as other financial incentives, including a Zoning Incentive Payment granted upon creation of the district. These are based on the projected number of additional new units that could be built on Developable or Underutilized Land under the Smart Growth Zoning in excess of what would previously have been allowed as-of-right through the underlying zoning. Another financial incentive includes a Density Bonus Payment upon the issuance of a building permit for each such additional unit, and priority when being granted other state discretionary subsidies.

1.1.1 Legislation background and goals

The basis of Chapter 40R is the 2003 report “Building on our Heritage: A Housing Strategy for Smart Growth and Economic Development” published by three authors from the Commonwealth Housing

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Task Force (CHTF), a coalition of business and community leaders facilitated by The Boston Foundation. Aimed to provide housing policy recommendations for legislative consideration, the report analyzed the housing and community development dynamics of the Commonwealth, and identified two key reasons for the failure of housing production to meet demand and the resulting high housing prices and rents: 1) A shortage of land zoned for higher density residential development, and 2) resistance to higher densities resulting from a municipal fiscal structure imposing clear financial disincentives against additional housing.¹

Based on these findings, the report recommends “an innovative mix of financial incentives and regulatory flexibility intended to address both of these challenges, which was expected to result in an excess of ‘zoned land’ suitable for higher density, higher quality residential development.”² Municipalities would adopt so-called “smart growth” zoning overlay districts including as-of-right residential development as a result of state financial incentives including absorption of education costs resulting from additional school children. As a result, market mechanisms, presently constrained by restrictive zoning, would be restored to adjust housing production. In the long-run, such a land surplus would help keep housing supply in pace with housing demand, and avoid a soar in land and housing prices in the next construction circle. The ultimate goal is to restore the comparative advantages enjoyed by the Commonwealth.³

In response to this report, the Legislature adopted M.G.L. Chapter 40R (“the Legislation” or “the statute”) in June 2004. The Legislation drew heavily from the CHTF report, providing incentives for voluntary municipal adoption of “Smart Growth zoning” overlay districts. The goal is to encourage Smart Growth as “a principle of land development” that

> “emphasizes mixing land uses, increases the availability of affordable housing by creating a range of housing opportunities in neighborhoods, takes advantage of compact design, fosters distinctive and attractive communities, preserves open space, farmland, natural beauty and critical environmental areas, strengthens existing communities, provides a variety of transportation choices, makes development decisions predictable, fair and cost effective and encourages community and stakeholder collaboration in development decisions.”⁴

The accompanying regulations (“the Regulations”), 760 CMR 59.00, were adopted by the Department of Housing and Community Development (DHCD) in March 2005 after two reviews within two public

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⁴ The Smart Growth Zoning Overlay District Act, M.G.L. Chapter 40R § 1 (2005)
hearings. The school funding component of the recommendations was adopted as M.G.L. Ch. 40S in November 2005. In November 2013, DHCD adopted amendments to the original regulations.

1.1.2 Overall implementation

As of December 2013, thirty-three 40R Smart Growth Overlay Districts (40R District) have been approved in thirty-two Massachusetts communities, with an aggregate area of 1,436 acres, and a total number of 12,350 Future Zoned Units; another three 40R districts are pending or under review. In seventeen 40R Districts, projects have been built or building permits have been issued. The total number of built or permitted units is 2,084. (Fig 1.1)

Fig 1.1 Approved 40R districts

Data source: Department of Housing and Community Development
1.2 Literature review

On Chapter 40R Legislation

To-date there is no systematic evaluation of the impacts of the Legislation and Regulations on the state's Smart Growth development.

Verrilli and Raitt (2009)\(^1\) conducted a study to examine the adoption and implementation of Chapter 40R in the 27 communities that had established 40R districts and approved local 40R zoning bylaws as of August 2009. This study provides rich quantitative and qualitative data including the location, size, and basic zoning provisions of each district, the amount of 40R incentive payments made and other public funding associated with each district, as well as the 40R process in each community and the key stakeholders' feedbacks on the process. However, the primary focus of this study is on the Legislation's effectiveness in creating 40R districts and the housing development potential in local communities, rather than on the Smart Growth qualities of the projects built under 40R.

Chaffee (2008\(^2\))'s \textit{a priori} evaluation on the Legislation compares the statute with M.G.L. Chapter 40B Massachusetts Comprehensive Permit Act, a state statute which enables local Zoning Boards of Appeals to approve affordable housing developments under flexible rules if at least 20-25% of the units have long-term affordability restrictions. Chaffee asserts that the housing mandates of 40B has "stimulated undesirable consequences in terms of both land consumption and community opposition," while Chapter 40R "maintains a higher degree of local control than Chapter 40B" which, although it "is also checked by the imposition of state-wide goals...allows communities to envision their own vibrant communities while ensuring land is used wisely and adequate housing stocks are built"\(^3\). In response to prevalent criticisms of Chapter 40R, such as that it "surrenders local control over the traditionally decentralized zoning system," Chaffee argues that "this fear should essentially be disregarded because after a municipality's smart growth plan has been adopted, the municipality has the opportunity to review projects based on design standards specified in their smart growth zoning application"\(^4\) and "the design standards and the community's initial delineation of the smart growth district boundaries allow communities to retain a reasonable degree of local control."\(^5\) Unlike the Chapter 40B process, where community members' only recourse is to leverage political pressure on local officials to deny


\(^3\) Ibid (pp.183-184).


\(^5\) Ibid (p.206).
a CP, the Chapter 40R process of adopting a smart growth district encourages local deliberation and the incorporation of a wide variety of interests through public notice, hearings and comment. This analysis provides a hypothesis of the dynamic between state-wide goals and local control during the implementation of the statute and Regulations, which could be tested by a comparison of 40R districts and projects among the communities.

**On Smart Growth**

There have been extensive studies on Smart Growth, including those evaluating its normative values, its goals and implementation principles, and the nature and success of policies, professional guidelines, techniques and other implementation strategies.

A number of academic studies discussed the history and definition of Smart Growth, and its normative values in ethical, philosophical, ecological, social, and legal perspectives.

Szold (2002) pointed out that “the concept of smart growth developed from statewide growth management legislation dating from the 1970s and 1980s. Specific smart growth legislation began with Maryland Governor Parris Glendening’s pioneering legislation in 1997, and continues today to extend to other initiatives from New Jersey to the West Coast.” Maryland’s state Smart Growth and Neighborhood Conservation Program outlined three goals, including 1) preserve remaining natural resources, 2) support existing communities and neighborhoods by targeting state resources to support development in areas where infrastructure is already in place or planned, and 3) save taxpayers from the unnecessary cost of building infrastructure required to support low-density, land-expensive development beyond where infrastructure already exist. A common thread in the different statewide initiatives is “the array of incentives and requirements to direct public and private investment away from the creation of new infrastructure and development that spreads out from existing built areas.” From a municipal and regional development perspective, the International City/County Management Association defines Smart Growth as a development strategy that “…invests time, attention, and resources in restoring community and vitality to center cities and older suburbs. New smart growth is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses (than the status quo). It also preserves open space and many other environmental amenities.”

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1. Ibid (p.207).
Weiskel (2002) based his ethical and ecological discussion of Smart Growth on Leopold’s (1966) argument for “a land ethic,” which refers to the relationship between man and the human environment, a notion that “the despoliation of the land is not only inexpedient but wrong.” \(^1\) Weiskel argues that from the perspective of basic dynamics of populations in ecosystems, Smart Growth “will need to recognize and embrace the fact that in healthy populations, as in healthy individuals, growth is a phase through which life forms move on the way to maturity. Continuous growth is not possible in healthy organisms or healthy populations. It is, in fact, the sign of pathology and imminent death.” \(^2\)

Kayden (2002) discussed the validity of Smart Growth regulation from a legal perspective. He argued that the main engagement of a Smart Growth regulatory regime is “restricting or influencing the location, type, density, layout, design, social/ economic composition, associated infrastructure, and pace of private development in order to promote a government-preferred land development pattern.” Its basis is a state’s police power, which allows state and local governments to enact regulations promoting and protecting the harmonious quartet of health, safety, morals and general welfare. By reviewing the leading cases related to regulatory takings – the legal framework that according to Kayden is most relevant to Smart Growth – Kayden concluded that Smart Growth is more likely to be attacked when it is used in a “case-specific” pattern. Therefore, “the constitutional validity of smart growth’s regulatory regime partly depends on detaching the geography of winners and losers from the geography of smart growth. One approach worthy of renewed attention from planners and lawyers is imbedding compensatory mechanisms within some of smart growth’s regulatory architecture.” \(^3\)

Nelson (2002) defined and interpreted Smart Growth goals in a holistic set of empirical goals and principles which could be used to guide planning and development practices (table 1.14). He used a sample of six cases – two at the project scale, two at the community scale, and another two at the regional scale – to demonstrate high-quality Smart Growth and low-quality Smart Growth at different development scales.

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### Table 1.1: Smart Growth Goals and Principles

<table>
<thead>
<tr>
<th>Goals</th>
<th>Principles</th>
</tr>
</thead>
</table>
| 1. **Preserve, if not advance, public goods such as air, water and significant landscapes.**  
  Certain resources are available to everyone, so no one can be excluded, and adding one more person does not deprive another of its enjoyment. Yet polluting the air does deprive people of its enjoyment. | - Prevent further expansion of the urban fringe.  
- Use a systems approach to environmental planning - shifting from development orientation to basins or ecosystems planning.  
- Preserve contiguous areas of high-quality habitat, as large and circular as possible if it is at or outside the urban fringe.  
- Design to conserve energy. |
| 2. **Minimize, if not prevent, adverse land use impacts.**  
Certain land uses have adverse effects on others, such as placing a landfill in the midst of an area planned for new community development. | - Prevent negative externalities between land uses.  
- Separate auto-related land uses from pedestrian-oriented uses. |
| 3. **Maximize positive land use impacts.**  
Some land uses have synergistic effects on other land uses, such as neighborhood schools on residential development. | - Achieve jobs/housing balance within three to five miles of development.  
- Design the street network with multiple connections and relatively direct routes.  
- Provide networks for pedestrians and bicycles as good as the network for motorists.  
- Incorporate transit-oriented design features.  
- Achieve an average net residential density of six to seven units per acre. This includes clustering housing to provide open space within sites. |
| 4. **Minimize public fiscal costs.**  
Smart growth should minimize the cost per unit of development to provide public facilities and services. | - Channel development into areas that are already disturbed. |
| 5. **Maximize social equity.**  
Smart growth should maximize jobs/housing balances within small areas; provide equal accessibility to work, shopping, services and leisure; ensure life-cycle housing opportunities within neighborhoods; and offer socioeconomic balance within neighborhoods. | - Provide for affordable single-family and multifamily homes for low- and moderate-income households.  
- Provide life-cycle housing. |

A number of professional guidelines and policies recommendations have been developed with a specific focus on one or a few of the Smart Growth principles. They usually start by stating the potential community benefits of these principles and then suggest policies and technical tools accompanied with
an implementation roadmap to realize the predicted benefits.¹

Another group of researchers focus on evaluating the empirical impacts of so-called Smart Growth principles and strategies. These evaluations vary in the range of Smart Growth principles that are considered and the scales of analysis.

Ingram, Carbonell, Hong, and Anthony (2009)² adopted a holistic approach and used state-level data to evaluate the Smart Growth policies in a sample of eight states, four of which had well-established statewide smart growth programs. It includes both an a priori measure based on the regulatory framework and an evaluation of the on-the-ground performance in achieving the five commonly shared smart growth goals: promote compact development, protect natural resources and environmental quality, provide and promote a variety of transportation options, supply affordable housing, and create positive fiscal impacts. Different from this holistic approach, a number of researchers focus on one or a few Smart Growth strategies or policies and use quantitative data to evaluate their impacts. Such evaluations are often initiated by a specific concern about Smart Growth expressed by an affected party. For example, studies have been conducted on the impact of a development location (e.g. inner city versus outer-ring suburbs, on vacant or underutilized land versus greenfields) on a municipal budget,³ that of housing density on property values,⁴ etc.

Ingram, et al.’s evaluation compared the performances before and after the establishment of Smart Growth programs, but didn’t analyze the ways these changes happened during the policy implementation process. The other group of evaluations directly related implementations to their results, but didn’t consider the interrelationship between the various aspects of Smart Growth strategies and results. Besides, both evaluations focused on aggregate results at the regional or municipal levels, that is, the levels the Smart Growth policies and strategies were established. They didn’t look into

¹ There are numerous examples of such studies conducted by scholars, researchers, and practitioners, and published by research institutions, NGOs (e.g. Smart Growth America, http://www.smartgrowthamerica.org/), consulting companies, and government agencies. For an example of policy and strategy recommendations, see: McConville, M., & et al. (2013). Creating Equitable, Healthy, and Sustainable Communities: Strategies for Advancing Smart Growth, Environmental Justice, and Equitable Development (No. EPA 231-K-10-005). US Environmental Protection Agency (EPA). Retrieved from http://www.epa.gov/smartgrowth/pdf/equitable-dev/equitable-development-report-508-011713b.pdf. For an example of technical tools, see: Massachusetts Smart Growth Toolkit. (n.d.). Massachusetts Executive Office of Energy and Environmental Affairs (EEA). Retrieved from http://www.mass.gov/envir/smartgrowth toolkit/. Some guidelines focus on a specific field such as density, mixed-use; others provide a comprehensive checklist, for example, New Jersey’s “Smart Growth Scorecard: Proposed Development (2002)”.


individual development projects where these strategies influenced and changed the decisions of key stakeholders.

Herr (2006) focuses on the conjunction of Smart Growth and affordable housing in the context of Massachusetts, defined as “smart growth affordability,” meaning “achieving compact housing, some of which is affordable, located where a mix of nearby uses and transportation alternatives help to reduce auto dependency.” Based on information from focus groups and interviews, Herr outlines three indispensable conditions for smart growth affordability to happen: “an idea about wanting such development in a specific place, and about how it might be done;” “a way to make the numbers (i.e. project financing) work in that marketplace context;” and obtaining “significant community support.” The three conditions include: 1) the “idea” usually comes from a vision of a private developer, but occasionally it is also initiated by local staff and officials. 2) The most common methods to “make the numbers work” include changes in zoning and other development regulations that are targeted to Smart Growth sites, (state) financial contribution or subsidies, mandatory inclusionary zoning, and incentive zoning. A major challenge of using these methods is to “craft and combine” them “in a way which is compatible with the existing physical, political, and economic context” to achieve a market context change. 3) Fostering and maintaining a culture of support is a long-term task which relies on a number of institutional, managerial, educational, and propagandistic efforts to make smart growth affordability the “new mainstream.” Herr’s definition of smart growth affordability overlaps with the goal of the 40R Legislation; his analysis of the strategies to achieve smart growth affordability in the Massachusetts context provides reference of the obstacles of Smart Growth that 40R is faced with, and the effectiveness of 40R in overcoming these obstacles.

1.3 Research question and methodology

1.3.1 Research Question

This research aims to give a diagnostic evaluation on the Chapter 40R Legislation and Regulations. By analyzing the Smart Growth qualities of the completed (sample) 40R developments, and the reasons for these results, the study tries to answer: How effective have the Legislation and the Regulations been in achieving the declared goals of encouraging housing production and promoting smart growth development? What characteristics of the Legislation may explain such outcomes, and are they beneficial to the overall success of the Legislation and Regulations? Is there any aspect of the Legislation

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and/or Regulations that may affect their effectiveness

1.3.2 Case study

1) Case selection

This study chooses a sample of four 40R districts to evaluate the impacts of the Legislation and Regulations on Smart Growth. All of the sample districts have completed 40R project(s) or project phases whose qualities could be observed. These districts vary in size and land configuration and resulted in different scales and types of developments, which show a diversity in the outcomes of 40R’s implementation (table 1.2). Finally, these cases are drawn from communities with different demographic and economic conditions (table 1.3), and land and housing development characteristics (table 1.4). The purpose is to analyze whether the implementation outcomes might have been influenced by contextual factors, and whether such an influence has enhanced or impaired the effectiveness of 40R as a Smart Growth zoning policy.

2) Information resources and information collection methods

The information about sample 40R districts and developments comes from two major sources. The first includes formal documents, such as official documents regarding master plans, zoning, housing plans, planning and development policy, 40R district applications submitted to DHCD by communities, 40R project proposals and approvals, and minutes of 40R related public meetings/hearings. The second source is information from interviews with key stakeholders, primarily city and town planners, town managers and developers. Interview questions focus on 1) What are the aims of adopting the 40R district and/or proposing the project under 40R? Was there opposition to the adoption of the 40R district or project? 2) What features of this project do you think reflect “smart growth” principles? What aspects of the project do you think could have been better planned or developed? 3) What are the roles of the 40R zoning in achieving the results?

To provide a background for analyzing these 40R districts and projects, interviews were also conducted with experts and professionals in the fields of land use, planning and Smart Growth, housing policy, and real estate development in Massachusetts, not limited to those who were involved in the development and implementation of the Legislation and the Regulations, and/or local 40R zoning bylaws. Interview questions focused on the background of the State’s adoption of the Legislation and the Regulations, the policy and market environment of housing development in the Boston Metropolitan area, and the typical response from stakeholders regarding Smart Growth, the Legislation and the Regulations, and other zoning, planning and housing policies.
Table 1.2: 40R districts and projects cases

<table>
<thead>
<tr>
<th>40R District</th>
<th>Total Acres (Developable acres)</th>
<th>Finished 40R Project(s) or project phases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td>Project Name</td>
</tr>
<tr>
<td>Gerrish Ave (Chelsea)</td>
<td>2.82 (2.73)</td>
<td>Janus Highland Apartment, Box Works Homes, Atlas Lofts</td>
</tr>
<tr>
<td>Downtown (Reading)</td>
<td>25.65 (13.38)</td>
<td>30 Haven St.</td>
</tr>
<tr>
<td>Our Lady of Mercy (Belmont)</td>
<td>1.50 (1.5)</td>
<td>Oakley St.</td>
</tr>
<tr>
<td>Planned Village Dev. (Lynnfield)</td>
<td>80.25 (65.09)</td>
<td>MarketStreet, Arborpoint Apartments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Types of development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120 Multifamily housing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>53 Multifamily units, 18,533 SF Ground floor commercial uses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17 units (2 Single-family, 15 Townhouses)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180 multifamily units; up to 530,000 SF office and retail</td>
</tr>
</tbody>
</table>

Table 1.3: Case context – community economic & demographic characteristics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelsea</td>
<td>$30,161</td>
<td>$14,628</td>
<td>23.3%</td>
</tr>
<tr>
<td>A traditional immigrant gateway city and the second most densely populated city in Massachusetts; located directly across the Mystic River from Boston; has commuter rail and bus services to Boston.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>$77,059</td>
<td>$32,888</td>
<td>2.6%</td>
</tr>
<tr>
<td>A mature suburban town located 12 miles north of Boston; has commuter rail service to Boston; has access to several major highways (I-93, I-95/MA Route 128, MA Route 129)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belmont</td>
<td>$80,295</td>
<td>$42,485</td>
<td>4.4%</td>
</tr>
<tr>
<td>A small streetcar suburb next to Cambridge; has bus service to Cambridge and commuter rail service to Boston.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lynnfield</td>
<td>$80,826</td>
<td>$39,560</td>
<td>2.5%</td>
</tr>
<tr>
<td>A traditional New England residential suburban town 15 miles north of Boston; has access to several major highways (US Route 1, I-95/MA Route 128)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State level</td>
<td>$50,502</td>
<td>$25,952</td>
<td>9.3%</td>
</tr>
<tr>
<td>Housing stock (2000)*</td>
<td>% of Detached Single-family units</td>
<td>% of Rental Home Value</td>
<td>Median Gross Rent</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------</td>
<td>-----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>7.8%</td>
<td>3.8%</td>
<td>$149,200</td>
</tr>
<tr>
<td></td>
<td>33.8%</td>
<td>11.7%</td>
<td>$271,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$450,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$328,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,141</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$572</td>
</tr>
</tbody>
</table>
| Notes: *Housing types other than detached single-family and multifamily units are not listed here, because the two listed numbers are sufficient to show the housing typology features of the selected cases. **Subsidized Housing Inventory (SHI), defined as "the list compiled by the Department (the Department of Housing and Community Development) containing the count of Low or Moderate Income Housing units by city or town in 9/2008 Comprehensive Permit, Low or Moderate Income Housing: DHCD maintaining the SHI to measure the state's stock of SHI Eligible Housing, which may include units developed through issuance of a Comprehensive Permit or under M.G.L. chs.40A, c.40B, and other statutes, regulations, and programs, so long as such units are subject to a Use Restriction, and an Affirmative Fair Marketing Plan, and they satisfy the requirements of guidelines issued by the DHCD. See 760 CMR 56.02; "Definitions" and 760 CMR 56.02(2); "Subsidized Housing Inventory".
1.3.3 Smart Growth quality evaluation criteria

1) Chapter 40R’s interpretation of Smart Growth

Due to the diversity of the sample 40R developments, the uniqueness of the local context in each case, and the complexity of the zoning and development process, this study adopts a flexible evaluation approach to analyze the Smart Growth qualities of each 40R development. A set of qualitative evaluation criteria was developed based on the Smart Growth principles in the Legislation and the requirements in the Regulations, which were then interpreted and adjusted with reference to existing Smart Growth checklists / scoring index and interviewees’ answers.

First, the Legislation outlines nine development principles of Smart Growth which are interpreted into a set of 40R district qualification standards in the Regulations (table 1.5). The minimum requirements include aspects of development location, baseline density, housing mix and affordability, and permitting procedures. Under these requirements, communities have certain freedom to modify the dimensional standards, and affordability, mixed-use, and open space requirements.

Table 1.5: Chapter 40R Smart Growth Standards

<table>
<thead>
<tr>
<th>Minimum requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Location</td>
</tr>
<tr>
<td>As least one of the three below:</td>
</tr>
<tr>
<td>1. areas near transit stations, including rapid transit, commuter rail and bus and ferry terminals;</td>
</tr>
<tr>
<td>2. areas of concentrated development, including town and city centers, other existing commercial districts in cities and towns, and existing rural village districts;</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Density</td>
</tr>
<tr>
<td>Housing density allowed in the developable land area of a proposed district must be at least:</td>
</tr>
<tr>
<td>• 8 du/acre for single-family homes</td>
</tr>
<tr>
<td>• 12 du/acre for 2 and 3 family buildings</td>
</tr>
<tr>
<td>• 20 du/acre for multi-family housing</td>
</tr>
<tr>
<td>Housing</td>
</tr>
<tr>
<td>• Affordability: no less than 20% of the residential units constructed in projects of more than 12 units be affordable, contain mechanisms to ensure that not less than 20% of the total residential units constructed in each Chapter 40R district will be affordable</td>
</tr>
<tr>
<td>• Diversity: permit a mix of housing such as for families, individuals, persons with special needs, or the elderly</td>
</tr>
<tr>
<td>Permitting</td>
</tr>
<tr>
<td>• Chapter 40R development 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.</td>
</tr>
<tr>
<td>• Local Chapter 40R zoning ordinance must define the manner of review for individual projects.</td>
</tr>
<tr>
<td>Optional standards</td>
</tr>
<tr>
<td>Mixed use</td>
</tr>
<tr>
<td>• may provide for mixed use development</td>
</tr>
</tbody>
</table>
Dimensional standard

- may modify or eliminate the dimensional standards contained in the underlying zoning in order to support desired densities, mix of uses and physical character;
- may designate certain areas within a smart growth zoning district as dedicated perpetual open space

Some of these standards were designed for a district instead of a project, and some of the standards, such as “… support desired densities, mix of uses and physical character,” are too general as evaluation criteria. A number of Smart Growth checklists/scoring indexes that are applicable to development projects have been developed by state/municipal authorities and professional organizations. Some of the most popular ones include “Smart Scorecard for Development Projects” (Congress for the New Urbanism, 2002), “Smart Growth Criteria Matrix (City of Mobile, AL), “Smart Growth Scorecard: Proposed Development (New Jersey, 2002), “Maryland Smart Growth Scorecard” (Maryland, 2002), “Smart Growth Matrix” (Austin, TX), “TND Design Rating System, Version 2.2” (The Town Paper, 2005), “Smart Growth Development Checklist” (City of New Westminster, BC, 2004), “Charlotte, NC Sustainability Index” (City of Charlotte, NC, 2005), and “LEED ND Scoring indicators” (US Green Building Council, 2009). These checklists/scoring indexes provide qualitative and quantitative measurements for Smart Growth features related to the 40R requirements. Referring to these measurements, the requirement to “support desired densities, mix of uses and physical character” is interpreted as a number of design elements such as pedestrian-friendly streetscape design, building and parking lot configuration, circulation, and architecture style; the “location” requirement is understood as the availability and accessibility of various amenities and services within ¼ mile walking distance.

Third, in order to tailor the standards to implementation practices, one question was raised to all interviewees – “What features do you think a project should have to be qualified as Smart Growth development?” Since this question was asked as background for research on the 40R legislation and development, it is reasonable to suggest that the Smart Growth features noted by the interviewees are more directly related to the development environment in Massachusetts and to the goals of 40R. Below are a list of Smart Growth features, roughly arranged by the frequencies they were mentioned by interviewees and the importance they were given by them:¹

- (Housing has) good access to transit, commercial, civic and other services and amenities
- (New development) Located in urban settings served with public infrastructures instead of in greenfield or in isolated locations
- A single development (not in close proximity to exiting town/city centers) may be large enough

¹ For example, two interviewees emphasized that “Access” to transit and to existing services and amenities is “the key piece of Smart Growth”, “on top of the list”. Their interpretations of Access overlapped with “location” and “housing being in proximity of other uses” features.
to form its own pattern – including a variety of uses and housing types, providing a variety of employment opportunities, and placing housing within walking distance of other uses.

- Use pedestrian-friendly streetscape design to improve walkability and help reduce vehicle uses
- Energy Efficiency
- Compact development and density
- Local context sensitive design
- Brownfield development and cleaning-up of contaminated land
- Repurposing existing structures, infill or redevelopment of underutilized land
- Open and green space preservation

The interviewees also noted that for a development project to be successful, it must be sensitive to local context and to the community’s needs. Not all the Smart Growth features are achievable or appropriate in every context, for example, preserving open space won’t apply to an infill site in a dense and substantially developed urban setting, and it is inappropriate to claim that lacking this element will diminish the Smart Growth quality of the project. This is consistent with this study’s flexible evaluation approach. Rather than using this list as a fixed matrix to score the sample 40R development, I will examine each case individually, referring to the popular Smart Growth criteria, describe the particular features of each development, and explain how such features reflect Smart Growth principles in each particular context.
2. 40R Districts and Developments Evaluation - Cases Analysis

2.1 Chelsea case

2.1.1 40R District and Development

Chelsea's 40R district — Gerrish Avenue Smart Growth Overlay District — located in the Box District, used to host a cluster of box manufacturing companies as early as 1903 and bedding and mattress companies beginning in the 1950s. The district gradually declined and the nearby residential areas began showing signs of blight in the 1960s when the companies no longer operated in the area. In 1986, the area was rezoned from industrial to mixed industrial/residential, but the City was experiencing fiscal difficulty and couldn't fund infrastructure improvement. Private developers had little interest in housing development in this neighborhood as well. In the 1990s, the Box District was identified as a focus area in the city's effort to acquire declined factories and transform them into residential uses.

In 2005, a local non-profit organization, Chelsea Neighborhood Housing Services (now called The Neighborhood Developers, TND), worked with the City, the neighborhood, and a private developer, Mitchell Properties, to develop a comprehensive revitalization plan for the area. Based on this plan, they proposed converting 2 buildings in a vacant mill complex into housing and clearing the others to build 3 new buildings next door and two nearby (Fig 2.1). After discussing zoning approval options with city officials, including possibly using Chapter 40B, they decided to start the first phase of development (18 rental units) by applying for a special permit and variance while pursuing the creation of a 40R district for the rest of the project.¹

![Fig 2.1 Box District prior to 40R development](image-url)

The Gerrish Avenue Smart Growth Overlay District (SGOD) ordinance (Chelsea Zoning Ordinance Sec. 34-183.) was approved by the Chelsea City Council in June 2006, and the 40R district by DHCD on July 2006. It includes two sub-districts scattered in the Box District neighborhood with an aggregated area of 2.73 acres (Fig 2.2). Compared with the R2 base zoning, 40R zoning allows multifamily dwellings as-of-right, and allows a maximum of 125 units to be built at a density of 45.79 units/acre across the district, 93 units more than that in the base zoning (table 2.1).

![Proposed 40R District](image)

**Fig 2.2 Gerrish Avenue Smart Growth Overlay District**

*Source: Chelsea, MA. Gerrish Avenue 40R Application, Attachment 3-1: Developable Land Plan*

<table>
<thead>
<tr>
<th>District Area (acre)</th>
<th>R2 base-zoning</th>
<th>40R zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max density (units/acre)</td>
<td>Max # of units</td>
</tr>
<tr>
<td>Sub-district 1</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Sub-district 2</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>40R District</td>
<td>12 avg.</td>
<td>32</td>
</tr>
</tbody>
</table>

Three 40R projects were built, offering 120 units of housing, which as a whole was the largest residential development in Chelsea in many years. No commercial, institutional or recreational uses were included (table 2.2, Fig 2.3). 131 parking spaces were provided at a ratio of 1.09 space/unit, including 19 spaces of on-street parking and 112 spaces in surface parking lots and garages.

**Table 2.2 Chelsea 40R Development Components**

<table>
<thead>
<tr>
<th>Units</th>
<th>Type</th>
<th>Affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janus Highland Apartments</td>
<td>41 Rental, Flats and townhouse-style</td>
<td>41 units (100%) at or under 60% AMI, including 4 under 50% AMI and 4 under 30% AMI</td>
</tr>
<tr>
<td>Box Works Homes</td>
<td>26 Condominium; townhouse-style</td>
<td>14 units (54%) at 80% AMI</td>
</tr>
<tr>
<td>Atlas Lofts</td>
<td>53 Rental, Studios and lofts</td>
<td>Primarily market-rated, approximate 130% AMI</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>55 units (46%) affordability: 34% of total units under 60% AMI, 12% under 80% AMI</td>
</tr>
</tbody>
</table>
2.1.2 Smart Growth features of 40R district and projects

Access to transit and other services & amenities

This 40R district is located near a number of transit, commercial, and civic facilities (Fig 2.4). Four MBTA bus routes (111, 112, 114, 116/117) have stops within ¼ walking distance, providing connection to the regional transit hub North Station in Boston and two Blue Lines stations (Wood Island Station and Maverick Station) in East Boston. Like most of the bus stops in Chelsea, these bus stops have clear signs, up-to-date schedule tables, and shelters that are well-furnished with benches and area maps and are placed on wide sidewalks (Fig 2.5). A commuter rail (Newburyport/Rockport Line) that connects to North Station and the North Shore has a station within 1/2 mile distance from the 40R district.

The district is also within a ½ mile of Chelsea's downtown where the commercial corridor along Broadway provides a major local employment center and shopping destination. Bellingham Square is the city's transit hub and major gathering place. The district also has convenient access to civic amenities.
including City Hall, the public library, public schools, and churches. Open spaces and recreational places within walking distance include the Box District Park at the Gerrish Ave. and Highland St. intersection, and several small parks and playgrounds that are scattered in the southern dense residential neighborhoods. The city’s two major waterfront parks – the Mary O’Malley Waterfront Park along the Mystic River and the Merritt Park along the Charles River – are accessible by bus.

However, because the city’s major transit corridors align in the southwest-northeast direction, the 40R district is not well connected to the northwest part of the city, particularly the Mystic Mall and Everett Avenue area (Fig 2.6, yellow-color existing transit corridors). Mystic Mall currently hosts the city’s biggest grocery store, Market Basket, and many other businesses. Several residents in the Atlas Lofts noted that it is inconvenient to go to the grocery store other than by car. Moreover, according to the city’s Everett Avenue Urban Renewal District plan, this area will become the city’s new employment center with future development in light industry, professional services, hospitality, and food services. The accessibility to this area from the 40R district relies on a proposed connection between 40R district and on the proposed “Green Path” on the former CSX Grand Junction Secondary Track right of way within Chelsea. This multi-use path is planned as a part of the Silver Line extension, which will pass through Chelsea’s downtown area and the Box District, connecting the Everett Avenue Urban Renewal District to East Boston (Fig 2.6, green-color route). Designated bike lanes and pedestrian paths will provide northwest-southeast connections between key local nodes (Fig 2.7). Two gateway entries with bus stops are planned on the north edge of the 40R district (Fig 2.8). Without this new path and the accompanying pedestrian and bicycle routes, or other potential northwest-southeast connection infrastructure projects, the 40R district is at the risk of losing connection to the city’s new economic hub.

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1 The Box District Park was a part of the entire neighborhood revitalization, built after the completion of the 40R projects and open to public in summer 2012

Pedestrian-oriented design

Site and building dimensions and configurations

The aerial photo (Fig 2.1) and 40R district map (Fig 2.2) show that historically, in order to accommodate industrial uses, parcel sizes and existing structures' footprints in the 40R district are much larger than those in Chelsea's traditional residential neighborhood. Therefore, there is a risk that new development could be over-scaled and create a pedestrian-unfriendly streetscape. Luckily, the 40R development avoided this risk by adjusting dimensions and configurations of streets and buildings.

First, 40R district zoning reduces the setback standard from 10' as in R2 zone to 5' to bring the buildings closer to pedestrians. These buildings also do not have fenced front yards as those on many existing residential neighborhood streets and on Broadway (between the Broadway @ Gerrish Ave and Broadway @ Marlborough St. intersections). This helps replace the previous car- or truck-dominant image with a residential neighborhood image. (Fig 2.10)
Second, following the 40R zoning requirement, all new buildings bordering streets face them, and use facade break, facade color change, or elevation change to create a dynamic streetscape. For example, The Box Works Homes along Library St. is constructed in two buildings, from the space between them, people can walk into a landscaped yard which is at the rear of Box Works Homes' buildings but in front of the Atlas Lofts building. This design creates a break in the long block and provides additional pedestrian access (Fig 2.3 site plan). A comparison with the industrial structure on the other side of the street shows the pedestrian-welcoming character resulting from 40R development (Fig 2.11). It is also an improvement to the existing residential neighborhood. As one interviewee noted, many people found it unpleasant to walk through those neighborhoods in the east-west direction because the blocks are too long. These two buildings also use different facade colors to create the visual perception of a series of facade sections, which roughly resembles the facade rhythm along the traditional residential neighborhood where the buildings have a smaller footprint. For another example, the Janus Highland Apartments building takes advantage of the elevation change on Highland St., by locating its long side along this street. The building is able to build more stories without creating a feeling of a “street wall” (Fig 2.12).
Pedestrian and parking facilities

Prior to 40R development, this area had limited pedestrian facilities. The City used 40R incentive payments to build sidewalks and street lights for the entire Box District. Outside the 40R district and Box District, the streets within walking distance provide mixed levels of pedestrian facilities. In areas near downtown, the streets have wide sidewalks, street lights, ADA-accessible curbs, as well as pedestrian signs, zebra stripes and safety islands at intersections (Fig 2.5). However, the north and east edges of the 40R district largely retain the street conditions of previous industrial zones. It relies on the proposed Green Path to add pedestrian facilities (Fig 2.8).

Parking is another drawback to the pedestrian-oriented notion of the 40R development. Since the 40R district has convenient access to multiple public transit services and the city center, it could contain less parking and save land for more productive uses. Compared with the base zoning, 40R zoning lowers the required parking ratio, explicitly encourages shared parking, and allows parking supply reduction on conditions related to public transit facilities and actual parking demand (table 2.3). The 40R development followed the public transit condition and adopted a 1.09 spaces/unit parking ratio. However, according to an interviewee who is familiar with the demographic features of the Box District, this has proven to be an over-supply, and some of the parking spaces are empty most of the time. In fact, the average car ownership in the neighborhood is 0.6 car/family, much lower than 1.09; moreover, the City passed an overnight on-street parking policy in 2012 requiring cars to be registered in Chelsea to be able to park on-street overnight. It is expected that this policy would reserve more on-street parking spaces for local residents and therefore reduce the reliance on off-street parking. In other words, the parking ratio in 40R zoning failed to take advantage of the existing public transit facilities and low car ownership rates to reduce car use and to increase land use efficiency.

<table>
<thead>
<tr>
<th>R2 Base zoning</th>
<th>2 spaces/unit for one- or two-family dwelling; 1.5 spaces/unit for dwellings in a building containing three or more dwelling units</th>
</tr>
</thead>
<tbody>
<tr>
<td>40R Zoning</td>
<td>Min parking ratio: 1.25-2 spaces/unit off-street resident parking; additional visitor parking spaces beyond the maximum 2 spaces/unit may be allowed through approval of Zoning Board of Appeals.</td>
</tr>
<tr>
<td></td>
<td>The use of shared parking to fulfill parking demands is strongly encouraged.</td>
</tr>
<tr>
<td></td>
<td>Minimum required amount of parking may be reduced by the Zoning Board of Appeals if the applicant can demonstrate that parking demands will be met due to factors such as shared parking program, the availability of surplus off-street parking in the vicinity of the use being served and/or the proximity of a bus or an MBTA transit station, the availability of public or commercial parking facilities in the vicinity of the use being served, age or other occupancy restrictions which are likely to result in a lower level of auto usage.</td>
</tr>
</tbody>
</table>

On the positive side, the majority of the off-street parking is located at the rear of the buildings and invisible from major streets, showing an improvement compared with some off-street parking in the existing residential neighborhood (Fig 2.13, Fig 2.14). However, once the proposed Green Path is built, the parking lot to the east of the Atlas building will be directly visible from the new pedestrian route. Additional investments and effort, for example in landscaping, will be needed to mitigate the negative impact of this parking lot on pedestrians.

**Efficient use of land – density**

Despite the unnecessary waste of land on surface parking, the 40R development still achieved an overall density of 44.5 units/acre, which is within the density limit of 40R zoning, but much higher than the density level initially proposed by the developers through a special permit & variance process (table 2.4), and the density requirement of the 40R Regulations.
Allowing high density was not uncontroversial. When the 40R district was in discussion in Chelsea, the average housing density in the city's residential neighborhood was about 20 units/acre, similar with the Regulations’ multi-family housing density standard. The Planning Board was reluctant to agree to higher densities for fear of negative impacts on traffic. However, the developers believed that building at 20 units/acre could not justify the cost of cleaning-up contaminated land and providing the amount of affordable units that were needed in the neighborhood (note that the affordable percentage of the 40R development is higher than is required by the Legislation). The City also supported higher density due to the district’s proximity to public transit nodes and city center. Therefore, the Planning Department offered to fund a study to determine the proper density in this neighborhood once the ordinance was approved. The study, conducted after the completion of the first development phase (18 rental units approved under Special Permit and variance), concluded that “Under this 35 units per acre threshold, residential development can be created as a density and construction typology that is affordable to Chelsea residents while still providing needed open space and parking,” and recommended “the redevelopment of these sites adhere to ... a density limit of approximately 35 units per acre”.

Table 2.4 Residential Density Comparison of base zoning and 40R zoning

<table>
<thead>
<tr>
<th></th>
<th>As-of-right density under R2 base-zoning</th>
<th>Proposed density under special permit/variance*</th>
<th>As-of-right density in Gerrish Ave. 40R overlay district</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-district 1</td>
<td>12</td>
<td>12.50</td>
<td>32</td>
</tr>
<tr>
<td>Sub-district 2</td>
<td>12</td>
<td>12.90</td>
<td>51</td>
</tr>
<tr>
<td>40R District</td>
<td>12 avg.</td>
<td>12.82 avg.</td>
<td>45.79 avg.</td>
</tr>
</tbody>
</table>

Note: * The development density proposed by the developers prior to the adoption of 40R district.

Source: City of Chelsea, 40R Application for Gerrish Avenue Smart Growth Overlay District, February 28, 2006

It turned out that with the help of site plans and renderings of proposed projects, the neighborhood was willing to accept even higher density than the recommended level, and the 40R district was approved by City Council allowing for 45.79 units/acre as-of-right. It’s worth mentioning that after the completion of these 40R projects, Chelsea adopted other zoning overlays in the Box District to develop the remaining sites. The Residential Planned Overlay District (RPOD) was crafted around another state subsidy program, the Housing Development Incentive Program (HDIP), allowing maximum residential densities of 35

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2 Housing Development Incentive Program (HDIP), codified as M.G.L. Chapter 40V, was initiated by the State in 2010 to support housing and economic development and neighborhood stability; the implementation regulations (760 CMR 66.00) was published in 2012. This program provides tax incentives to developers to undertake substantial rehabilitation of properties in Gateway Cities for sale or lease as multi-unit market rate housing. Housing Development Incentive Program, M.G.L. CHAPTER 40V, 760 CMR 66.00. Retrieved from http://www.mass.gov/hed/docs/dhcd/cd/hdip/hdip-regulatoryrequirements.pdf.
units/acre (RPOD 1) and 45 units/acre (RPOD 2) as-of-right\(^1\) (Fig 2.15); after adopting the RPOD in June 2012, a HD Zone was established in October 2012 to qualify for HDIP tax incentives. These new overlays will not directly impact the 40R projects, but they prove that the neighborhood is comfortable with high density residential development similar to the 40R projects. Therefore, the 40R projects will likely remain well suited to the neighborhood. Fig. 2.15 shows two examples of non-40R projects, the Chelsea Flats (under construction) and Highland Terrace (finished) that have visual consistency with the Box Works Homes and Janus Highland Apartments.

![Image](Fig 2.15 Residential Planned Overlay District)

Left: RPOD overlay district plan (Source: City of Chelsea Department of Planning and Development. Housing Development Incentive Program Plan, HDIP Zone and Plan: Exhibit III Map G. 2012, October 31).

Right: View A - Chelsea Flats, View B - Highland Terrance

**Other environmental features**

The 40R development created environmental benefits through the transformation of industrial land to residential use. First, the sites which had been contaminated from previously industrial uses were cleaned up; second, the Atlas Lofts kept and renovated the existing mill building structures instead of tearing them down and rebuilding; third, the new buildings were designed to Energy Star standards.

\(^1\) City of Chelsea Zoning Ordinance, Ord. of 6-20-2005, § 8.7; Ord. of 6-18-2012, §§ 1, 2. Retrieved from http://library.municode.com/HTML/14939/level3/PTICOOR_CH34ZO_ARTVIIIISPDI.html#PTICOOR_CH34ZO_ARTVIIIISPDI_S34-185REPLOVDIRP.
2.1.3 The roles and limitation of 40R zoning

*40R as a tool to accelerate neighborhood revitalization*

Generally speaking, the 40R development put abandoned industrial sites into productive use and provided high-quality affordable housing to the neighborhood. However, as noted by interviewees from both the City and the developers, since stakeholders already achieved a consensus to transform the neighborhood and had a shared vision of potential development. Therefore, it was likely that projects similar to the ones developed under 40R would be developed even without the 40R provision. In other words, despite the fact that the city's comprehensive neighborhood revitalization strategy for the Library Marlborough and Gerrish Avenue neighborhood had been contemplated for over 20 years before the adoption of the 40R district, and it wasn't until 2005 that “the initiative of CNHS in securing control of two major sites [meaning the Janus Highland Apt. site and Box Works Homes site, added by the author] within this neighborhood has generated momentum and enthusiasm for the realization of the intent to convert this former light industrial area into a vibrant residential community,” 2 40R wasn’t intended to change the overall development dynamic. Rather, it was a tactic within a larger development strategy to accelerate the implementation of the strategy.

As the first new projects in a declining area with abandoned mills, vacant land, and deteriorated infrastructure, the 40R development projects signaled a transformation, changed people's perception of the neighborhood, and helped build real estate market’s confidence in investing in the area. As noted by interviewees, this area used to be one of the city’s lowest income areas, but the projects following 40R development in the Box District have a larger market-rate proportion; it is expected that in the near future, this neighborhood will be able to attract higher-income residents, and the market will support a 100% unsubsidized housing development. The City received a total amount of $435,000 incentive payments (a $75,000 Zoning Incentive Payment and a $360,000 Density Bonus Payment), which were reinvested in the neighborhood to upgrade the sidewalks, sewer, street lights, and other infrastructure, necessary support given the fiscal difficulty of the City. These physical and visual improvements, together with the 40R projects, created a new image for the neighborhood.

The 40R projects also established credibility during the public engagement process. When TND started to work with the city and the adjacent neighborhoods on an implementation plan for the revitalization of the Box District, there was a general concern among the residents about the unexpected outcome of the proposed “complete transformation from industrial area to residential neighborhood” (Emily, TND). It wasn’t until the completion of these 40R projects that the residents finally became fully supportive.

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1 CNHS, Chelsea Neighborhood Housing Services, the previous name of TND.
of the whole revitalization project. In other words, the 40R development facilitated the remaining implementation of the overall neighborhood revitalization plan by helping establish the credibility of the plan and the developers.

**Limitations to broader adoption of 40R districts and projects**

Several developers stated that they still hope to pursue 40R development when there is an opportunity, mainly because the as-of-right standards provide security against abutter oppositions or appeals during the development process. However, the City, faced with some controversies around 40R, prefers more traditional zoning tools.

One major controversy regards zoning authority. The Legislation requires DHCD's approval of local 40R zoning ordinance/bylaw and district. Although this review only aims to confirm that the ordinance and district meet with the 40R requirements, rather than interfere with the detailed zoning clauses or district plans, it raised skepticism in the community, as some people believed that the City has lost some measure of land use regulation authority to the State.

There has also been concern about the 40R process interfering with the local planning approval process. Chelsea’s Planning Board got the authority to approve a development’s site plan about one year before the city’s adoption of the 40R ordinance, but according to the 40R legislation, Chelsea’s 40R district and development should be approved by the Zoning Board of Appeals. 1 The Planning Board was concerned about the possibility of losing their site plan approval authority. It was the 40R incentive payment and the prospect of more private development in the future in the Box District neighborhood that convinced the Planning Board that a compromise for them to release their approval authority was worthwhile. Since it is no longer as difficult as it used to be for the City to invest in infrastructure upgrading or attract private investment for housing development, the financial incentive of 40R is less important.

Chelsea has alternative zoning tools to enable high-density and/or mixed-use development that the 40R program particularly encourages and zoning techniques to control the development quality of a larger area, built gradually over a longer period, which the 40R district offers to ensure. As mentioned above, the Residential Planned Overlay District which has been used in several projects in the Box District, allows a residential density of 35 units/acre or 45 units/acre as-of-right; it also incentivizes market-rate housing which the City supports. The Planned Unit Development ordinance, established through Special Permit, enables the City to look at a development over four acres in a holistic manner. It is used in two ongoing projects, one is a 182-unit condo project (32 affordable units and 150 market-rate units).

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1 Chelsea Code of Ordinance Part II, Article VIII, "Sec. 34-183. Gerrish Avenue Smart Growth Overlay District (SGOD)": “for the purposes of reviewing project applications and issuing decisions on development projects within the SGOD, the zoning board of appeals, consistent with M.G.L. c. 40R and 760 CMR 59.00, shall be the plan approval authority (PAA), and is authorized to approve a site plan to implement a project.”

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in a waterfront residential neighborhood, and the other is the Mystic Mall Traditional Neighborhood Development. Chelsea planned for mixed-use development in the Everett Avenue Urban Renewal area which included office, commercial, residential, and recreational uses. The City expected the housing component to be completely market-rate units without public subsidy, therefore 40R is not applicable.

Given the controversies around the first 40R district and the alternative zoning tools available, the City is hesitant to initiate or support a second 40R district at least in the near future.

2.2 Reading case

2.2.1 40R District and Development

Reading’s 40R district – the Downtown Reading Smart Growth District – is located within the town’s Business B zone. Prior to the adoption of the 40R district, the Town had been seeking ways to introduce residential uses into this commercial area, and created a Downtown Mixed-use Overlay District in 2005. The 2006 Town of Reading Housing Plan identified a “historically low production of other-than-single-family units” in the town, which would result in “a continuation of high housing costs and fewer opportunities for low to moderate income households, empty nesters, and elderly.” It suggested that “avenues such as Chapter 40R state permits or mixed use overlay districts...should be investigated as to their applicability, flexibility and long-term impacts,” and that the downtown area would be an ideal location for mixed-use and affordable housing development, particularly through infill projects near a commuter rail station.

Meanwhile, the Atlantic Food Store – a local family-owned grocery store located on Haven St. – went up for sale by its owner. The Oaktree Development (Oaktree) purchased the property and planned for a high-density, mixed use development, which was not allowed as-of-right in the base zoning. Oaktree considered several zoning tools including the Special Permit through the Downtown Mixed-use Overlay

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1 Reading has two 40R districts, Downtown Reading Smart Growth District and Gateway Smart Growth District. Unless otherwise specified, “40R district” and “40R development” in this section refer to the district and project in the downtown area.
2 Town of Reading 2006 Housing Plan (p.15).
3 Ibid (p.22).
4 Ibid (p.43).
District, the Local Initiative Program (LIP), and 40R. After discussing with the Town, both of them agreed that 40R was their best option, and collaborated in the public process of adopting a 40R zoning by-law and permitting the 40R project.

The 40R zoning by-law was adopted in November 2009. The 40R district falls within the Business B commercial zone and the Downtown Mixed-use Overlay District (Fig 2.16). It covers an area of 25.65 acres, 13.38 acres of which are developable land. It allows mixed-use and multi-family housing development at 20 units/acre as-of-right, a total of 256 housing units not previously allowed (52 affordable units) in the commercial zone. 11.65 acres of the developable land are identified as underutilized land and suited for small infill and redevelopment, including multi-family housing development above street front retail, mixed use

![Fig.2.16 Reading Downtown 40R district](source)

Source: Chapter 40R Application for Letter of Eligibility
(2009, July 30). The Town of Reading, MA.

![Fig.17 30 Haven St. before (up-right) and after (down-right) 40R development](source)

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1 Local Initiative Program (LIP), a state program that encourages the creation of affordable housing by providing technical assistance to communities and developers who are working together to create affordable rental opportunities for low- and moderate-income households. See: Local Initiative Program (LIP), program description, MA Housing and Economic Development. Retrieved from http://www.mass.gov/hed/community/40b-plan/local-initiative-program-lip.html
development in the southern portion of the district area, and higher density development adjacent to public and private off-street parking lots.¹

So far one project is complete in the 40R district. The 30 Haven St. project is located on a 33,362 SF (0.765 acres) site bounded by the Brande Court Municipal Parking Lot to the north, a public driveway to the east, Haven St. to the south, and a 3-story commercial building to the west. The developers demolished the Atlantic Food Store, and constructed a four story building which provides 18,533 SF of commercial space divided into 6 suites on the ground floor, 53 units of one- and two-bedroom rental housing on the upper three floors, and 78 underground parking spaces. Currently there are five commercial tenants including Portland Pie Company, Zinga Frozen Yogurt, Pamplemousse, Snap Fitness, and Reading Pediatrics. The residential unit sizes range between 725 SF - 1,447 SF. Eleven of the units are affordable units at or below the 80% AMI level. (Fig 2.17)

78 underground parking spaces are built - 12 reserved for commercial tenants, and the remaining for the residents at a 1.25 spaces/unit ratio (0.5 space/unit for affordable units and 1.36 spaces/unit for market-rated units). The on-street parking spaces are preserved and dedicated to commercial customers and residential visitors.

2.2.2 Smart Growth features of 40R district and projects

Accessibility to transit and other services & amenities

The 40R district is served by commuter rail and bus services, including the MBTA Commuter Rail Haverhill Line (Reading station Reading Depot) at the southwest end of district, 28-minutes to Boston’s North Station (Green Line, Orange Line and multiple bus routes stops), and MBTA Route 136/137 with stops at both Reading Depot and the northeast end of the district, providing connection to the Oak Grove Station (Orange Line and multiple bus routes stops). (Fig 2.18) Several rider- and pedestrian-friendly accessory station facilities are provided to encourage ridership, such as the shelter and an ADA path for the

boarding platform, paving and signals at the crosswalks, a paved seating area and a pedestrian walkway along the rail line, street lights, etc. (Fig 2.19, first three images from the left) A MAPC study on the Haverhill Commuter Rail corridor shows that as of 2010, the Reading station has 927 weekday boardings, which is the highest among the stations between Malden Center and Reading (included). 113 parking spaces and 10 bicycle racks are provided at the station. The parking lot is usually fully occupied during the weekdays, suggesting that about 800 residents either walk, take a bus or share a car with others to get to the station. The 30 Haven St. project is 0.1 mile (a 2-min walk) away from the Reading Depot. The High St. & Haven St. at Chute St. at Green St. intersection is furnished with zebra stripes and safe islands to protect pedestrians from the high-speed vehicles especially on High St. (Fig 2.19, right image).

Fig 2.19 Design elements improve accessibility
Left to right: Board platform with ADA path, Walkway and crossing, Seating area, Street intersection

Within a ½ mile, a variety of commercial, institutional, and recreational amenities are located along Main St. and Haven St., including retail shops, restaurants, pharmacies, banks, salons, auto-repair shops, churches, schools, a senior center, a Creative Art Community, as well as Washington Park, the Town Commons and Memorial Park. (Fig 2.18) However, one interviewee noted that the current retail mix in this area mainly targets day-workers, rather than households. For example, after the Atlantic Food Store closed, the nearest grocery store, the Market Basket, is about 1 mile away and not accessible by public transit. If more housing is to be built in the 40R district, additional commercial services will be needed to support it.

30 Haven St. also provides bicycle facilities. As noted by several interviewees, these facilities – including bike racks at the southeast side of the building, and a 649 SF indoor residential bike parking area which was converted from retail space in a plan revision in June 2011 – are heavily used, particularly during warm seasons. Both the Town staff and the developer interviewed expressed their intention to encourage bicycle travel. Reading doesn’t have designated bicycle lanes on the streets, but bicycle racks and signal accommodations are provided in multiple locations, including the Reading Depot, the Town Hall and other major local destinations. One interviewee gave an example of a 30 Haven St. resident who commutes to Boston on weekdays taking her bike onto the train to North Station and continuing to her work from there.

2 Information from: my two site visits, and conversation with the employee of the bakery at the station.
Pedestrian-oriented design

Compared with the previous single-story Atlantic Food Store, the 40R development significantly improved the pedestrian environment of the site and the adjacent area through site and building design.

**Fig 2.20** Site conditions before (left) and after (right) 40R development
*Source: 30 Haven Street Proposal dated on March 9, 2009: Land Title Survey, Landscaping Plan*

**Fig 2.21** Pedestrian-oriented design
*Left to right: Pedestrian crossing, ADA accessible curbs and seats, Planned corner outdoor seating of Portland Pie*

First, the project created 5’ wide sidewalks along Haven St. the driveway to the Brande Court Municipal Parking Lot at rear of the building, and a 10’ wide paved pedestrian crosswalk connecting to the sidewalk on the other side. The sidewalks are landscaped and furnished with seats and ADA accessible curbs. A seasonal outdoor seating place will be added at the corner by Portland Pie Company this summer\(^1\) (Fig 2.20 site plan and Fig 2.21 images).

Second, at the street level, all the retail units have glass doors and big glass windows to maximize the transparent area of the facade; the two residential entrances are well embedded into the retail facade by resembling the retail entrances. This new frontage replaced the previous 250’ long, dull brick wall of the supermarket, and continues the ground floor retail frontage of the adjacent building to create a series of lively window displays to attract pedestrians. This contrasts with some other parts of Haven St. where

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\(^1\) 30 Haven Street Proposal dated on March 9, 2009.
surface parking lots have wide openings along the streetscape, often wider than the frontage of the adjacent building (Fig 2.22). At upper levels, since the 45’ building is taller than most of the buildings in the adjacent area, to avoid the impression of a long, tall wall suppressing pedestrians, the residential component is separated into two parts with a terrace in the middle as a visual break. The 4th floor also steps back 6'6” to make the primary frontage similar in height to the adjacent building.

These design features are attributed to the 40R district Design Standards. For example, the Building Design Standards require that “The front and rear facades of four story buildings shall step back a minimum of five (5) feet from the primary building face at either the second or fourth floor levels over 50% of their length, or offer alternative strategies for scaling the building height to the pedestrian must be offered,” and that “ground floor commercial and retail uses shall be a minimum of 60% glass. The view into the first floor commercial or retail windows shall be maintained with a view into the sales floor or seating area”; the Site Design Standards require that “Amenities that increase the comfort of pedestrian movement along sidewalks such as lighting, projecting canopies, and street trees are required”, that “improvements to adjacent crosswalks, curbing and sidewalks to accommodate increased pedestrian activity associated with new developments are encouraged”, and that “below grade parking is encouraged ... Ramping must be incorporated within the building envelope or below grade”.

In the remaining area of the 40R district, a number of pedestrian-oriented facilities have been installed through a $6.1 million street reconstruction project sponsored by the State prior to the adoption of the 40R district. All the streets in the downtown area are furnished with wide sidewalks, red brick crosswalks, street and sidewalk lighting, bollards, benches, pedestrian push buttons, and pedestrian walk indicators. The 30 Haven St. project benefited from this earlier project.

**Efficient use of land**

30 Haven St. achieves a residential density of 69 units/acre and an overall density of 2.78 FAR. 40R zoning allows a multifamily residential density of 20 units/acre pursuant the 40R legislation, and requires a maximum FAR of 2.8 for mixed-use with ground floor commercial development, and of 2.4 for other mixed-use or residential-only development. The developer applied for and was granted a density waiver which raised the density limit to 73 units/acre, on the condition that the developer “make substantial

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improvements to the public parking (Brande Court Municipal Parking Lot).”  

According to the interviewees and the records of public hearings, density (and parking) were the two most controversial issues of adopting the 40R district. Besides worrying that high-density residential building would destroy the existing image of a small town commercial street, the town residents and commercial tenants were particularly concerned that a high-density residential development would create huge parking demand (the average car ownership in Reading is over 2 cars/family), which would encroach upon the parking spaces for retail employees. The Town and the developer sought to develop a shared parking program with adjacent commercial properties such as Eastern Bank and Rite Aid, both of which have ample off-street surface parking lots, but it didn’t succeed. In fact, the key reasons that the existing Mixed Use Overlay District didn’t work was because it couldn’t accommodate both the residential and commercial parking on site in the downtown area where developable land is limited, and the low density cap made it financially infeasible to build underground parking.

40R solved this problem by allowing density to reach with the point at which the real estate profit would offset the high cost of underground parking (table 2.5). Therefore, though the 30 Haven St. project has a higher residential parking ratio than it would have under the Mixed Use Overlay District zoning. All of the parking was accommodated on-site, and the developer was able to spare part of the profit margin to finance the improvements to the municipal parking lot.

Table 2.5 Parking and density requirements comparison

<table>
<thead>
<tr>
<th></th>
<th>Business B</th>
<th>Mixed Use Overlay District</th>
<th>40R District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking requirements</td>
<td>Retail stores, offices and consumer service exempt from parking requirements when property is within 300’ of Town owned off-street parking lot.</td>
<td>1 space/unit (units up to 700 SF); 2 spaces/unit (units up to 1100 SF); 3.5 spaces/1,000 SF office space; 1.5 spaces/1,000 SF retail space</td>
<td>Same 300’ exemption as in Bus.B; 2 spaces/1,000 SF office or institutional uses; 1.25 spaces/unit (Residential); 1 space/2,000 SF leasable non-residential space in excess of 2,000 SF</td>
</tr>
<tr>
<td>Maximum FAR</td>
<td>N/A</td>
<td>0.8</td>
<td>Max. for Mixed use with Commercial use = 2.8; Max. for Residential only = 2.4</td>
</tr>
</tbody>
</table>


Town of Reading Community Planning and Development Commission, Final Site Plan Review Decision: 30 Haven Street, Oaktree Development. (2010, September 13).
**Mix of use**

Mixed-use is emphasized in both the 40R zoning by-laws and the Design Standards, with the aims to facilitate dense residential development in the downtown commercial neighborhood, and at the same time maintain and leverage the traditional retail environment, using well-designed and properly-organized ground floor retail stores to attract foot traffic, encouraging people to park once and walk to multiple destinations in the neighborhood, and ultimately achieving a live-work balance. For example, the 40R by-laws states that “development Projects may include a portion not to exceed 50% of the total gross floor area to be used for non-residential uses including Office, Retail, Restaurant, Service or Institutional Uses; provided that office or institutional uses on the ground floor may not utilize more than 33% of the total gross square footage of that floor.”

Though no comprehensive survey has been conducted on the 30 residents' live-work and daily travel patterns, both the Town and the developer found evidence that the residential component has achieved their aims. The developer noted that the housing units were very welcomed and leased up quickly. Currently there are about 30 people on the leasing waiting list. The interviewee from the Town noted that there are several residents who work in the offices on Haven St. (attorney’s office, clinic, and bank). On weekdays, they usually take several minutes’ walk to their offices, get lunch in one of the restaurants or gourmet shops on Main St. which is also only minutes away, and maybe do a little shopping at one of the convenience stores such as the Olde Redding Butcher Shoppe on their way home; on weekends, they may drive to the Market Basket for grocery shopping, but they may also take their kids to the Zinga Frozen Yogurt downstairs, or walk to the Creative Arts community to join in children’s’ workshops.

In comparison, the developer acknowledged that the commercial component hadn’t achieved a similar level of success until recently. Early on, they followed neighbors’ desires to keep the grocery store...

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Fig 2.23 Ground floor retail space plans: February 2009 version (left) and May 2011 version (right)

Sources: 30 Haven Street Proposal dated on March 9, 2009 and June 22, 2011

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1 Town of Reading Zoning ByLaw, section 4.12.7 "Mixed-Use Development"
option and proposed three retail spaces – a 3,662 SF restaurant at the west end, an 11,104 SF grocery store in the middle, and a 6,652 SF bookstore with outdoor seating space at the east end (Fig 2.23). Having difficulty in finding suitable tenants, they changed the retail space configuration and leasing plan several times, and eventually settled on six smaller units, and the overall area has been reduced from 21,418 SF to 18,533 SF. According to the developer, despite the broker’s diligent effort in recruiting retail tenants, the space still had some difficulty leasing out. The last tenant – the worldwide health & fitness franchise Snap Fitness – just moved in late 2013 and opened in 2014. Currently all the retail stores are doing well, their patrons including 30 Haven St. residents, employees in the offices nearby, and people passing by on their way from or to the Reading Depot. Nevertheless, the developer noted if they had a chance to redo the project, they would bring on board a retail development specialist early who had a better understanding of the local retail climate and could propose a more reasonable store mix based on surrounding uses, and suggest space dimensions. It is clear that the mix of stores has been an essential but most challenging part of the whole project.

Energy Efficiency

Oaktree specializes in green building design and construction. They used the in-house module-box technology “Green Stack” in the 30 Haven St. project, building 180 module boxes off-site. After building the podium, they finished the project in 3.5 weeks.

2.2.3 The advantages and constraints of 40R zoning

40R provides long-term opportunity for mixed-use, high-density development in downtown

First, 40R resolved the major obstacles to multi-family residential development in the downtown area. The 30 Haven St. project provides an example of using high density to finance the construction of underground parking, which, in turn, satisfies the parking demand generated by the dense housing units and helps reduce the neighbors’ concerns about the development. From the perspective of Smart Growth, this “high-density + underground parking” model also has advantages in land use efficiency and pedestrian-friendly streetscape, as long as the density is achieved based on the Design Standards.

![Fig 2.24 Development potential in 40R district (DSGD)](source: Downtown Smart Growth District Developable Land Plan, Downtown Smart Growth District Land Utilization map, and Downtown Smart Growth District Residential Density Plan. Town of Reading. Downtown Smart Growth District Application. (2009).)
Second, the 40R district created residential development capacity that is reserved for gradual development over a long period. Of the 11.65 acres (45% of the entire district) of “Underutilized” land, 9.7 acres (81 parcels) were identified as “Suitable Locations for DSGD Development”\(^1\) which would allow at least 172 residential units (Fig 2.24). Even parcels that were categorized as “Unlikely to be rebuilt” have recently seen redevelopment opportunities. For example, the US Post Office site at the corner of Haven St. @ Sanborn St. is now up for sale. There were 20 such parcels with a total area of 4.64 acres, which would support at least 84 units. This reserved capacity can be released with market demand. The interviewee from Oaktree Development noted that they have been approached by a property owner in the Downtown 40R district to talk about the potential of developing a similar project. If some of these future projects follow the 30 Haven St.’s density pattern, the 40R district could accommodate more market housing demand.

Third, 40R allows flexible applications in phased and/or multi-component development. This advantage is shown in another mixed-use phased project within the 40R district. In 2005, the local developer Haven Properties, LLC purchased the 33,482 SF historic MF Charles buildings\(^2\) at the corner of Haven St. and Main St. and planned to renovate the building and to lease the vacant 1st floor commercial spaces to a Northern Bank Trust Co. branch, and a pub, Bunratty Tavern. In 2009, this site was identified as a “Suitable Location for DSGD Development”, and the developer agreed to convert the vacant upper two stories to residential units in a future phase. Due to his concerns about the weak housing market and the controversy around residential development, the developer decided to postpone the residential component, and proceed with the commercial component under the more straightforward Business B base zoning. That phase was approved in 2012 and was near completion when the field trip for this research was conducted. The interviewee in the Town noted that with the housing market warming up, the residential phase was expected to be proposed soon under 40R zoning. In other words, the 40R zoning as an overlay offers the developer the flexibility to apply it in certain phase(s) and component(s) of one project, potentially mixing and matching with base zoning, giving developers more latitude in utilizing the reserved development capacity.

Controversies and limitation of 40R’s broader application

Despite the advantages of the 40R zoning district, its adoption and application hasn’t been uncontroversial.

\(^1\) “DSGD Development”: Downtown Smart Growth Development.

Besides the concern about difficulty to accommodate residential parking needs as explained above, another major concern was about the building scale and density promised by the 40R by-laws and allowed as-of-right in the downtown area. The 40R district was initially proposed to cover a larger area and include the whole Business B zone and a stretch of land across the Commuter Rail line which is within the Single Family 15 District and currently has auto-related commercial uses. However, the neighborhood was concerned that the proposed building would be much taller and would hover over the adjacent buildings and the streets, and that exotic building typologies resulting from the mixed-use concept would destroy the traditional character and feeling of the downtown commercial streets. Meanwhile, the developer was in the process of proposing the 30 Haven St. project, whose site plan and renderings, made in accordance with the Design Standards, helped convince the neighborhood that a development under 40R could achieve such density, scale, and use mix without jeopardizing the coherent image and atmosphere of Haven St. Therefore the Town decided to shrink the 40R district, focusing on the Haven St. and a section of Main St., with the intention to "get this part of the Smart Growth district off the ground, and then to evaluate it and if appropriate, extend it into the remainder of the Business B zoning district".

The positive feedback from the community and the developer on the 30 Haven St. project don’t necessarily translate to every situation. The neighbors’ concerns about density, scale, parking and other issues remain, as do the technical challenges in creating visually appealing mixed-use, compact development. The interviewee from the Town didn’t have strong confidence in the neighborhood’s acceptance of a number of such projects in the downtown area, and the readiness of the local development community in shifting their focus to a development type that requires a more sophisticated financial plan, design, marketing, and property management.

2.3 Belmont case

2.3.1 40R District and Development

Belmont’s 40R district – the Oakley Neighborhood Smart Growth Overlay District – is located in a residential neighborhood where the majority of the housing stock is single-family detached houses valued at over $1 million on average. The residents are predominantly well-educated, high-income professionals. The land of the district was formerly church property (Our Lady of Mercy) including a church, hall, parking lot, rectory and convent (Fig 2.25). When the church closed at the end of 2004, the Belmont Housing Trust (a Town-appointed non-profit) began exploring the feasibility of developing

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1 Town of Reading. (2009, July). Subject: RE: 40R plan meeting (Town of Reading proceeding).
mixed-income housing under 40B, and developed an initial plan of 27 units (9 affordable). The neighbors, unhappy with the density as proposed, formed the Oakley Neighborhood Association (ONA) to explore alternatives that would ensure them more control over potential development. ONA took initiatives to conduct a land survey and develop a conceptual site plan, building plans, and design standards (Fig 2.26), and worked with the Town to establish the 40R district in October 2007 (Town Meeting approval).

The 40R district consists of three sub-districts with an aggregated area of 1.51 acres. The underlying zoning Single Residential C allows construction of single-family housing as-of-right. Under 40R zoning, a maximum of 18 units is allowed as-of-right; 20% of all units or 25% of all rental units should be affordable; for projects exclusively limited to occupancy by elderly persons and/or by persons with disabilities, 25% of all units should be affordable. Recreation and community uses are allowed as-of-right in all the sub-districts. Allowed housing type(s) and dimensional requirements vary among the sub-districts (Table 2.6 and Fig 2.27).

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Table 2.6: 40R zoning district and standards

<table>
<thead>
<tr>
<th>Sub-districts</th>
<th>Allowed Housing types</th>
<th>Size (SF)</th>
<th>Max Density (units/acre)</th>
<th>Max # of units allowed as-of-right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triangle</td>
<td>Single-family detached; Two-family</td>
<td>15,212</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Senior Center</td>
<td>Single-family detached</td>
<td>13,167</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Rectory</td>
<td>Single-family detached; Two-/Three-family</td>
<td>9,182</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Church Buildings</td>
<td>Single-family detached; Two-family; Three-family; Multi-family (if the Church is renovated)</td>
<td>28,237</td>
<td>15</td>
<td>9</td>
</tr>
</tbody>
</table>

The 40R project was proposed in April 2009 and approved in October 2009. It removed the existing structures and constructed 17 dwelling units (three affordable), including 15 three-bedroom townhouse units (1,438 SF - 2,040 SF) and 2 four-bedroom single family homes (2,567 SF - 2,696 SF). 27 off-street parking spaces are provided with a 1.59 spaces/unit parking ratio. (Fig 2.28, table 2.7)

Fig 2.27 40R district and sub-districts

Fig 2.28 40R development
Left to right: Church Buildings site, Rectory site, Senior Center site, Triangle site

Table 2.7: 40R development

<table>
<thead>
<tr>
<th>Sub-districts</th>
<th>Development</th>
<th>Parking</th>
<th>Residential Density</th>
</tr>
</thead>
</table>
| Church Buildings; Rectory   | One eleven-unit condominium association consisting of 11 townhouse units located in 4 separate buildings; 2 units are affordable. | • 1 space/unit for the 2 affordable units  
• 2 spaces/unit for the 9 market-rate units | 12.81 units/acre             |
| Senior Center               | 2 single-family units, 2,696 SF and 2,567 SF                                                 | • 2 spaces/unit                                                           | 6.62 units/acre              |
| Triangle                    | 1 four-unit building (2 two-family townhouses with a common party wall); every two-family house is a condominium; 1 unit is affordable. | • 1 space/unit for the affordable unit;  
• 2 spaces/unit for market-rate units | 11.45 units/acre              |
2.3.2 Smart Growth features of 40R district and projects

Accessibility to transit and other services and amenities

The 40R district and development is served by public transit facilities which provide access to a number of destinations. The project site is located on the MBTA bus Route 73 which connects to the regional public transit hub Harvard Square in Cambridge and to several local commercial destinations, including the business corridors and zones along Belmont St. and Pleasant St., and at the Trapelo Rd. at Waverley St. intersection. The site is also adjacent to the Commuter Rail Fitchburg/South Acton Line (the Waverley Station) which connects the suburban communities in the northeast region of the Boston Metropolitan area.

However, neither public transit nor non-vehicle travel is emphasized in this 40R district and residential project. Cambridge and Boston are the two major work destinations of the residents in Belmont, including those in the Oakley neighborhood, and the majority of the residents drive to work. Except for a limited number of small neighborhood retail stores and one church (the Payson Park Church), none of the major commercial destinations, schools and other public amenities is located within a ¼ mile walking distance of the neighborhood (Fig 2.29).

Efficient use of land

The 40R development includes 17 units on the 1.51-acre site at an average density of 11.25 units/acre (table 2.7). The density of each housing type is not only lower than what is required by the Legislation, but also lower than the typical density standard commonly used in the industry. The only sound density argument for this 40R development is when it is compared with the as-of-right scenario under base zoning. Given the fragmentation of the site (table 2.6), only 5-6 detached single-family dwelling units could be built as-of-right following the site and building dimensional requirements of the base zoning Single Residential C, and the overall density would be less than 4 units/acre.

For example, according to Ellis in “Explaining Residential Density”, the typical density of single-family detached housing is 10 units/acre, that of two- or three-family semi-detached housing (2-3 story) is 15 units/acre, that of row houses (3-4 story) is 20-35 units/acre. See: Ellis, John G. (2004). Explaining Residential Density [Research & Debate]. Places, 16(2), 34. Retrieved from: http://escholarship.org/uc/item/2np5t9ct
Table 2.8 shows that the 40R zoning, while maintaining most of the dimensional requirements for single-family housing, overcomes the challenge of developing fragmented parcels and achieving high land use efficiency by 1) allowing two-family and three-family housing, 2) exempting the minimum lot area requirement, and 3) reducing the parking ratio and using flexible driveway and parking configurations. Fig 2.32 illustrates the contrast in the site configurations and building footprints between the 40R development and the existing as-of-right single-family housing. For example, following the 9,000 SF minimum lot area requirement of base zoning, the sites of the Triangle and Senior Center sub-districts each could only have one unit; in the 40R development, the Senior Center parcel was subdivided into two separate single-family lots, 7,044 SF and 6,125 SF respectively, the Triangle parcel was subdivided into two separate two-family lots, 7,939 SF and 7,276 SF respectively. The 11 townhouses units on the 37,419 SF combined site of the Church Buildings & Rectory sub-districts are organized into four buildings served by three driveways. Units 1-6 share one driveway from Belmont St. which leads to a shared parking lot in the courtyard (provided in addition to the independent one-car garage for each unit); units 7 & 8 share one driveway from Belmont St. which leads to their individual one-car garages; unit 9 & 10 share one driveway from Lawndale St. which leads cars to basement garages; unit 11 uses the same driveway, and has two exterior parking spaces in the rear yard. The whole condominium achieved a 12.8 units/acre density on the 0.86 acre site.

Table 2.8: Dimensional requirements in base zoning (Single Residential C) and 40R zoning

<table>
<thead>
<tr>
<th></th>
<th>Single Residential C</th>
<th>40R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min lot area</td>
<td>9,000 SF</td>
<td>N/A</td>
</tr>
<tr>
<td>Min lot frontage</td>
<td>75 feet</td>
<td>50' (single-family and two-family) or 90' (three-family)</td>
</tr>
<tr>
<td>Min front setback</td>
<td>25' or 25% of lot depth</td>
<td>25'</td>
</tr>
<tr>
<td>Min side setback</td>
<td>10'</td>
<td>10' (single-family and two-family) or 15' (three-family)</td>
</tr>
<tr>
<td>Min rear setback</td>
<td>30' or 30% of lot depth</td>
<td>30'</td>
</tr>
<tr>
<td>Max lot coverage</td>
<td>25%</td>
<td>25% (single-family), 30% (two-family) or 40% (three-family)</td>
</tr>
<tr>
<td>Min open space</td>
<td>50%</td>
<td>50% (single-family and two-family) or 40% (three-family)</td>
</tr>
<tr>
<td>Parking ratio</td>
<td>2 spaces/unit (with two or more bedrooms)</td>
<td>1-2 spaces/unit</td>
</tr>
</tbody>
</table>

**Neighborhood sensitive design**

Although the 40R development is much more compact than adjacent single-family buildings (Fig 2.30), it mimics the architecture style, building facade, roof, yard, and landscape of the existing neighborhood,

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and therefore maintains the overall image of the neighborhood. This consistency is achieved with the assistance of 40R Design Standards.

Ensuring that any potential development fits into the neighborhood was the primary motivation of the neighbors organizing the ONA to adopt the 40R district. Besides developing conceptual site and building plans, ONA also drafted Design Standards which elaborate various standards of site and infrastructure configurations, building scales, proportions, and exterior appearance, off-street parking, natural site feature protection, landscaping and on-site open space, lighting and buffering. Photos of existing examples in the neighborhood area were included for illustration purposes. These standards directly reflect the residents’ perceptions of the character of their neighborhood, and provided a reference to the developer who purchased the land and proposed housing development in 2009. The initial site plan, submitted in April 2009, went through four revisions before being approved in October 2009. Except for modifying the locations of driveways, building and garage entrances, and architectural details, no major changes were made.

However, some criticize that under the influence of the neighbors, the developer went too far and ended up compromising the development quality. The location of garage doors and driveways raised intense controversy during the site plan review. Some neighbors opposed to having 4 garage doors facing the side street that they lived on, cited the design standards that state “building design and location of garages and driveways should minimize the impact of automobile parking and driveways on the pedestrian environment, adjacent properties and existing streets and intersections by consolidating access to a limited number of curb cuts.” They insisted that two of the 4 garages and driveways be on

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3. Town of Belmont – Oakley Neighborhood Smart Growth Overlay District Design Standards.
front of Belmont St. which is an 80’ wide state highway. This disagreement led to a long and hostile negotiation, at the end of which the neighborhood won the Planning Board’s support. One may argue that relocating two driveway entrances from side-street to Belmont St. shows the power of design standards in ensuring “neighborhood sensitive” development, however, such a modification was a detraction in both safety and aesthetics, particularly for the new residents.

2.3.3 The role and constraints of 40R zoning

40R zoning secured neighborhood control and provided predictability of future development

According to the Town planner, 40R zoning satisfied the neighborhood’s goals of avoiding 40B development and ensuring a certain level of predictability of and control over potential development. As explained above, due to the fragmentation of the site, as-of-right development under the base zoning is limited to 5-6 units, leaving developers great incentive to pursue 40B development, such as the 27-unit proposal from the Belmont Housing Trust. 40R provides an alternative which, although it doesn’t dismiss the possibility that a developer may still choose 40B, is supposedly more appealing to developers because it promises a friendly developer-neighborhood relationship without losing financial viability or delaying the permitting process. Once 40R is chosen, its use, dimensional, and design standards help ensure that development in each sub-district strictly follows what was approved.

Limitation of 40R’s application

The Oakley 40R district was initiated and adopted by the neighborhood with few controversies and helped them avoid the threat of 40B development. In addition, it created a project that largely maintained the overall neighborhood character and was appreciated by the Town and the developer. However, due to their experiences with the costly process of drafting the 40R by-law and permitting the project, neither the developer nor the Town has a strong interest to initiate 40R for future development.

For the Town, establishing a 40R district requires a long intensive process to draft the by-law and typically requires hiring a consultant to help work through the process; in Belmont where the majority of the town area is built, a 40R district would not yield a large number of units. Besides, the Town has adopted a mixed-use, transit-oriented zoning district for Cushing Square and a high-density open space preservation zoning district for the redevelopment of McLean Hospital. Therefore, the benefits of 40R – the ability to enable mixed-use and high-density housing, to control development in the long-run – could be achieved by other existing zoning tools, which the Town would prefer because they don’t need DHCD’s review and approval.

For the developer of the Oakley project, the 40R zoning hasn’t been effective in helping the developer
gain neighborhood support and streamlining the permitting process. The initial proposal submitted in April 2009 complied with the 40R bylaw and was only subject to site plan review, and the Planning Board should have made a decision on the site plan application within 120 days of the application. As discussed above, the developer referred to the Design Standards and started with a proposal that was very close to the vision and preference of the neighborhood, in expectation of a shorter site plan review process and fewer plan revisions. However, faced with two neighborhood concerns regarding the garage door/driveway locations and the proposed building types, the developer feared the Planning Board might deny the permit, so agreed to waive the 120-day time limits. Although the neighborhood decided to accept other-than-single-family houses when adopting the 40R district, they were reluctant to accept the project proposal, arguing that “townhouse type” wouldn’t fit into the neighborhood. Comparing the site plan proposed by the developer and the initial conceptual plan made by ONA (Fig 2.26), particularly the building footprint, it is clear that the neighbors envisioned new development to be almost identical with what existed, and their vision was so strong that it tended to reject any later plan that was different from it. As noted by the developer, the entire permitting process lasted about 6 months with multiple public meetings (including hearings); the delay and difficulty in this process, combined with the requirement of an affordable housing provision, offset the financial advantage of higher density allowed by 40R, making it comparable to a by-right project of entire market-rated houses built under base zoning.

2.4 Lynnfield case

2.4.1 40R District and Development

Lynnfield’s 40R district — the 40R Planned Village Development District — is located at the southwest edge of the town, along Interstate-95/MA Route 128. The site was part of the former 202-acre Sheraton Hotel Colonial Golf Course, one of the three golf courses in the town (Fig 2.31). The town’s 2002 Master Plan recommended “to anticipate land use changes that may redefine the role of each of the golf courses in the Town of Lynnfield” and that Colonial Golf Course be reduced to nine holes and that a large portion of the site be designated for development as a “mixed-use office park, market-
rate residential, recreational and open space, maintaining appropriate buffer zones between development and existing residential area.\textsuperscript{1} Later in the Town's 2006 Affordable Housing Plan (2006 Housing Plan) for Planned Production Regulation Under M.G.L. Chapter 40B, this site was identified as one which could potentially "accept high-density development of rental units"\textsuperscript{2} and "produce more housing units than has ever been produced in any other single development in Lynnfield."\textsuperscript{3} While there had been a proposal to build a 300-unit 40B project, the Town believed 40R was a better strategy to realize its vision of "affordable units, mixed-use village concepts, and a range of commercial development."\textsuperscript{4} It is also suggested that the recently enacted Chapter 40S, applied in combination with 40R, would help offset increased school costs created by the new housing. Therefore, when the developer, National Development, purchased this site in 2006, the Town suggested they pursue 40R. After negotiating with the Town and the community, the developer agreed to donate 103 acres of the site to the Town as a nine-hole golf course, donate another 7 acres to the Town to build 48 units of age-restricted housing, and establish a 40R district in the remaining area (Fig 2.32).

The 40R district was approved by Town Meeting in 2007. It covers 82.7 acres of land (59.3 acres developable). Under the base zoning Single Residential B, a maximum of 56 single-family housing units are allowed as-of-right at a density of 1.45 units/acre; multi-family housing, assisted living residences, and commercial uses are only allowed by special permit subject to the approval of the Zoning Board of Appeals. 40R zoning divides the site into two sub-districts, a 10.6-acre multi-family Residential sub-district exclusively for housing development at a maximum of 180 units and a Commercial sub-district which only allows non-residential development of no more than 475,000 SF (table 2.9).

\textsuperscript{1} Town of Lynnfield, MA, Master Plan, submitted by Planners Collaborative, Inc., (2002 September 2002). (pp. 3, 166)
\textsuperscript{3} Ibid. (p.25)
\textsuperscript{4} Ibid. (p.26)
Table 2.9: base zoning and 40R zoning comparison

<table>
<thead>
<tr>
<th>Sub-district</th>
<th>Area (acre)</th>
<th>Base zoning Single Residential B</th>
<th>40R zoning Allowed uses</th>
<th>As-of-right density and maximum amount of development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family Residential</td>
<td>13.1</td>
<td>Max 5 single-family dwelling units at 1.45 units/acre</td>
<td>Multi-family housing; 2/3-family housing; conservation</td>
<td>25 units/acre for multi-family housing and 12 units/acre for 2/3-family housing; total development no more than 180 units.</td>
</tr>
<tr>
<td>Traditional Neighborhood Village</td>
<td>69.6</td>
<td>Max 51 single-family dwelling units at 1.45 units/acre</td>
<td>Retail, restaurant; office; conservation; recreational use</td>
<td>Total gross leasable floor area no more than 475,000 SF, at least 50,000 SF of which shall be located solely on the 2nd floor of a building; At least 25% of the total permitted retail building area shall be composed of retail units of 12,500 square feet of Gross Leasable Floor Area or less</td>
</tr>
</tbody>
</table>

Source: Town of Lynnfield Zoning Bylaws (April 30, 2012), Section 9.5 PLANNED VILLAGE DEVELOPMENT DISTRICT (the “PVDD”) (APRIL 30, 2007)

The entire development includes 180 residential rental units constructed in three buildings (60% one-bedroom, 40% two-bedroom), 395,000 SF of commercial space (including 308,500 SF retail and 86,500 SF restaurants), and 80,000 SF of office spaces. The development has been built in phases; the first phase has been finished and includes 180-unit housing component (25% of the units affordable for

Fig 2.33 40R development - Phase 1 completed and Phase 2 under construction

Sources: Left - MarketStreet site plan by National Development & WS Development dated on December 16, 2011
Right - Phase 2 proposal dated on July 30, 2013
households under 80% AMI) and a commercial component Market Street of 196,134 SF of retail, 85,146 SF of restaurant, and 15,598 SF of office space. The remaining part has received site plan approval and is currently under construction. A total of 2,541 parking spaces are provided, including 315 residential parking spaces (178 surface parking, 137 garage) at 1.76 spaces/unit parking ratio, and 2,226 spaces for commercial and office uses (Fig 2.33).

2.4.2 Smart Growth features of 40R district and projects

Accessibility to transit and other services & amenities

The site of the 40R district is located on Interstate 95/MA Route 128, providing connections to Boston (within a 30 minute drive during nonpeak hours) and a number of towns and cities in the Boston Metropolitan area (Fig 2.34). This highway connection renders the site a top-tier real estate development location for a large-scale commercial center that serves regional customers and provides housing for non-local employees. However, this site is not served by public transit facilities. The nearest rapid transit station is the commuter rail Wakefield Station, which is about 3 miles away from the site. Locally, this site is connected to other parts of the Town by the town’s primary road Walnut St. and to the adjacent office and hotel zone in Wakefield through Audubon Rd. There is no pedestrian or bicycle network that connects the site to public transit nodes and local destinations.

From a real estate market perspective, these highway and local roadway improvements are key to the success of both the commercial and residential components. As one interviewee noted, Whole Foods has become a primary grocery destination for residents in both Lynnfield and Wakefield (Fig 2.35). The restaurants have attracted local residents, employees from the nearby offices in south Lynnfield and Wakefield, and also the customers of other retail and entertainment stores. Most of the residential tenants work in regional job centers such as Boston and drive to work on a daily basis. In other words, both the commercial and the residential components were planned at a
regional scale, rather than with the aim to achieve live-work balance locally. Correspondingly, generous on-site parking spaces are provided to satisfy the need for car accessibility. 40R zoning requires a lower parking ratio for commercial uses as compared with the off-street parking requirements in base zoning (Table 2.10); however, more parking spaces are actually provided (Table 2.11), and the average parking ratio in the Traditional Neighborhood Village sub-district is not significantly lower than required in the base zoning.

Table 2.10 Parking requirements comparison between 40R zoning and the Town’s base zoning for similar development components

<table>
<thead>
<tr>
<th>40R zoning</th>
<th>Minimum parking ratio:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.5 spaces/unit</td>
</tr>
<tr>
<td></td>
<td>1 space/250 SF (retail); 1 space/200 SF (restaurant or recreational); 1 space/333 SF (office)</td>
</tr>
<tr>
<td></td>
<td>Minimum required amount of parking may be reduced by the Approving Authority through the Site Plan Approval process if the applicant can demonstrate that parking demands will be met due to factors such as shared parking program, the availability of public or commercial parking in the vicinity of the use being served, age or other occupancy restrictions which are likely to result in a lower level of auto usage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Base zoning</th>
<th>Minimum off-street parking ratio for commercial uses (permitted in Limited Business, General Business, Commercial, Office Park or Limited Industrial Districts):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Retail and office: 1 space/180 SF of ground floor area plus 1 space/360 SF of upper levels floor area.</td>
</tr>
<tr>
<td></td>
<td>Restaurants and other food, beverage services, amusement places: 1 space/180 SF of ground floor area plus 1 space/360 SF of upper levels floor area, or 1 space/3 seats provided for patron use, whichever requires the greater number of parking spaces.</td>
</tr>
<tr>
<td></td>
<td>Off-street parking should be located within 300 feet of the uses.</td>
</tr>
</tbody>
</table>

Source: Town of Lynnfield Zoning Bylaws (April 30, 2012), Section 7.2 Off-Street Parking; Section 9.5 Planned Village Development District (the “PVDD”) (APRIL 30, 2007)

Table 2.11 Parking requirements and actual supply

<table>
<thead>
<tr>
<th></th>
<th>Min # of parking space required by 40R</th>
<th>Actual # of parking space provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial component</td>
<td>1908 (Avg. 1 space/248.9 SF)</td>
<td>2226 (Avg. 1 space/213.4 SF)</td>
</tr>
<tr>
<td>Residential component</td>
<td>270</td>
<td>315 (1.76 spaces/unit)</td>
</tr>
<tr>
<td>Total</td>
<td>1908</td>
<td>2541</td>
</tr>
</tbody>
</table>

Moreover, the transportation infrastructure upgrades conducted as a part of the 40R project improved the driving conditions and further emphasized the priority of vehicle travel. Traffic signals were installed at the Walnut St. and Market St.

Fig 2.36 Transportation infrastructure upgrading
Left: Intersection improvement, Right: New bridge and driveway
intersection, helping divert traffic from and to Interstate 95; Audubon Rd. was widened in the section within Lynnfield, and a bridge was built above the Saugus River, connecting the site to the hotel and office park area in Wakefield (Fig 2.36).

According to two widely used criteria of Smart Growth – encouraging public transit and non-vehicle transit, and placing residential, commercial, office, and recreational uses near each other in order to reduce driving distance on a daily basis – this 40R district and the Market Street project can hardly be classified as Smart Growth development. A closer look at the project’s site plan shows that the emphasis of Smart Growth was placed on creating a pedestrian-friendly commercial environment, open space preservation and other environmental protection strategies.

**Pedestrian-oriented design**

In order to create a pedestrian-friendly environment and to avoid the typical images of a car-oriented highway shopping center – such as a big-box or strip shopping mall with a huge parking lot in front, and to better integrate the new development into the existing neighborhood, Market Street conducted a series of planning and design strategies. In the commercial sub-district, the “street” layout, building configuration, “streetscape” and parking design, and public space program are used to mimic a main street or traditional village; at the district edge and among sub-districts, pedestrian connections are added. To-date, these strategies have achieved different levels of success.

**Street network**

First, if only looking at the building footprints and the generous unbuilt space between buildings, one may think that this commercial area is nowhere near a traditional human-scale main street. However, following the Design Standards regarding the design of “Traditional Main Streets”, the space between buildings is dedicated for pedestrian and vehicle circulation through the district and is designed to resemble a hierarchical street network (Fig 2.37). The primary route (the widest) resembles a two-way street with drive lanes, sidewalks, lamps, “on-street” parking, safe-island, and curbs; perpendicular to Main St. are narrow routes that resemble side streets. “STOP” signs, crosswalks, and way-finding signs
that are installed at intersections make the street feeling more vivid. In other words, the space between buildings is organized to mimic a fine-grained urban network with each building resembling a block. (Fig 2.38)

Fig 2.38 Street design elements

**Streetscape and building scale**

Second, the Design Standards regarding building design encourage “placing buildings oriented parallel with the front setback line... to keep a consistent ‘street wall,’ with primary entries oriented toward the Traveled Way,”¹ and requires that “building facades more than 50 feet wide shall be broken down into a series of smaller elements... by incorporating at least two of the following design elements: color change, material change, ... “. Following these requirements, each building contains multiple retail stores (restaurants) which have shorter frontage facing the streets; many of the restaurants also have outdoor seating places. These design strategies transformed the buildings into human-scale, and strengthens the image of a traditional main street where a diversity of small-scale retail line up along both sides (Fig 2.39).

Fig 2.39 Building facade and store frontage design- human scale

*Left: Break buildings into small-scale retail stores with identical facades (source: MarketStreet leasing plan), Right: Image of store frontages*

**Parking plan**

Third, the 2,226 parking spaces dedicated to retail, restaurant, and office uses are organized into surface parking lots at the perimeter of the sub-district and with on-street parking on the Traditional Main.

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¹ Traveled Ways, defined in Design Standards as “A way intended for use by the general public for the movement of vehicles which may include provision for use by pedestrians and cyclists through the use of bicycle lanes, sidewalk, shoulders and/or dedicated travel lanes.” In Lynnfield 4OR Planned Village Development District Design Standards and Procedures (Adopted by vote of the Lynnfield Planning Board). (2007, April 16). Retrieved from http://www.mass.gov/hed/docs/dhcd/cd/ch40r/ds-lynnfield.pdf. (p.6)
Streets. Except for the parking lot in front of Building 100 which now contains the Whole Foods, all of the other parking lots are located at the back of buildings and are almost invisible from pedestrian routes. The on-street parking functions as a physical and visual buffer between sidewalks and motorized vehicle lanes (Fig 2.40 left image).

However, comparing the build-out scenario with the initial site plan and the Design Standards, one may conclude that the plan wasn’t carried out as it could have been, and the pedestrian-friendly quality was compromised. The initial plan placed parallel parking on the Traditional Main Street (Fig 2.40 right image); a plan revision in February 2011 changed it to angle parking, resulting in an increase in on-street parking spaces and a widening of the street. As a result, the current on-street parking has similar dimensions to some of the...
perimeter parking lots and with some of the buildings – that is, the “block” created by the Traditional Main Street network. Given that the majority of the buildings along the Traditional Main Street are one-story (Fig 2.41), the overall image is closer to a surface parking lot in front of a strip mall (Fig 2.42 and Fig 2.39 View A) which, although well designed and visually appealing, is not a pedestrian-oriented traditional main street or village center as illustrated in the initial Design Standards (Fig 2.43). It could be concluded that the primary reason for this parking redesign is to provide more convenient parking near retail entrances, rather than to provide a buffer to protect pedestrians and encourage foot traffic.

In summary, the location, the development program, and the site design of Market Street imply that this is a typical “life-style” retail center where people drive to, park, and stroll between stores to have a more authentic-feeling shopping experience. Therefore, the pedestrian-friendly design discussed above as well as other design strategies (e.g. lighting, signage, landscape) are meant to make the retail center more visually appealing and attractive, rather than to encourage other-than-private-vehicle travel options such as walking, biking or public transit.

Open space design and program

Fourth, the open space of Market Street is programmed and designed to attract people and encourage pedestrian and social activities. A key element is the Village Green which is a piece of turf with seating along one side; a plan revision in October 2012 added a customer kiosk at the edge of Village Green which displays information regarding activities at Market Street, Town events, sports/entertainment events and sponsor videos. Another is Market Square which includes seating and a playground.
These open spaces, together with the above street and building design strategies, help enhance the pedestrian-friendly image of Market Street. (Fig 2.44)

*Non-vehicle connection to outside the district*

However, the pedestrian connections proposed at the edges of the district haven’t achieved a similar level of success as the design strategies within the district. It is expected that the pedestrian network created in Market Street would be extended to adjacent neighborhoods through the two gateways (Fig 2.45). However, there is no pedestrian network outside the district that it can connect to. Particularly, the eastern gateway is in close proximity to high-traffic Walnut St. and Interstate 95. Therefore, although a number of pedestrian-friendly elements have been added to the two gateways, they didn’t change the fact that the majority of visitors drive to Market Street, park their cars in the parking lots or on the street, and keep their pedestrian activities within the boundary of the district.

*Environmental protection*

Environmental protection strategies are included in the site plan, infrastructure and development process of this project.

![Environmental Protection Methods](image)

Fig 2.46 Environmental Protection Methods

*Left: Environmental mitigation plan (source: Market Street at Lynnfield Overall Grading Plan dated on March 27, 2012); Right: top to down - Buffer, Wetland, Detention pond, Parking lot Swales & filter*
First, besides maintaining 103 acres of the land as open space (the 9-hole golf course), the 40R zoning and Design Standards also created buffers and wetlands at the north and east edges of the district, mitigating the impacts of new development on Reedy Meadow and the existing homeowners along Walnut St.. Second, in order to mitigate the effects of creating 38 acres of impervious surfaces, a number of storm water management facilities were installed, including three detention ponds at the borders of the district, landscaped swales and filter strips in parking lots and on the streets. Third, construction was monitored to minimize the impact on local wildlife, particularly those in the wetland. For example, the construction start and finish dates of the bridge over the Saugus River were controlled to avoid birds’ nesting season and turtles’ breeding season (Fig 2.46).

2.4.3 The advantages and constraints of 40R zoning

*40R creates a development opportunity that meets with both the community’s and the developer’s interest.*

First, 40R zoning was used as a permitting tool to achieve the Town’s specific goals.

As noted by interviewees from the Town, the 40R district was created as a contract to ensure the Town’s control over the development. This was done in order to achieve three major goals, all of which were indeed achieved by the 40R development:

*Diversifying the tax base:* the Town’s 2002 Master Plan indicates that the Town’s tax base was primarily residential (91% as of 2001), and suggests intensifying commercial development in South Lynnfield and on some of the golf course land to diversify the tax base and enhance tax revenue. Currently the Town is receiving about $3 million in real estate taxes and $3,000 – $4,000 in meal tax every year from the completed part of MarketStreet.

*Resolving the pressure of 40B development:* the Town had experienced an unprecedented amount of 40B development proposals during the several years prior to the adoption of the 40R district. Over the several decades prior to 2004, only two affordable housing projects were proposed and approved. During 2004-2005, four 40B projects filed for Comprehensive Permits, proposing construction of 340 units. Such multi-family 40B projects were free from the zoning bylaw and other local controls, and were often insensitive to the context of single-family neighborhoods. Therefore, the Town’s 2006 Housing Plan proposed to have one large-scale multi-family housing project, which would increase its subsidized housing inventory from 2.3% (2006) to above the 10% threshold. The 180 units built under 40R would increase the subsidized housing inventory to 11.5% and free the Town from the threat of 40B development.
Diversify the housing stock: the Town’s 2006 Housing Plan indicates that the town’s existing housing stock was primarily single-family housing, and there was “demonstrable needs for housing among young adults, empty nesters, and retirees”; one of the town's overriding principles and preferences for housing policy is to encourage one or two large scale affordable housing developments to meet the need for housing among these three particular groups. The 40R project provided 180 units which are smaller units (60% one-bedroom, 40% two-bedroom) targeted toward the three groups, and, according to the Town Manager, they helped the Town reach a reasonable diversity of housing stock.

Controlling the use, dimension, and design of new development to ensure that it has high visual quality, maintains the “look and feel” of a “traditional New England Village” of Lynnfield, and preserves the Town’s wetland and open space, all of which had been identified as development principles in the Town’s 2002 Master Plan. This goal was achieved through 40R Design Standards, which haven’t been used in the town before. The Design Standards elaborated design principles and technical standards for streets, buildings, open space, landscaping, buffering, exterior signage, lighting, and parking spaces within the district. It also specified that certain requirements would not be subject to a waiver, including maximum building heights, mix of retail use sizes, required buffer, maximum residential (180 units) and non-residential development (475,000 SF), all of which are critical to the “look and feel” of Lynnfield and for environmental protection. Besides, a Development Agreement was established between the Town and the developer to guarantee compliance with the design standards and development impact standards.

Second, 40R enabled profitable real estate development, which created both private and public benefits.

Besides achieving the above goals explicitly stated in the town’s 2002 Master Plan and 2006 Housing Plan, this 40R development also created other public benefits to the community, including providing high-quality retail and entertainment services, improving transportation infrastructure, donating 103 acres of open space to the Town as a golf course, donating 7 acres to the Town (who then sold it to Lynnfield Initiative for Elders (LIFE) for $1.8 million), and donating $1.5 million in developer’s fees to the Town during the economic recession. These benefits are supported by the real estate profit generated from the scaled-up commercial and residential development, one of the main motivations to pursue 40R.

According to the Town Manager, developing the site under base zoning couldn’t justify the land cost. Therefore, without 40R zoning, this site was highly likely to be proposed under 40B, which might help the Town reach the 10% affordable housing inventory threshold, but couldn’t ensure the realization of any of the other goals. During the public process of adopting the 40R district and permitting the project, those

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1 Town of Lynnfield Affordable Housing Plan For Planned Production Regulation Under M.G.L. Chapter 40B. (2006, February 21) (p.21)
benefits played an essential role in dismissing the community’s concern about the scale and components of the development. The Development Agreement, which specified the liabilities of both parties, particularly those of the developer, helped to convince the community that the mitigation methods would be conducted and the promised community benefits would be delivered. The Town Meeting for voting for the 40R district attracted 2,100 voters - the largest number in the Town’s history - who voted 5:1 in favor of establishing the 40R district. It should be noted that there was opposition to the development, mostly from the property owners and residents from the immediate adjacent area who enjoyed the views of the golf course and hoped to maintain a single-family residential neighborhood. (Fig 2.47)

**Limitation of 40R’s application**

Despite the overall positive feedback on Market Street, the Town is not expecting more 40R districts and projects in the near future, because the Town needs 40R as a solution to its development needs.

First, when the Town was faced with the pressure of diversifying housing stock and the threat of 40B, 40R was a preferable tool because it enabled denser (than allowed as-of-right in the base zoning) and affordable housing development than 40B does, without losing any control of the process and results of development. However, following the several 40B projects in recent years and the 40R housing development, the Town already achieved the housing diversity it hoped to. For the purpose of controlling public expenditures, particularly education costs, it is to the interest of the Town to limit denser housing development in the future. Also, according to the Town Manager, the Town doesn’t have pressure from the local community to provide more affordable housing. Therefore as soon as the pressure of 40B from developers is dismissed, the Town no longer relies on 40R to enable and control denser and/or affordable housing development.

The amount of commercial development of Market Street is another benefit created by 40R. However, the Town prefers to limit future commercial development within the commercial zones in south Lynnfield in order to maintain the rest of the town as traditional quiet single-family residential neighborhood with generous open space, which is the character that has drawn the majority of the current residents to the town in the first place. Besides, most of the developable area of south Lynnfield has already been built, and the existing businesses are stable, leaving little opportunity for new commercial development. Therefore, once there is a redevelopment opportunity, the Town prefers to have pure commercial development to maximize the tax revenue. Then, 40R no longer applies, and the base zoning (either General Business or Limited Business) is preferable.
In conclusion, the current 40R district was crafted around a specific site as a permitting tool to ensure that the development would achieve specific goals. Therefore, the impact of the 40R bylaw is limited to this project. The 40R process and resulting product are similar to those in a planned unit development, except that 40R created extra financial benefit to the Town via incentive payments.

2.5 Summary the Smart Growth qualities of 40R development in sample districts

This chapter analyzes the four cases where a 40R district has been adopted and at least one project (or one phase) has been completed. Table 2.12 and Table 2.13 summarize the key Smart Growth features that are found in these projects.

<table>
<thead>
<tr>
<th></th>
<th>Chelsea</th>
<th>Reading</th>
<th>Belmont</th>
<th>Lynnfield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District type</strong></td>
<td>Multiple discontinuous sites tailored to specific projects, within the framework of a comprehensive neighborhood revitalization plan.</td>
<td>A continuous district covering a large area of the town where multiple sites are available for future developments.</td>
<td>Multiple discontinuous small-scale fragmented parcels; tailored to one specific (future) redevelopment opportunity.</td>
<td>A large-scale site intended to be developed as a whole under the &quot;Planned Village Development&quot; concept.</td>
</tr>
<tr>
<td><strong>District initiator(s)</strong></td>
<td>Initiated collectively by the town and the developer.</td>
<td>Initiated by the Town, supported by the developer.</td>
<td>Initiated by the neighborhood in response to the threat from a 40B development proposal.</td>
<td>Conceived by the Town, initiated collectively by the developer and the Town.</td>
</tr>
</tbody>
</table>

Table 2.12 Key features of sample 40R districts
Table 2.13 Smart Growth principles and related 40R projects features

<table>
<thead>
<tr>
<th>Housing location &amp; accessibility</th>
<th>Chelsea</th>
<th>Reading</th>
<th>Belmont</th>
<th>Lynnfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Housing is located near transit facilities, and/or a variety of existing services and amenities</td>
<td>&quot;Transit&quot; 40R eligible location category. Residential-only, but the housing units are located near multiple bus and commuter rail stations, and the city center where a number of commercial and civic amenities are within walking distance.</td>
<td>&quot;High-suitable&quot; 40R eligible location category. Mixed-use development that is located near commuter rail station, and within the town's business zone where a number of retail and professional services are within walking distance.</td>
<td>&quot;High-suitable&quot; 40R eligible location category. Residential-only; housing located in residential neighborhood which has bus service but has limited commercial and other amenities within walking distance.</td>
<td>&quot;High-suitable&quot; 40R eligible location category. Separated residential and commercial uses within walking distance of each other, but not for on-site job-housing balance; located along interstate highway and has no public transit service, has limited non-vehicle connections to context.</td>
</tr>
<tr>
<td>Efficient use of land</td>
<td>Revitalize vacant and underutilized industrial site; one 40R project renovated and reused a mill building. Overall residential density 44.5 units/acre, much higher than the as-of-right density in base zoning, but compatible with adjacent neighborhood.</td>
<td>Redevelopment of underutilized property (a supermarket). Residential density of 69 units/acre, overall FAR 2.78. The overall density is allowed as-of-right in base zoning, but the residential density is unachievable in either base zoning or the Mixed Use Overlay zoning for this area.</td>
<td>Redevelopment of vacant land and underutilized church properties. Overall residential density 11.25 units/acre, which is unachievable in base zoning due to the as-of-right use and dimensional restrictions, and the fragmentation of the subject parcels.</td>
<td>Reuse of a golf course where there was no public sewer and Residential density 17 units/acre, which is not allowed in base zoning. However, the density hasn't reached the 40R requirement.</td>
</tr>
<tr>
<td>Chelsea</td>
<td>Reading</td>
<td>Belmont</td>
<td>Lynnfield</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Encourage non-vehicle travel</td>
<td>Effective pedestrian environment in the whole town area due to a public</td>
<td>The pedestrian environment is limited by the nature of the car-oriented</td>
<td>Non-vehicle travel options are limited.</td>
<td></td>
</tr>
<tr>
<td>- Pedestrian and bicycle facilities</td>
<td>improvement project carried out prior to the 40R development.</td>
<td>residential neighborhood and the building typologies of one-family,</td>
<td>Due to the design of street system, streetscape, signage, lighting,</td>
<td></td>
</tr>
<tr>
<td>- Pedestrian-oriented design</td>
<td>Underground parking for residential at 1.25 spaces/unit ratio. Retail</td>
<td>two-family and townhouse housing.</td>
<td>landscape, etc., the commercial zone is more pedestrian friendly than in</td>
<td></td>
</tr>
<tr>
<td>- Parking</td>
<td>and restaurant parking exempt, but parking need is satisfied by on-street parking, and municipal parking lot at the rear of the building.</td>
<td>Pedestrian-oriented design elements include: reducing the parking ratio from 2 spaces/unit to 1.59 spaces/unit; multiple units sharing one driveway; locating garage door away from residential street.</td>
<td>a typical big box retail mall. But this merit is confined to the 40R district boundary and is limited by the car-dominant nature of the commercial uses.</td>
<td></td>
</tr>
<tr>
<td>Environmental protection</td>
<td>Cleaning-up the contaminated land. Building reached EnergyStar standards.</td>
<td>Buildings reached LEED standards.</td>
<td>Residential parking ratio of 1.75 spaces/unit, lower than single family base zoning; commercial parking ratio of 1 space/213.4 SF on average, higher than a typical main street or traditional village center.</td>
<td></td>
</tr>
<tr>
<td>- Preserve open space and natural resources</td>
<td>LEED certified building and module-constructor.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Redevelop Brownfield</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood sensitive development</td>
<td>40R incentive payment was used to upgrade infrastructure and streetscape.</td>
<td>The developer upgraded the existing on-street: parking and the municipal parking lot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Create benefits to the neighborhood and community</td>
<td></td>
<td>The new buildings were designed following the forms, architecture styles, and materials of the existing houses in the neighborhood.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The design of new development fits into the surroundings</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Environmental protection
- Preserve open space and natural resources
- Redevelop Brownfield

Neighborhood sensitive development
- Create benefits to the neighborhood and community
- The design of new development fits into the surroundings
3. 40R's advantages and limitations in facilitating Smart Growth in the Commonwealth

3.1 40R's advantages

3.1.1 40R's flexibility and adaptability

The sample cases show a diversity in the scales and forms of the districts created by local 40R zoning ordinance or by-laws, and in the types of Smart Growth qualities in the projects developed under 40R zoning. This diversity reflects an essential characteristic of the Legislation, that is, its flexibility in defining Smart Growth standards and 40R district qualifications which enables it to adapt to various circumstances during implementation. Although the Legislation outlines nine Smart Growth principles, it only sets a few baseline standards for 40R district approval; the majority of the other Smart Growth features are optional, subject to each community's interpretation of Smart Growth and its development needs. Being flexible and adaptable is essential to the success of the program.

First, 40R aims to affect local development through local zoning or to introduce a new development pattern into the local community through voluntary changes in local zoning. Eventually, it is implemented through the local public rezoning and project permitting processes. The communities hold the initiative to maximize 40R's impacts. Therefore, in order to attract broad support to start the program, aside from providing financial incentives, 40R needs to leave each community the latitude to interpret the Smart Growth principles according to its own goals and needs.

Second, as shown in the cases, most of the developments' Smart Growth features are context sensitive. Some of them only apply to special circumstances (e.g. the open space preservation in Lynnfield's 40R development), and as noted by an interviewee, it is almost impossible to include all desired features in one development project. By keeping a broad definition of Smart Growth principles while keeping most of the features optional, 40R is able to create a critical mass of qualified 40R districts and projects to maintain the program. If 40R narrowly defined Smart Growth as Transit Oriented Development or Brownfield redevelopment, or requires satisfaction of all the features, it would hardly gather enough participants to apply for continuous funding from the State.
3.1.2 Incentive-based stakeholders’ cooperation

From the establishment of the 40R Legislation and the Regulation to the implementation of the program at the State and the municipality levels, the success of 40R relies on stakeholders’ cooperation, a central notion of 40R to better align the interest of the community and that of the developer. In addition, 40R reflects the State’s broader mission to increase housing supply and improve environment quality.

Since the term ‘growing smart’ was first coined in Massachusetts in 1987, this conceptual framework has promised to tame the related challenges of housing affordability, worsening traffic, downtown and urban disinvestment, and fragmentation of the Commonwealth’s natural landscape. However, public policies to facilitate realization of this promise have been slow to materialize. This was a major reason for legislators prompt adoption of the 40R legislation – only one year after the publication of the Commonwealth Housing Task Force report. Governor Romney’s commented that Chapter 40R was “the most far reaching and innovative housing steps that Massachusetts has seen in decades.” In other words, the CHTF report successfully increased political understanding of the connection between land use, economic development and environmental values at the state level and helped create 40R as a way to integrate state policy and spending regarding these issues and to overcome obstacles to Smart Growth development.

At the local level, it takes effort, money, and a longer approval period to go through the 40R process. Therefore there must be sufficient incentives for at least one stakeholder to initiate 40R. Then, the prospective benefits of 40R must be broad enough so that the majority of the key stakeholders are willing to participate in the process and to create the political support needed to achieve approval of a city council or the two-thirds vote required at a town meeting. These incentives are offered in 40R in the form of financial payment, zoning standards, permitting, and the public participation process (table 3.1).

<table>
<thead>
<tr>
<th>Local government</th>
<th>the Zoning Incentive Payment and Density Bonus Payment, priority in getting other discretionary public funding, particularly for infrastructure, the promise that local education costs won’t exceed property tax revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developers</td>
<td>the economies of scale resulting from higher densities, more friendly and cooperative dynamic with local communities, as-of-right zoning and streamlined permitting process, the reduced risk of abutter issues or appeals, the ability to overcome development obstacles created by site-specific conditions or financial difficulties</td>
</tr>
<tr>
<td>Neighborhoods</td>
<td>the public process prior to the adoption of zoning district; the opportunity to ensure a predictable build-out scenario through design standards; the promise of avoiding adversarial 40B projects</td>
</tr>
</tbody>
</table>

3.1.3 The power of zoning tools

Zoning is a tool that communities use to direct future development. Good zoning should reflect public objectives and ensure a certain level of predictability while still being flexible enough to adapt to changing conditions and times. It should also provide project proponents with a certain level of zoning security without local public participation, and last but not least, be feasible and implementable. Since 40R Legislation aims to promote Smart Growth development through the local zoning process, a successfully structured 40R by-law meets most of the advantages of good zoning.

First, zoning is adopted and implemented through a public process, so good zoning reflects public objectives, and contains a mechanism to secure public interest. 40R embraces these qualities in its district establishment process and project permitting process. Although 40R grants each party the same power to initiate a 40R district based on their own interest, it requires a local public process prior to submitting the 40R district application to DHCD. It also requires site plan review for a 40R project proposed in an existing 40R district, even when the project, as proposed, already meets all the as-of-right zoning standards. These requirements help ensure that the 40R zoning by-law and development represent the community's interest and vision and therefore, fully utilizes 40R's flexibility and adaptability.

Second, zoning has multiple layers, including as-of-right development, special permit, variance, waiver, etc., which changes the levels of control for each stakeholder on individual projects over a long period across multiple projects. Similarly, a successful 40R by-law would create as-of-right development capacity that could be achieved conveniently by a developer, such as in Reading's Downtown 40R by-law; it should also create room for stakeholders to negotiate and adjust certain aspects of zoning requirements, such as the permitting schedule waiver in Belmont's 40R by-law and the design standards waiver in Lynnfield's 40R by-law.

Third, 40R encourages communities to use Design Standards to regulate future development and facilitate the public process. Several interviewees noted that the visually unappealing appearance of many high-density developments (most of which were developed as 40B projects by bypassing local zoning) is a major reason why multi-family housing is not welcomed in many neighborhoods. In response, the Legislation authorizes municipalities to adopt design standards in 40R districts; the Regulations supplement the statute, specifically authorizing regulation of the "exterior appearance of buildings" (760 CMR 59.04(a)(6)), and require that any dimensional or other zoning standard waiver should be granted on condition that the waiver "will allow the Project to achieve the ... physical
character allowable under the Smart Growth Zoning, and is consistent with the Design Standards.”
Therefore, communities which don’t have Design Standards in the base zoning, particularly those that are subject to the threat of 40B development, by adopting a 40R district with Design Standards, would have a tool to control the appearance of future development and to facilitate communication among stakeholders.

For example in Belmont, the Design Standards drafted by the neighborhood gave the neighbors significant control on the development proposed one year later. It also gave the developer a reference of the types of development that the community were likely to accept and thus helped ensure that the proposal would meet the neighborhood’s expectations. Reading and Lynnfield provide examples where Design Standards functioned as a communication tool in the public process. In Reading, because the Downtown 40R district would potentially allow many projects which were not foreseeable at the time of creating the district, the neighborhood was reluctant to support the by-law. In Lynnfield, the unprecedented scale of the proposed 40R development also raised a lot of concerns and doubts in the community. In both cases, Design Standards were developed by the developer and the municipality with input from the neighborhood. They provide predictability of future build-out scenarios, which helps reduce the neighbors’ concerns about the proposed 40R district and 40R development.

3.2 40R’s limitations

3.2.1 Obstacles from development context

There are some general barriers to Smart Growth development that come from the neighborhood, the local government, and the development community. According to many interviewees with ample experience in city/town planning and development in Massachusetts, these barriers are rooted in the policy and political environment, prevailing market situation and mainstream lifestyle; they exist in every

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1 Relevant text in the statute and Regulations: M.G.L. Ch.40R §10 authorizes municipalities to adopt: “...design standards applicable to projects undergoing review by the approving authority, to ensure that the physical character of development within the smart growth zoning district is complementary to adjacent buildings and structures, is consistent with the comprehensive housing plan, and any applicable master plan or plans for the city or town. Such standards may address the scale and proportions of buildings, the alignment, width, and grade of streets and sidewalks, the type and location of infrastructure, the location of building and garage entrances, off street parking, the protection of significant natural site features, the location and design of on-site open spaces, exterior signs, and buffering in relation to adjacent properties.” 760 CMR 59.04(1)(f) reads that “Design Standards may address the scale, proportions, and exterior appearance of buildings, the placement, alignment, width, and grade of streets and sidewalks, the type and location of infrastructure, the location of building and garage entrances, off-street parking, the protection of significant natural site features, the location and design of on-site open spaces, landscaping, exterior signs, and buffering in relation to adjacent properties.”
step of the planning, zoning, permitting processes, and have major impacts on development patterns, leading development away from what is commonly considered as Smart Growth; they are difficult to change within a short time or by a few policy initiatives. Some of the most frequently mentioned barriers include:

- Most residents don’t welcome new development near their homes, mainly because they are uncertain about what would be built and who will move in and worry about traffic congestion and circulation caused by increased density.
- Some neighborhoods are opposed to affordable housing and high-density housing development, due to concerns about the negative impact on the neighborhood and on property values. Others object to introducing commercial activities into a residential neighborhood.
- Municipalities are concerned about high-density residential development due to the expected increase in school cost because of more students.
- Interviewees from the development community noted that the majority of housing developers in Massachusetts are only interested in “quick and simple” single-family housing development. Only a limited number of developers are proactive in engaging in the types of development that Smart Growth advocates (i.e. mixed-use, compact development, infill or renovations). Such projects are more sophisticated in terms of design, construction, impact mitigation, and real estate finance, and require more specialized development skills.

40R faces the same challenges when it tries to introduce Smart Growth into a neighborhood, and it cannot succeed unless it creates enough incentives for its initiator(s) and supporters to persuade opponents. A few successful Smart Growth development examples may help reduce people’s doubt or hostility to Smart Growth, but before it becomes the mainstream development pattern, 40R would remain in a disadvantageous position when it encounters those oppositions.

3.2.2 Dilemmas of zoning policy

As discussed above, 40R is expected to influence land development patterns and housing production by incentivizing good local zoning. However, as revealed in Verrilli & Raitt (2009), and confirmed by multiple interviewees, the majority of the thirty-three approved 40R districts were initiated by a developer and/or municipal government when a development proposal was already available; in many cases, the developer worked closely with the Town/City in drafting a 40R district application and design standards. 40R was therefore used as a permitting tool instead of a land use planning tool. The 40R district was crafted around a single project, its benefits directly related to a particular neighborhood and developer, and its Smart Growth impact was confined to a limited area. In these cases, 40R failed to realize the potential power of zoning. Two reasons may explain this problem:
First, there was a conflict between the timeline and scope of land use planning and development incentives. Designed as a zoning tool, 40R is expected to show its impact gradually over a long period, and the incentive payments granted to municipalities are not bound to a particular district or time period. However, the incentive-based cooperation requires that 40R offers certain and immediate benefits in order to motivate stakeholders. A development proposal provides such certainty, and helps the 40R initiator(s) to identify and lobby the immediate beneficiaries. In most of the approved 40R districts, the benefits of adopting a 40R district were directly channeled to a specific neighborhood in one way or another. In Chelsea, the City used the incentive payments to upgrade the infrastructure in the Box District neighborhood, while in Lynnfield, the developer paid for the upgrading from the revenue obtained through 40R. As noted by several interviewees, the majority of the residents don’t care whether their town/city receives state subsidies or takes Smart Growth initiatives, unless their immediate interests are affected. Therefore, 40R is more likely used as a project permitting tool, and it is easier to get local support in this way.

The second explanation is the obstacle to zoning change. As noted by several interviewees, in Massachusetts in the past decade, the State has advocated for a variety of Smart Growth strategies and tools. The implementation of these strategies often requires local zoning changes. More often than not, the majority of the residents prefer things to remain static and therefore, vote against zoning changes. A major reason is that these proposed zoning changes are often allowed an as-of-right development pattern (uses, densities, income-level, etc.) that currently does not exist in the neighborhood, or it requires a Special Permit or Variance to get approved under the base zoning. The residents tend to believe that once the new zoning is adopted, inescapable and uncontrollable changes will result.

40R probably amplified this concern about changes in as-of-right zoning when it tried to streamline the permitting process. As specified in the Legislation and Regulations, once a 40R district is established, any development proposal should be issued a permit upon compliance with zoning and Design Standards within 120 days (it may be subject to a site plan review process in addition). 40R also allows certain relief by waiver instead of by variance, which from the neighborhoods’ perspective might further limit the public’s influence on new development. Therefore, although the neighborhood has opportunities to interfere with the details of the 40R bylaw/ordinance before adopting a district, they may hesitate to support 40R zoning due to the perception that they will lose control of future development. This perception is reinforced by the restriction on modifying a 40R district that has already received final approval from DHCD. The Legislation authorizes DHCD with veto power in case the municipality opts to amend or repeal an approved 40R district; amendments to approved 40R districts are not effective without the written approval of DHCD, and if the approved amendment or revocation results in fewer housing units, the community must refund the corresponding incentive payments.
As a result, 40R as a zoning policy, is faced with bigger obstacles as compared to other project-based and/or non-zoning Smart Growth policies or strategies. Communities tend to prefer the latter tools if they can offer a similar amount of financial or other incentives.

### 3.2.3 Lack of planning and land regulation foundation at state level

40R is the first major effort that the State has taken to incentivize communities to conduct Smart Growth planning, however, its effectiveness has been suffering from a lack of support in a solid state/regional regulatory framework and planning activities.

The home rule tradition in Massachusetts determines that the authorities and activities of planning and land use regulation are mainly concentrated at the municipality level. The State doesn’t have a regional Smart Growth master plan or land management plan, doesn’t mandate that communities include Smart Growth into local planning and development agendas, and doesn’t require communities to achieve certain development results. DHCD as the state regulatory agency of 40R, is obligated to work within the framework established by the Legislation, which granted DHCD very limited power to influence the features and zoning standards of the proposed 40R districts.

Therefore, 40R as a voluntary incentive program, is easily ignored or manipulated by communities. After almost 9 years since the Legislation’s issuing, only 32 of the 351 municipalities of the state (9%) have adopted a local 40R zoning ordinance or bylaw. Many communities didn’t feel an obligation to embrace Smart Growth, to provide high-quality affordable housing, or build sufficient motivation or financial interest to use 40R on a particular site. Other communities had a Smart Growth agenda or already identified potential developable site(s), but preferred to use other zoning tools which are locally controlled. Manipulation is illustrated in cases where the neighborhood adopted 40R, but mainly for the purpose of avoiding a current or potential 40B threat, or maintaining the existing development pattern as much as possible. As noted by several interviewees, in early stage of 40R’s implementation, DHCD, in order to make progress and encourage participation, approved some 40R districts with very loose standards. There is also criticism that the Legislation and Regulations put the focus on implementation mechanisms and process, but neither as much focus on the results, nor on whether communities should be rewarded for good results and penalized for unsatisfactory results. Nevertheless, DHCD recently amended the Regulations based on lessons from 40R’s previous implementation, and DHCD supposedly has more discretionary power to evaluate 40R district proposals against stricter standards. However, given that many communities, which adopted or had considered adopting 40R districts, perceived a loss of authority to the State when the standards were looser. It’s not unreasonable to assume that communities would be even more reluctant to use 40R under the new standards.
3.2.4 Cons of the 40R’s flexibility

The flexibility and adaptability of 40R helped it fit into different contexts and encouraged local innovation in planning, design and development. However in some cases, being flexible went too far and resulted in development that failed to meet most of the Smart Growth principles outlined in the Legislation. For example, as noted by several interviewees, some 40R districts approved under the “highly suitable locations” standard failed to achieve the Smart Growth principle of locating housing in places where a number of services and amenities are easily accessible. In addition, some completed 40R projects have very low density or are not significantly better than a conventional housing project that is isolated from the rest of the community. There were also comments that issuing money to such developments violates the notion of awarding high quality Smart Growth development. Such drawbacks of 40R are attributed to both the policy itself and the context in which it operates.

For 40R itself, there has been criticism about the vagueness of 40R’s definitions and requirements of some of the Smart Growth standards, as a result, some districts and projects approved under 40R didn’t truly embrace the Smart Growth principles. One major ambiguity is the definition of “highly suitable location” in the initial Regulation adopted in March 2005. The Legislation defines “highly suitable locations” as “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.” The Regulation adopted in March 2005 integrated this definition into approval requirements and criteria (table XX, middle column). This standard gave local communities complete freedom to choose any location to establish a 40R district as long as that location is locally identified as “appropriate” for high-density housing or mixed-use development. DHCD, as the state agency to approve a 40R district and issue incentive payments, has very limited power to turn down a district proposal that is inconsistent with some key Smart Growth principles. Criticisms of this problem led to revisions of the definition, approval requirements, and criteria in the amended Regulation adopted in November 2013 (table 3.2, right column). The new definition emphasizes the “statutory goals of Smart Growth” and sets forth specific criterion which directly reflect Smart Growth principals. Most importantly, the new approval requirement puts the burden to prove eligibility on the municipality, and gives DHCD discretionary power. “Such evidence may include, but would not be limited to, the degree to which ...” to “determine” whether the evidence is “satisfactory” and the proposed location is eligible. It is hoped that future 40R districts approved under the new standards will have more robust Smart Growth qualities.

In terms of the context, as discussed above, 40R is subject to the impacts of general Smart Growth obstacles, zoning barriers, and a weak regional planning regulatory framework. Being flexible creates opportunities for stakeholders and other interested parties to use it opportunistically to pursue objectives other than true Smart Growth development.
<table>
<thead>
<tr>
<th>Table 3.2 Comparison of the definition, approval requirement and criteria of a “highly suitable location” in the initial and amended Regulations</th>
</tr>
</thead>
</table>
| **Definition of “highly suitable location”** | 40R Regulations (effective on March 2005)  
Highly Suitable Location means a location that qualifies as an Eligible Location under the criteria set forth in 760 CMR 59.04 (1)(a)3. | 40R Regulations (effective on November 2013)  
Highly Suitable Location means a location that, as determined by the Department based on satisfactory evidence provided by the Municipality, is consistent with the statutory goals for Smart Growth set forth in M.G.L. c. 40R, §1 and 760 CMR 59.00, and qualifies as an Eligible Location under the criteria set forth in 760 CMR 59.04 (1)(a)3. |
| **Approval requirement and criteria of “highly suitable location”** | The District comprises part or all of the land located within a “Highly Suitable Location,” as defined in 760 CMR 59.04(1)(a)3. The Department shall presume that a location is highly suitable if it has been identified as an appropriate locus for high-density housing or mixed-use development in a local comprehensive plan, community development plan, area specific plan, regional policy plan, or other plan document, in each case adopted or updated after a public planning process no more than five years prior to its submission under 760 CMR 59.00, or if it has been designated as a development district under M.G.L. c.40Q. Otherwise, the Municipality must provide satisfactory evidence that designation of an area, by virtue of its existing or Planned Infrastructure, existing or Planned transit or other transportation access, existing underutilized facilities, and/or location, is consistent with the statutory goals for smart growth set forth in M.G.L. c.40R §1 and 760 CMR 59.00. | The District comprises part or all of the land located within a Highly Suitable Location, as designated by the Department. The Municipality must provide satisfactory evidence that the proposed District, although it does not qualify under either of the other two categories of Eligible Location, nevertheless is a location where development would promote Smart Growth. Such evidence may include, but would not be limited to, the degree to which:  
1) the location is near (though not within ½ mile of) a rapid transit or commuter rail station or bus or ferry station terminal;  
2) the location has Transportation Access [a];  
3) proposed zoning in the location and existing zoning near the location will encourage compact, land-use-efficient design, and Mixed-use Development;  
4) infill and redevelopment of previously-developed areas with Infrastructure are likely to occur that will help to preserve Open Space, farmland, natural beauty, and critical environmental areas elsewhere in the Municipality; and  
5) prior identification as an appropriate locus for higher-density housing or higher-density Mixed-use Development in an adopted Municipal, regional or state plan. |

Note: [a] “Transportation Access”, defined in the new Regulation as “safe, practical and continuous pedestrian access to at least one destination that pedestrians frequently use, such as an elementary or high school; a college or university; a hospital; a municipal office building, public library, post office, public safety facility, or other civic facility; a general or neighborhood commercial or business area with substantial employment, retail or entertainment activity; a recreational facility open to the public; or a bus stop along a route serving an Eligible Location or Adjacent Area at a minimum of hourly frequency during peak periods.

Source: 760 CMR 59.00: Smart Growth Zoning Overlay District, Chapter 40R Regulation Effective March 25, 2005 to November 21, 2013, 760 CMR 59.00: Smart Growth Zoning Overlay District, Chapter 40R Regulation Effective November 22, 2013.
4. Conclusions

4.1 40R’s effectiveness in promoting Smart Growth

This research set out to investigate the effectiveness of Chapter 40R in promoting Smart Growth in Massachusetts using four cases to discuss the Smart Growth development qualities resulting from implementation of 40R in local communities.

All the 40R districts and projects in the four cases presented certain Smart Growth features, but they differ from each other in terms of location, scale, zoning standards, and development type, and highlighted different Smart Growth features beyond the minimum 40R district requirements. Even when they targeted the same Smart Growth principle, that principle was often interpreted differently according to the particular needs and vision of the key stakeholders. The process was conducted based on the public and private resources that were available, and each project achieved different levels of quality as a result. In a sense, these districts and projects did not result from the implementation of the Legislation; rather, they resulted from a specific need or vision of the community or a developer which already existed before 40R’s provisions and was realized with the help of 40R. In many cases, a developer brought a high quality development proposal which set the tone for the 40R district and development; in other cases, the local political leaders integrated Smart Growth and 40R into the community’s overall development agenda. In other words, 40R has facilitated rather than initiated development. As a result, the Smart Growth qualities of the build-out largely rely on the nature of the needs, the Smart Growth notions of the vision, and the resources in each context.

This is due to 40R’s structure and its implementation mechanism. First, the Legislation defines Smart Growth principles broadly and adopts very flexible Smart Growth standards, leaving itself open for communities to interpret the principles and craft local Smart Growth standards according to their needs. Second, 40R as a voluntary program, is implemented through local zoning and development practices through a public process and cooperation of key stakeholders, which is supported by the benefits that 40R may bring to stakeholders. These stakeholders have the incentive and opportunity to choose the Smart Growth principles that maximize benefits. Third, by creating a zoning district, 40R provides an opportunity to scale up a good vision and serve the neighborhoods’ needs for housing, services, jobs, etc. in the long run.

However, in some circumstances, the same characteristics of 40R may have negative impacts on its effectiveness. Being flexible may go too far and result in development that can hardly be qualified as
Smart Growth. This is more likely to happen when 40R is faced with resistance to high-density, affordable housing, and mixed-use development. In the majority of the communities, people’s resistance to zoning change prevents broader adoption of 40R, so the benefits of Smart Growth cannot be extended. Lastly, a lack of a planning and land use regulatory framework at the state or regional level leaves 40R vulnerable to challenges.

There is a need to look for ways to utilize 40R’s potential. A study conducted by the Metropolitan Area Planning Council (2014) identified the pressing need to increase housing production in the Boston metropolitan area in order to maintain the region’s most critical asset—a skilled, well-educated workforce. It is estimated that householders born before 1966 will put 130,000 single family units back on the market by 2020, enough to supply 72% of demand for younger households. Meanwhile, the under-40 households critical to growing the labor force overwhelmingly prefer apartments and condominiums, far fewer of which would be freed up by older cohorts. As a result, nearly two-thirds of housing demand will be for multifamily housing (Fig 4.1). Such demand will concentrate in the inner core and regional centers where the majority of job opportunities, public infrastructure and well-
established services and amenities are available (Fig. 4.2). These demographic and housing market projections underline the importance of coordinating housing production with spatial planning and infrastructure strategies at the regional level, as well as with a development-friendly zoning framework at the community level. 40R provides such an opportunity by aligning the state’s Smart Growth goals and housing subsidy with local land use regulation and real estate development processes. 40R needs some modifications to better serve this purpose.

4.2 Recommendations

First, balance the flexibility and rigorousness of Smart Growth standards. Set stricter standards for the minimum district requirements in order to avoid subsidizing development that represents little of the Smart Growth principles as specified in the Legislation; at the same time, give DHCD more flexibility and discretionary authority in reviewing and approving 40R applications in order to fully consider the context in each individual situation. As discussed above, the amended “highly suitable location” criterion supposedly would deny a district application for a site that has limited transit and non-vehicle access and limited other services nearby. Another standard that may need to be modified is the density threshold. Currently, 40R includes three housing density thresholds – 8 units/acre for single-family housing, 12 units/acre for two- and three-family housing, and 20 units/acre for multi-family housing. However, a zoning district that only allows single-family housing development as-of-right can hardly be considered as contributing to Smart Growth, even though it provides affordable housing or is within walking distance

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1 “Stronger Region scenario” refers to the scenario where the region develops strategies to stem the loss of population to other states and achieves a small net inflow of labor (the labor force grows by 175,000 over the next 30 years, an increase of almost 7%).

to public transit and other services. One suggestion is to exclude single-family housing from the density qualifications or at least from the calculation of 40R incentive payments; an alternative suggestion is to give DHCD more discretionary authority to decide whether the proposed 40R district has devoted enough of its developable land area to multi-family housing.

Second, emphasize the Smart Growth mission of the Legislation. Associate the Zoning Incentive Payment with multiple Smart Growth standards. Currently, the amount of Zoning Incentive Payment is calculated based on the projected number of additional new units that could be allowed as-of-right after adopting the 40R zoning. However, 40R's mission is not confined to producing housing, and zoning as a land planning tool may be more effective than a project-based program. Therefore, it is reasonable that the Zoning Incentive Payment consider multiple Smart Growth standards, and the total amount of payment is the aggregate of several payments each of which is decided by each Smart Growth standard. For example, payments could be made separately for housing, transit, density, brownfield redevelopment, and open space preservation incentives. A side benefit of this approach is the potential to turn 40R into a Smart Growth umbrella program, and channel other public funding sources that are devoted to individual Smart Growth strategies to communities through 40R zoning. Communities may meet the standards in different ways. For example, if a proposed 40R district is not served by public transit and is unlikely to have that in the near future, it may still get the transit incentive on the condition that the payment would be spent to provide shuttles to the nearest transit station, or if a proposed development has promised to provide that service.

Third, leverage the power of zoning. Associate the Zoning Incentive Payment with good local zoning strategies. Traditional zoning typically includes some as-of-right standards that may create barriers to Smart Growth types of development, such as maximum density, minimum parking, etc. The Legislation uses minimum residential density standards and eligible location standards to encourage higher-density development and less private vehicle use. However, the majority of local 40R zoning ordinances and bylaws still use maximum density and minimum parking standards, and many of them took the minimum density threshold in the Legislation as the maximum as-of-right density for their 40R districts. As a result, a development couldn’t increase the density or reduce parking supply, without going through a Special Permit or density/parking waiver process. A potential solution is to set aside a proportion of the Zoning Incentive Payment to reward communities that include 40R zoning strategies that make the permitting process shorter and more predictable for a proposed development that has improved Smart Growth qualities.

Fourth, pay more attention to the build-out results, and reward high-quality development. Currently, 40R's Smart Growth standards are only used in district applications. Once a district is approved, there is little concern for the development results; the only relevant 40R element is the Density Bonus Payment,
which takes little consideration of the Smart Growth qualities of the project(s). However, having 40R zoning doesn’t assure that the barriers of Smart Growth are reduced. For example, many approved 40R zoning ordinances and bylaws “encourage shared parking” and allow the minimum parking requirement to be reduced when a shared parking program is adopted. However, none of the 40R developments in these districts has shared parking. As noted by an interviewee whose community had tried to develop a shared parking program, it took a lot of time and effort to negotiate with stakeholders and to deal with legal and insurance issues. Without significant benefits, neither the municipality nor the developer had the motivation to push for this Smart Growth parking mode. To go further, associate the Density Bonus Payment with the Smart Growth qualities of a project, or set aside a proportion of the incentive payment to reward high performance development. This may help to transfer the Smart Growth principles and standards into built results.

Last but not least, 40R cannot offer a fast solution to the context barriers to Smart Growth and zoning change. However, it could use successful 40R projects to showcase the benefits of 40R zoning and Smart Growth. This requires keeping track of 40R projects, evaluating their Smart Growth qualities and the role that 40R played in achieving the results. Eventually, 40R may inspire Smart Growth vision in places where such a vision doesn’t exist.

4.3 Further research

This research only looked at four cases where 40R development has been conducted in a 40R district. This is only a small fraction of the 33 districts that have been approved and a much smaller fraction of the 351 communities in Massachusetts, all of which may participate in the 40R program in the future. As a result, there are limitations to this research’s conclusions related to the scale and diversity of the sample, and the timeline of the Legislation, Regulations and the real estate development cycle. A more comprehensive evaluation of the effectiveness of 40R could be conducted based on a larger sample and over a longer period. This would have several advantages.

First, table 1.3 and table 1.4 in section 1.3.2 listed the economic, demographic, land and housing development characteristics of the sample communities. The initial purpose is to find the correlation between these factors and the implementation results of 40R in these communities. A larger and more diverse sample may provide more evidence or counter-evidence. Particularly, a sample including cases where 40R districts were created but haven’t been developed and where 40R had been considered but not chosen may help understand the obstacles to 40R’s implementation during the entire process of community planning, zoning, and project permitting. These obstacles may be related to certain characteristics of the community.

Second, a larger sample may uncover relevant magnitude thresholds for some of the 40R district
qualification standards. For example, the cases illustrate that the density thresholds may need to change, but there is little information on what the property density range is, particularly when it comes to introducing multi-family housing into a neighborhood where the existing housing stock is exclusively single-family. It involves many factors such as the service capacity of the infrastructure, land prices, housing prices and rents. This needs to be analyzed based on a larger sample. Another example is the parking ratio. There isn't a unified 40R parking standard for all proposed 40R districts. However, as an important factor of Smart Growth, parking ratios should be included in the 40R standards. A broader and larger sample is needed to estimate the correlation between the property parking ratio and factors including affordable housing percentage, residents' age, the availability of transit facilities, the distance to jobs, etc., in order to set a thresholds for 40R parking ratios.

Third, all the sample 40R districts were approved and projects finished before the amended Regulations took effective. The amendment supposedly improves the overall "location" Smart Growth qualities. Observations of districts approved under the new standards are needed to confirm this assumption. It may also shed light on other proposed modifications.

Fourth, several interviewees mentioned that the real estate development cycle has affected the implementation of 40R, and suggested that in the next few years there will be more mixed-use projects, more development in existing 40R districts, and additional establishment of new 40R districts. Since 40R's implementation and impacts largely rely on real estate development activities, the cycles of the real estate market should be taken into consideration.

Finally, this research, and also all the future research questions listed above focus on the results of 40R's implementation. But a balanced policy evaluation needs to consider both the input and outcome, measuring the cost-benefit of public spending on 40R. The input may include the amount of 40R incentive payments paid to communities and the costs of 40R program outreach and technical assistance. However at this point, it is still unclear what timeline and standard should be used for such an evaluation. On one hand, it is inappropriate to compare 40R with other project-based housing or Smart Growth policies, for example, estimating how many housing units would have been created since the launch of 40R if a similar amount of public money had been spent on 40B subsidy. On the other hand, one interviewee commented that the same amount of money might have larger effects if it was spent on regional planning rather than on 40R. It is true that for cost-effectiveness analysis purposes, a comprehensive regional planning policy would be closer in nature to 40R than project-based subsidy programs, but there hasn't been such a policy in Massachusetts that could be used as a reference to set evaluation standards. Therefore, future study is warranted.
5. Bibliography

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6. Appendix

6.1 Chapter 40R Requirements of Smart Growth Zoning District

(a) The minimum requirements of a smart growth zoning district include the following:

1. The proposed district must be determined an “eligible location” (see definition in Section 2).

2. The zoning ordinance must provide for residential use to permit a mix of housing such as for families, individuals, persons with special needs, or the elderly.

3. Housing density allowed in the developable land area of a proposed district must be at least: 20 units per acre for multi-family housing, 8 units per acre for single-family homes, and 12 units per acre for 2 and 3 family buildings.

4. The zoning ordinance for each proposed district will:
   - provide that not less than 20% of the residential units constructed in projects of more than 12 units will be affordable, and
   - contain mechanisms to ensure that not less than 20% of the total residential units constructed in each district will be affordable.

5. The zoning ordinance must permit infill housing on existing vacant lots and additional housing units in existing buildings, consistent with neighborhood building and use patterns, and consistent with building, fire, and safety codes.

6. Development in the district will 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.

7. No restrictions on age or any other occupancy restrictions in the district as a whole. This provision does not preclude the development of specific projects that may be exclusively for the elderly, the disabled, or for assisted living, provided that not less than 25% of the housing units in such a project will be affordable housing.

8. Full compliance with federal, state and local fair housing laws.

9. The proposed district may not exceed 15% of the total land area in the municipality, except that the
department may approve a larger land area if such an approval serves the goals and objectives of the chapter.

10. The total land area of all approved smart growth zoning districts in the municipality may not exceed 25% of the total land area in the municipality.

(Note: unlike #9, above, this provision may not be waived.)

11. Proposed housing density will not overburden infrastructure as it exists or may be practicably upgraded.

12. The proposed zoning ordinance must define the manner of review for individual projects by the approving authority in accordance with Section 11 (see below) and specify the procedure for such review, in accordance with the regulations of the department.

6.2 Interviewees list

Angus Jennings (A.G. Jennings, LLC)

Ann Verrilli (Citizens’ Housing and Planning Association)

Bill Reyelt (Department of Housing and Community Development)

Bob Mitchell

Chryse Gibson (Oaktree Development)

Clark L. Ziegler (Massachusetts Housing Partnership)

Eleanor White (Housing Partners, Inc.)

Emily Loomis (TND, Chelsea)

Jean J. Delios (Town of Reading)

Jeffrey Wheeler (Town of Belmont)

Jennifer Raitt (Metropolitan Area Planning Council)

John DePriest (City of Chelsea)
6.3 Sample interview questions

Interview with Town/City Planner or Town Manager on Smart Growth, Chapter 40R Districts and Projects

1. Before the City/Town adopted Chapter 40R ordinance, were there development policies, plans, or zoning articles that aim to promote smart growth? If yes, what smart growth features were emphasized in these policies, and what features do you think are not applicable to your city/town? How well have these policies and planning efforts achieved your smart growth aims?

2. What are the reasons for the adoption of the Chapter 40R districts? Did you expect that it would fill certain gaps of existing plans, zoning, and development policies?

3. What were the existing conditions of the site/area prior to the creation of the Chapter 40R district(s)? What aspects of the site/area make it an ideal location for Chapter 40R district and projects?

4. Were there any different opinions or opposition on establishing a Chapter 40R district in that location? If so what were the reasons for the opposition/conflicts? Do you think these disagreements were valid? How did the oppositions affect the resulting district?

5. What are the smart growth features do you think the project has (not confined to the baseline requirements of the legislation)?

6. Besides these smart growth features of the project itself, do you think the project has some impact on other non-40R projects? If yes, what are the impacts?

7. (This may include whether it facilitated other similar project; whether it affected the housing price, demography, the sufficiency of amenities and services such as traffic, retail, hospital,
shopping, etc. of the area or the community). – Particularly for Reading: the relationship between the two districts and projects?

8. Do you think the project has any flaws or negative impacts? If yes, what are they, and what are the reasons?

9. Are these results consistent with what the Town expected at the beginning? Is there any part/aspect of the project that the Town or you think could have been better planned or developed?

10. Was there opposition to the plan, design, and/or development of the project? If so, what was the basis for the opposition? How were they solved? How have these negotiations affected the final quality of the project?

11. Does the City/Town have plans for more Chapter 40R district and projects? If so, what if anything would you like to see done differently?

12. Do you have any comments on the state’s Chapter 40R legislation?

13. Are you expecting other federal/state/municipal level policies that aim to encourage and facilitate smart growth development? If yes, what particular factors do you think the new policies should have?

**Interview with developer**

1. What do you think are the most important factors when deciding whether a project is smart or not? Which smart growth aims do you think are less likely to be realized and what are the obstacles?

2. How the project came out as a 40R development? What are the major reasons of your decision?

3. What features distinguish it from the other recently developed projects in the town? Particularly, what smart growth features does this project have?

4. Is there any part/aspect of the project that you think could have been better planned or developed – e.g. any flaws, or inconsistency with smart growth principles, or negative impacts? If yes, what are they, and what are the reasons for them?

5. Was there opposition to the plan, design, and/or development of the project? If so, what was the basis for the opposition? How were they solved? How have these negotiations affected the final quality of the project?

6. Besides this project, have you developed, or tried to develop other project that you think is a good example of smart growth development?

7. Do you have any comments on the state’s Chapter 40R legislation?
8. Are you expecting other federal/state/municipal level policies that aim to encourage and facilitate smart growth development? If yes, what particular factors do you think the new policies should have (suppose the existing policies lack)?