

Housing and Land Use Policy in Massachusetts

Reforms for Affordability, Sustainability, and Superior Design



By Amy Dain

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Funding for this paper provided by:

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EXECUTIVE SUMMARY

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Massachusetts' inadequate framework for land use regulation has caused hyperinflation in housing prices, loss of population, poorly designed neighborhoods, and sprawling development that threatens the state's environmental, agricultural, and recreational resources. The resolution of these problems will require state action that:

- Rewards municipalities for meeting state-wide goals regarding the quantity and quality of development.
- Permits specific types of compact, higher density residential development.
- Provides municipalities with new regulatory tools to negotiate more effectively with builders.

Restrictive regulations have undermined the market's ability to meet demand, such that homebuyers have dramatically bid up the prices of a limited supply of housing over the last 25 years. Local regulations systematically favor development of the most expensive type of housing—single-family homes on large lots—while putting up barriers to multi-family housing, single family houses on small lots, and accessory apartments in owner-occupied homes. In addition, overly prescriptive regulations prevent developers from creating innovative neighborhood designs that are organized around the landscape; lots and roads are laid out instead to meet strict geometric requirements. Finally, regulations that prevent dense residential development and in-fill of new housing in existing neighborhoods have undermined sustainable land use patterns

by forcing most new development into large parcels of undeveloped land, often far from town centers, public transit, and other infrastructure.

To encourage localities to accept more development, and to create a regulatory framework that promotes superior design and better environmental outcomes, Pioneer Institute recommends a series of policy innovations at the state level.

INCENTIVES: Pioneer Institute recommends creating incentives for municipalities to improve their performance in housing development. The state should base allocations of new state aid to municipalities at least partially on levels and patterns of housing development. Communities should be rewarded for greater building levels, with higher allocations given for building in areas where there is high demand (based on prices), existing density, and proximity to Boston or other economic centers; bonuses could be granted for housing built on small lots or near public transit or town centers. In communities with low demand and less regional need for housing, grants could be allocated based on other considerations, not as incentives for building.

EXEMPTIONS: Pioneer Institute recommends the following exemptions from local zoning authority to make “smart growth” the path of least resistance for developers.

- **In residentially zoned districts, allow by right accessory apartments in owner-occupied single-family homes that meet certain standards.** Many municipalities prohibit accessory apartments, and others

restrict occupancy of the units to relatives of the homeowners. Allowing more accessory apartments would be a low-impact source of rental housing across the suburbs, where the supply of rental units is currently inadequate.

- **Allow by right (with site-plan review) certain mixed-use developments within a half-mile of public transit stations within districts locally zoned for commercial development.** State statute should allow developers to build two stories by right of residential units above ground floors that contain commercial uses. The Commonwealth invests in developing and maintaining public transit, but by zoning for low-density development, localities often work against state goals of increased ridership that would make the investments worthwhile. Allowing mixed-use development would increase residential construction, lead to livelier business districts, and increase use of public transit.
- **Allow by right (with site-plan review) conservation subdivisions that contain protected open space and clustered residential development.** Developers could either build under local zoning rules or opt to build a by-right conservation subdivision, with the allowed density of housing (units per acre) specified in state law and regulations. The more open space protected on the parcel, the more units allowed. The municipality could allow development of the open space in exchange for funding to be used for open space protection at another site. Conservation subdivisions would be a tool to allow the market to meet demand for housing while also protecting open space.

REGULATORY TOOLS: The Commonwealth should give local planning boards

the following regulatory tools to facilitate better and more compact development:

- **Create zoning tools (similar to “friendly 40Bs”) through state statute that could be used at the discretion of local planning boards to grant special permits for cluster developments, mixed-use, conversions of houses and mills to multi-family, and transfer of development rights.** Just as some municipalities have used “friendly 40Bs” to permit desired dense residential development that would not be allowed by local zoning, planning boards could use these tools to permit other types of needed development not allowed in their local zoning bylaws/ordinances. Each of the Commonwealth’s municipalities writes its own zoning laws; most are poorly crafted to meet the municipality’s and Commonwealth’s goals for growth management.
- **Explicitly authorize local planning boards, through state statute, to grant special permits that would double the number of units allowed “as of right” under local zoning in exchange for negotiated benefits from the developer.** This is not a clarification of local zoning authority, but a direct empowerment of planning boards to negotiate density, even where local zoning bylaws/ordinances do not grant them the authority. For projects that by right could include 5 or more units, planning boards could negotiate density bonuses in exchange for any of the following:
 - open space set-asides,
 - superior site design,
 - infrastructure improvements,
 - inclusion of affordable units,
 - or donations to a fund that could be used for open space protection,

infrastructure improvements,
schools, etc.

- Currently, many town meetings and city councils authorize the special permit granting authority (locally designated as the planning board, zoning board of appeals, or city council) to negotiate increased density, but they often place tight limits on the types of development and number of units that could be negotiated. Localities, developers and the region can all benefit when local boards have the authority to negotiate density.
- **Amend the state Subdivision Control Law to include standards for road design.** The state standards for road design would represent “best practices”, and serve as a ‘default’ for communities without the resources or will to develop effective standards. Municipal planning boards could adopt local amendments to the state standards. Many local road design standards represent “worst practices” in landscape design, and some appear to be written to increase the cost of subdivision for developers.

To remain competitive, the Commonwealth needs to allow the housing market to meet demand for workforce housing. We’re faced with a choice: re-examine our land use laws and encourage well-planned increases in the supply of workforce housing, or continue allowing only large-lot sprawling development and risk undermining the state’s economic vitality as workers seek affordable housing elsewhere.

I. INTRODUCTION

Massachusetts' system of local regulation of housing development threatens our state on many fronts. Workers are leaving the state for places where homes are more affordable. Open space is developed at a rate of 40 acres per day. The designs of new subdivisions fail to meet our expectations for charming, walkable New England neighborhoods. The resolution of these problems calls for state-level policy reform.

Restrictive regulations have undermined the market's ability to meet demand, such that homebuyers have dramatically bid up the prices of a limited supply of housing over the last 25 years. Local regulations systematically favor development of the most expensive type of housing—single-family homes on large lots—while putting up barriers to multi-family housing, single-family houses on small lots, and accessory apartments in owner-occupied homes. In addition, overly prescriptive regulations prevent developers from creating innovative neighborhood designs that are organized around the landscape; lots and roads are laid out instead to meet strict geometric requirements. Finally, regulations that prevent dense residential development and in-fill of new housing in existing neighborhoods have undermined sustainable land use patterns by forcing most new development into large parcels of undeveloped land, often far from town centers, public transit options, and other infrastructure.

BACKGROUND

Housing prices in eastern and central Massachusetts have skyrocketed over the last 25 years. Between 1980 and 2004, housing price

appreciation in the Boston-Quincy region, Cambridge-Newton-Framingham region and Essex County ranked second through fourth in the nation, behind only New York's Nassau-Suffolk region (Glaeser, Schuetz, and Ward 2006). In addition, Worcester County ranked 9th nationally in price appreciation. Even with the region's home prices beginning to moderate, Greater Boston remains one of the most expensive housing markets in the country (Bluestone and Heudorfer 2006). The recent report by the Pioneer Institute and Rappaport Institute, *Regulation and the Rise of Housing Prices*, concludes that the region's dramatic price appreciation is due in large part to local restrictions on building (Glaeser, Schuetz, and Ward 2006). The paper found significant correlations between large lot-size requirements and decreased permitting levels across 187 localities in Eastern Massachusetts.

The region does not lack the land to build new homes. Many communities claim that they are "built out," but they are only built out to the capacity allowed in current zoning standards. The cities of Boston and Worcester are much denser than their neighbors, yet permit the construction of far more units per year than their respective suburbs.¹ Across Massachusetts, there is a considerable amount of land to build on, even while setting aside critical open space for protection. If land were becoming scarce, we would expect for new lots to be smaller and for premiums paid on large lots to increase. The opposite is happening. According a recent study released by MIT and the Massachusetts Housing Partnership, the median lot size for new single-family houses created in Greater Boston from 1998 to 2002 was 0.91 acres, up from 0.76 between 1990

and 1998 (Jakabovics 2006). Separate studies by Ed Moscovitch of Cape Ann Economics and Harvard Professor Edward Glaeser also demonstrated that people pay relatively small premiums for large lots, an indication that lot sizes are driven by zoning requirements, not demand for big yards. Moscovitch concludes from analyzing housing prices in Ipswich: “people are basically neutral about the density of the neighborhood they live in; additional density neither adds nor subtracts from sales prices.” (Moscovitch 2005, p. 20) Glaeser estimates that in Eastern Massachusetts land sitting under a new home is worth \$390,000 per acre on average, but land that extends the lot around the house is valued at only \$16,600 per acre (Glaeser, Schuetz, and Ward 2006, p. 11).

Communities systematically put up barriers to all types of residential development, especially multi-family housing, townhouses, two-family and small-lot single-family homes. In many municipalities, the only type of housing allowed by zoning is single-family homes on large lots. Such regulations have the effect of keeping lower-income households out of suburban communities. Jay Wickersham, former head of the Massachusetts Environmental Policy Act office, explains: “In exclusionary zoning, municipalities use large lot requirements within zoning districts limited to single family homes to block the creation of affordable housing.” (Wickersham 2006, p. 33) The Metropolitan Area Planning Council (MAPC) projects that, based on current zoning and development trends, more than 85 percent of new housing in developing suburbs in Metropolitan Boston in the coming decades will be large, expensive single-family houses on lots of one acre or more. MAPC concludes: “There will be a lack of modestly priced housing for young families, municipal employees, and minorities along I-495, even though this is where much of the region’s job growth will occur.” (MetroFuture, Trend Lines

#3) According to the 2005-2006 *Greater Boston Housing Report Card*, new production consists mostly of one and two-bedroom units in multi-family dwellings, housing restricted to those aged 55 and over, and large and expensive single-family homes (Heudorfer and Bluestone 2006, p. 5). What continues to be missing in the mix, the Report Card concludes, is “workforce housing”: single-family and townhouse units for young families with children.



PHOTO BY SANDRA COSTELLO

Single-family house in a large-lot subdivision in Boxford.

Large lot requirements are not only exclusionary; they also cause development to sprawl across the land. According to a 2003 Audubon Society report, development has been consuming 40 acres of land per day in Massachusetts (Breunig 2003). The study by Moscovitch found that if future development in the Rt. 128-495 corridor were at a density of .25 acres per unit instead of the recent pattern of 1.08 acres per unit, the rate of consumption of vacant land could be cut almost in half, with a doubling of the number of units built (Moscovitch 2005).

In addition to causing wasteful development patterns at the regional level, common-practice regulation undermines good design at the neighborhood level. Overly prescriptive, rigid regulations lead to gerrymandered designs that maximize the number of buildable lots

on a parcel, regardless of aesthetics or environmental impact. Road design standards in many municipalities represent “worst practices”. Randall Arendt, formerly the director of planning at the Center for Rural Massachusetts at the University of Massachusetts in Amherst, concludes in *Rural by Design*: “the uncritical adoption of conventional suburban zoning and subdivision regulations has created a virtual sea of standardized, sprawling development incompatible with ... important aspects of traditional towns: their ambience, character and vitality.” (Arendt 1994, p.8) Professor Eran Ben Joseph of MIT’s Department of Urban Studies and Planning has documented how standards associated with subdivision development have resulted in excessive impervious surfaces and piped drainage systems (Ben Joseph 2004).

A key aspect of conventional zoning practice has been to segregate uses, keeping noxious industrial facilities, for example, away from residential neighborhoods. Many land use experts and commentators, however, now decry that the separation of uses has been taken too far. Arendt comments that such practices have resulted in “sterile single-use districts” (Arendt 1994, p. 22). Anthony Flint, previously a journalist for the *Boston Globe* covering land use issues, wrote in his recent book *This Land: The Battle Over Sprawl and the Future of America*: “The classic New England Village would actually be illegal under current zoning. Special permission is needed to put homes over stores; under the dogma of 1920s zoning, cities and towns separate all uses....” (Flint 2006, p. 202)

The state’s dysfunctional approach to housing policy has not only led to high prices of housing, bad design, and unsustainable development patterns, but new analyses indicate that high prices are leading to an out-migration of Massachusetts population and hurting the region’s economy. Glaeser concludes that limits on new construction are responsible

for the recent declines in Massachusetts’s population and that significant housing price increases appear to lead to declines in employment and income. He writes: “The economy cannot grow unless population grows and the population cannot grow without new housing.” (Glaeser 2006) Similarly, Barry Bluestone of the Center for Urban and Regional Policy at Northeastern concludes: “If home prices and rents continue to rise in Massachusetts, we can expect to see further job erosion, more out-migration, and a real challenge to the Commonwealth’s prosperity.” (Bluestone 2006) According to the Greater Boston Housing Report Card 2004, the number of 20-24 year olds in the region declined by 11.5 percent between 2001 and 2003, and the number of 25-34 year olds fell by 7.2 percent (Bluestone and Heudorfer 2005). Nationally, the number of people in these age groups increased.

HOUSING AND LAND USE POLICY IN MASSACHUSETTS: AN OVERVIEW OF THIS ANALYSIS

Numerous reports in recent years have documented a range of problems with land use patterns and housing affordability in Massachusetts, and many observers have pointed to various local regulations as underlying these problems. Yet, with 351 cities and towns in the state writing their own land use regulations, analysts of local regulations have been largely unable to move beyond case studies and anecdote. The 2004 survey of zoning, road design, wetlands, and septic regulations in 187 municipalities in eastern Massachusetts conducted by Pioneer Institute and the Rappaport Institute for Greater Boston has enabled a systematic comparison of local regulations for the first time.

As the issues identified in this study are not new, the state has already launched several initiatives over the past few decades to address the problems. Some of these initiatives, such as the state's Chapter 40B law that allows developers (under certain circumstances) to bypass local zoning restrictions, have had a dramatic impact on housing production. The results of some other programs have been more modest, and some new initiatives are now being tested. Despite progress, the package of existing state interventions will not conclusively solve the range of problems outlined here. New approaches are needed.

This paper describes the Pioneer/Rappaport survey of regulations (section ii), outlines key findings and comparisons about how communities zone for different residential uses (section iii), briefly explores some of the underlying reasons for the current state of local zoning (section iv), reviews past and current policy initiatives to address the problems (section v), and presents recommendations to improve the system of regulation (section vi). While the survey included wetlands and septic regulations, this paper focuses on zoning and road design standards.² Additional analyses of local environmental requirements are available on the Pioneer Institute website (www.pioneerinstitute.org/municipalregs).

This paper focuses on market-rate construction, not housing produced with public subsidies or long-term affordability restrictions. Different approaches than suggested here may be appropriate to meet the housing needs of the state's lowest income residents, for whom housing priced at the cost of new construction is still not affordable. This report's recommendations, however, would go far in meeting the housing needs of middle class and moderate-income residents, relieving inflationary pressure at every level of the housing market.

II. THE PIONEER/RAPPAPORT SURVEY OF LAND USE REGULATIONS

In 2004, researchers affiliated with the Pioneer Institute and Rappaport Institute surveyed land use regulations in the 187 municipalities located within 50 miles of Boston (highlighted in the map), not including Boston (Dain and Schuetz 2005).³ The survey included over 100 questions about zoning, subdivision, wetlands and septic regulations in each community. To answer the questions, researchers obtained and analyzed the regulations, called local officials for clarification and commentary, and entered all of the relevant information into an on-line database. The information collected is available to the public at www.pioneerinstitute.org/municipalregs.



Researchers faced a series of challenges in tracking and comparing the regulations. Many of these same challenges are also issues for builders and homeowners who want to understand the regulations. The primary problem is that sometimes researchers could not reliably determine the regulatory requirements from reading the written rules. This is manifested in a number of ways. Zoning bylaws sometimes contain vague language and contradictions.⁴

The same terms used in different bylaws/ordinances can mean different things, and requirements written with the same language and definitions can still be interpreted in different ways from community to community.⁵ Outdated regulations that are still on the books may not be enforced, and waivers and variances may be granted generously. Often, what is listed as allowed in general may be made infeasible by the details of the regulations, as appeared to be the case for some types of multi-family housing and cluster development. Since the regulations do not always follow a standard format, requirements can be hard to find within the text. Regulations can also show up in unexpected places, such as typical zoning requirements in the subdivision regulations or septic standards in the zoning. Finally, boards and officials may enforce informal policies that are not promulgated in the regulations.

To address these challenges, researchers documented all of their assumptions and contacted local officials by phone and email for verification. As further verification, Pioneer Institute mailed the short answers⁶ to most of the questions to the conservation commissions, boards of health, and planning departments/boards in each of the 187 communities for review and comment. At least one department from 110 of the 187 municipalities returned the verification survey.

The following analysis is based on research conducted in 2004. The paper refers to the regulations in the present tense, although by the 2007 release of this analysis, some of the regulations have been amended and new requirements adopted.

III. THE PAPER WALL

LAND USE REGULATIONS IN 187 COMMUNITIES

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The survey revealed systematic problems with local land use regulation in Massachusetts. Municipalities often over-restrict needed types of housing. They rely on rigid, overly detailed requirements that can stifle creativity and undermine good design. Disappointed with the development that results from the rigid requirements in conventional zoning, they do adopt regulations to enable more flexibility, but then they often undermine the purpose of the flexible regulations with unnecessary restrictions. Finally, common-practice zoning prohibits much concentrated and in-fill development, so development must consume large amounts of open space.

A. RESTRICTIONS ON DEVELOPMENT OF MULTI-FAMILY HOUSING

Of the 187 municipalities within 50 miles of Boston, there are only ten that outright prohibit all multi-family development,⁷ and another nine that only allow multi-family housing if it is restricted by deed to occupants who are 55 years or older, i.e. have no children (see figure 1). This means that only ten percent of municipalities in eastern Massachusetts outright prohibit multi-family housing for families. However, the rest of the municipalities regulate this type of development so tightly that it is not feasible to build multi-family housing in many more communities, at least under the local zoning regime. As a planner in a town south of Boston com-

mented, “It may technically say that you can build multi-family, but the bar is so high that you can’t build under it.” For example, while Westborough lists Garden Apartment and High Rise Apartment Districts in its zoning bylaw, the Westborough Master Plan states: “Although these districts appear to provide ample alternatives to single-family housing in the Town, in reality they do not since virtually no land is zoned for multi-family housing.”⁸

Figure 1: Eastern Massachusetts Communities that Prohibit Multi-Family Housing

	No multi-family allowed	Only age-restricted multi-family allowed
1	Bolton	Boxford
2	Boylston	Carlisle
3	Bridgewater	Lynnfield
4	Dighton	Marshfield
5	Lakeville	Paxton
6	Littleton	Plympton
7	Mendon	Wenham
8	Nahant	Hanover
9	Seekonk	Medway
10	West Bridgewater	

Source: Dain 2006

Similarly, Rowley’s Master Plan reads: “While the Town has recognized the need to offer a wider variety of housing opportunities to meet the needs of its residents, the Town’s zoning bylaw offers few viable options for building such housing. Multi-family housing is only allowed in the three

small Residential districts on Haverhill Street and in the Central District, and much of this land is already developed. In the Residential district, a minimum parcel size of 20 acres is required to build multi-family housing. In addition, the multi-family housing special permit process requires four out of the five Planning Board members to vote in favor of the proposal.”⁹

There are a few common types of restrictions on multi-family housing that make its development unlikely or infeasible in many communities. First, many communities require parcel sizes for multi-family housing that are larger than a developer could likely assemble in that community. Second, there are often requirements for lot area per dwelling unit that would make multi-family development as low-density as single-family development (see figure 2). Third, most communities require special permits for multi-family development, making it a riskier undertaking than by-right projects. Many communities additionally require a two-thirds vote of approval by town meeting for each multi-family project.¹⁰ Finally, some communities only allow multi-family where it is already built, so no new units can be developed.

According to an analysis by Massachusetts Housing Partnership and MIT’s Center for

Real Estate, only one out of four communities between routes 128 and 495 built any multifamily developments of five or more units between 1998 and 2002 (Jakabovics 2006). Commonwealth Magazine reports that multi-family housing permits doubled from 2002 to 2004, 3,829 units to 7,635 (Jonas 2006), but twenty-five percent of the units in the Boston area came through the state’s Chapter 40B law that allows certain projects to bypass local zoning, or as part of an age-restricted development. In the region’s towns (as opposed to cities), the figure is 42 percent.

Figure 2: Examples of restrictive dimensional requirements for multi-family (MF) development

TOWN	RESTRICTIVE CRITERIA
Lot area and density	
Townsend	MF allowed by special permit at density of: <ul style="list-style-type: none"> • 1 unit per 2 acres in RB • 1 unit per 3 acres in RA
Princeton	Conversion to 3-family allowed on 5-acre lots
Tyngsboro	MF allowed at density of 2 units per acre in R3
Dover	MF allowed (by re-zoning) at density of 4 units per acre
Easton	In MF, 1/2-acre (20,000 square feet) required per bedroom. 10 bedroom limit per building.
Height	
Auburn	Maximum height: 25 feet; 35 feet by special permit
Parking	
Wrentham	3 space on-site parking per unit for MF

Source: Dain and Schuetz, 2006



PHOTO BY SANDRA COSTELLO

Age-restricted townhouses in Newbury, approved by special permit through zoning provisions for Open Space Residential Design. The project includes 66 housing units, arranged three per building.

B. RESTRICTIONS ON MULTI-FAMILY CONVERSIONS

Effective methods for allowing gradual in-fill of new housing units in existing neighborhoods, as well as former industrial areas, include zoning for conversion of single-family

houses and adaptive reuse of non-residential buildings to multi-family housing. Fewer than half of the municipalities studied (84 of 187) explicitly allow conversion of either dwellings or non-residential buildings to multi-family housing.¹¹ Most often, the regulations limit reconfiguration of existing dwellings to contain no more than three units, although some allow more units. A couple of communities, Princeton and Swansea, only allow multi-family housing when it results from conversion of single-family houses. In Princeton, to convert a single-family house into a two-family, the house must sit on three acres of land; to convert to a three-family, the house must be on five acres.



PHOTO BY BILL DAIN

Single-family house converted to multi-family housing in Newton. Three units are in the original house and another four were constructed as attached units in the back, making a total of seven units in the building.

C. AGE-RESTRICTED HOUSING

One common way that communities do accommodate relatively compact development is through age-restricted zoning. Many communities allow multi-family housing and single-family housing on small lots for residents who are 55 or older. Ninety-six of the 187 municipalities within 50 miles of Boston have zoning for age-restricted housing; 64 have specific provisions for multi-

family housing that is age-restricted. As noted above, nine communities allow multi-family housing only if it is age-restricted. Zoning for age-restricted housing comes in a few forms, often as an overlay district or a type of cluster development. The zoning for age-restricted projects is usually denser than for projects without occupancy restrictions. Some municipalities give developers incentives in the form of density bonuses to restrict units. For example, the Town of Clinton grants density bonuses in Flexible Developments for units restricted to occupants 55 years and older and apartments developed with limited bedrooms (“for every two dwelling units restricted to occupancy by persons over the age of fifty-five, one dwelling unit may be added as a density bonus.... for every dwelling unit restricted to two bedrooms, an additional two-bedroom unit may be added as a density bonus.”)

Communities promote age-restricted housing for a variety of reasons. Lynnfield’s Master Plan notes in the section “Economic Development”: “Another means of increasing the tax base in Lynnfield is development of age-restricted housing. These developments have a positive fiscal impact because they do not produce any school-age children.” Chelmsford’s Master Plan reads: “Senior housing is usually more readily accepted by existing residents than regular multi-family housing because of the reduced levels of automobile traffic, the maturity of the residents, and the realization that such housing is needed to accommodate the increasing number of seniors.”

The Greater Boston Housing Report Card 2004 concludes: “While there are more than 9,000 units in age-restricted developments in the suburban pipeline, there are few large-scale proposals that would provide workforce housing.” (Bluestone and Heudorfer 2005) Production of age-restricted housing is production all the same; as people move

into the restricted units, they often free up unrestricted housing for families. Nonetheless, while there is clearly market demand for the denser housing, the 55+ requirements are largely driven by municipal policy, not market demand for deed restrictions on occupancy.



PHOTO BY SANDRA COSTELLO

Age-restricted attached units in Rowley

D. RESTRICTIONS ON MIXED-USE DEVELOPMENT

Although land use planners for some years have been advocating for the mixing of residential and commercial uses to keep downtown areas vital into the evening, less than half of the zoning bylaws/ordinances surveyed (84 of 187, or 45 percent) include explicit provisions for combining dwellings with other uses, usually retail or office.¹² Thirty-four of these allow mixed-use by right, at least under certain circumstances, while the other 50 require special permits for all cases of mixed-use development. Common practice in many commercial zones is to allow low-rise retail and commercial buildings with no residential units, even near transit stops. Well-traveled corridors with extensive transit

options, such as Trapelo Road in Belmont, are lined with single-story strips of stores. The integration of housing into such development could revitalize the area, increase the use of commuter rail and buses, and relieve price pressure throughout the community.

E. RESTRICTIONS ON ACCESSORY APARTMENTS

Another over-restricted type of housing is accessory apartments that homeowners add to their single-family homes, usually with separate bathroom and kitchen facilities. While almost 60 percent of localities in eastern Massachusetts allow some kind of accessory dwelling unit in owner-occupied houses, over half of those restrict occupancy of the units, usually only to relatives of the homeowner (so called “in-law apartments”) and sometimes also to caretakers and au pairs.¹³ To prevent violations of the occupancy restrictions, many of the regulations include extensive provisions about verification of occupancy, usually through regular re-certification or re-permitting of the units. After the relatives either move out or pass away, the kitchen must be removed and the apartment reintegrated. For example, Dover’s bylaw states: “Within 6 months of the lapse of a Special Permit hereunder, the owner or owners of the building containing an apartment shall dismantle the cooking facilities of the apartment and restore the building to a single-family dwelling.” Two municipalities even require the homeowner to put down a surety bond to ensure that the apartment will be reintegrated upon vacancy by the relatives or sale of the house.

Most municipalities place several additional restrictions on accessory apartments that can limit their use; requiring, for example, that the house shall have existed for a certain number of years or have a certain

amount of floor area. Hamilton's 2002 Master Plan Phase 1 Report notes (p. 44-45): "The regulations for this option significantly restrict the universe of eligible properties because in order to qualify for an accessory apartment, the property must have 10 acres of land."

The regulations on accessory apartments represent an effort to prohibit the use of existing housing capacity for housing people at a time when high housing prices are a regional crisis and there is an unmet need for rental housing in the suburbs. A planner in one community noted to a Pioneer Institute researcher (11/04) that residents object to accessory apartments because they do not want to live next to a "tenement." The planner commented: "A lot of these 'tenements' are \$750,000 homes." A Boston Globe article from January 2006 about Franklin's accessory apartments bylaw stated that a town councilor "said a new bylaw is needed to specify exactly who could live in the apartments to make sure people don't build them to generate rent money or to house relatives who just want a cheap place to live." (Ryan 2006)

F. MINIMUM LOT SIZE AND OTHER DIMENSIONAL RESTRICTIONS

A common way to forestall development of affordable housing is to require very large lots for single-family houses. More than half of the municipalities in eastern Massachusetts (95 of 187) zone over half of their land area for lot sizes of one acre per home or greater (MassGIS 2000). Fourteen municipalities within 50 miles of Boston zone more than 90 percent of their land area for two-acre lot sizes.¹⁴ Twenty-seven municipalities zone more than 90 percent

of the land area for at least one-acre lot size requirements.¹⁵

More than 60 percent (117) of the municipalities surveyed restrict the use of wetlands, steeply sloped land, and/or easements in calculating minimum lot area for single-family homes. The regulations on "buildable area" read so that a certain percent of the minimum lot area requirement must be met with buildable (non-wetlands) land, specified in the regulation as either contiguous or not. The most common percentages required are either 50 percent or 90 percent, but some municipalities require that 100 percent of the minimum lot area requirement be met with buildable land (see figure 3). Minimum buildable area requirements mean that actual lots often need to be larger than the basic minimum lot size specified. Buildable area requirements might be appropriate where zoning allows dense development in general, so that housing where there are significant wetlands would be less dense. However, where lot size requirements are already large, wetlands could be counted towards minimum lot area requirements even while homes are set back from the wetlands and a buffer of undisturbed vegetation around the wetlands is preserved.

Fig. 3: Municipalities that exclude all wetlands from minimum lot area calculations

Only contiguous buildable area counted	Only buildable area counted
Andover	Burlington
Duxbury	Essex
Easton	Lynnfield
Halifax	Mendon
Hingham	Norwell
Medfield	Scituate
Norton	Tyngsborough
Wenham	

Source: Dain 2006



PHOTOS BY SANDRA COSTELLO

Above and below: Conventional large-lot subdivision in West Newbury.



In addition to large lot size requirements, municipalities require that a long stretch of the front lot line (frontage) abut the road, and they adopt other requirements for lot width, long setbacks from property lines, and yard dimensions. In 80 percent of municipalities, minimum frontage is listed as 150 feet or more in at least one district. Nine communities require 250 feet of frontage in at least one district.¹⁶

Fig. 4: Municipalities that regulate lot shape with perimeter-area ratios

Perimeter-Area Equation	Municipality	X=
$(p^2/a)/(a/r) \leq X$		
	NORFOLK	20
	WELLESLEY	20
	WINCHESTER	20 in RDB-10 and RDC-15; 25 in RDA-20
	WRENTHAM	25
	NEEDHAM	30 in Res A and Industrial; 20 in Res B
	NEWTON	30 in single res 1; 20 in single res 3; 25 in single res 2

$p^2/a \leq X$		
ASHLAND	22	(only for lots under 2 acres)
BELLINGHAM	22	
BELMONT	22	
DANVERS	22	
HINGHAM	22	
MEDWAY	22	
NORTON	22	
CANTON	23	
WAKEFIELD	24.6	
BLACKSTONE	25	but if lot area >2 acres then 30
LANCASTER	30	for lots >80,000 sf; 25 for lots <80,000 sf
MIDDLEBOROUGH	30	
MILFORD	30	in RD; 22 in RA, RB, RC
STOUGHTON	30	
BOLTON	32	(does not apply to lots over 4.5 acres)
BOXFORD	32	if frontage over 250 ft; 80 if under 250 ft
AUBURN	40	
CARLISLE	40	
GROTON	40	
LITTLETON	40	
PAXTON	40	
PEPPERELL	40	
STOW	40	
SUTTON	40	
WESTFORD	40	
TOPSFIELD	45.7	
$p/a \leq X$		
PEMBROKE	0.02	
DRACUT	0.025	
ROWLEY	0.025	
SUDBURY	0.025	
TEWKSBURY	0.025	
TYNGSBOROUGH	0.025	
MILLIS	0.08	
p=perimeter, a=lot area, r=required lot area		
Source: Dain 2006		



PHOTO BY SANDRA COSTELLO

Conventional large-lot subdivision in Rowley.

These prescriptive regulations can undermine good design: subdivision design becomes a high school geometry problem, in which developers maximize the number of lots they can create given dimensional constraints. In gerrymandering lots to meet the plethora of dimensional requirements, developers have been known to create odd shaped lots. In turn, municipalities have passed lot shape requirements. Millbury's zoning bylaw states: "No pork chop, rattail, or excessively funnel-shaped or otherwise gerrymandered lots shall be allowed." Other municipalities have more specific shape requirements. Thirty-nine municipalities within 50 miles of Boston ensure regularity of lot shapes by requiring that certain ratios of perimeter length to lot area be met so that lots will more closely resemble squares than pork chops (see figure 4). Other municipalities require that lots be of a shape such that rectangles, circles, or squares of certain dimensions could be inscribed within the lot lines. Carlisle requires that an ellipsis of certain dimensions fit within the lot lines. Dover requires that a lot's buildable area fit within a perfect square of 100 feet by 100 feet, 150 feet by 150 feet, or 200 feet by 200 feet, depending on the district.

G. CLUSTER ZONING

Planners and builders have long recognized that subdivision design should not be a math assignment, but an art form for creating appealing places to live. Thus, in the 1970s, cluster zoning was developed to achieve better neighborhood design while protecting open space within each development. Cluster zoning is also called flexible zoning, open space residential design, conservation subdivision, or planned residential development. All of these approaches regulate the total number of units allowed on a parcel, but unlike conventional zoning, cluster zoning gives the developer flexibility to cluster the units and preserve open space on the parcel. This method makes it easier to protect environmentally sensitive parts of a parcel, such as wetlands and steeply sloped land, and to organize the design around natural contours. Most cluster provisions require that a certain percentage of the tract be set aside as permanently protected open space or recreational land. Where cluster zoning is on the books, developers can usually choose between applying for a conventional zoning plan or a cluster plan.

Cluster zoning would seem to be popular with Massachusetts' municipalities. Since cluster development's introduction in the 1970s, 80 percent of the municipalities in eastern Massachusetts have adopted some kind of cluster provision. The cluster regulations, however, are often written in ways that inhibit their use. Many require larger parcel sizes than are typically available for development in the locality (for example, 25 acres in Lynnfield, and 10 acres in Burlington). The vast majority requires special permits.¹⁷ There are even towns that require town meeting approval of any cluster-zoned development. Tyngsborough's 2004 Master Plan recommends: "Eliminate

requirement that Town Meeting approve each Open Space Residential Development.” The risky permitting processes can drive up the cost of this kind of development and make conventional design more appealing to the developer. Many of the provisions are crafted to give the developer very little flexibility in design; the provisions actually serve as alternative types of conventional zoning, still requiring large lots per unit, wide setbacks, excessive frontage, etc. Finally, the provisions are often structured so that the special permit granting authority has little ability to negotiate increased density in exchange for benefits for the municipality, such as greater open space protection.

There are cluster zoning success stories, including Hopkinton, where 70 percent of subdivisions built in the 1990s were cluster; Westborough, which protected over 250 acres of open space using the cluster mechanism; and Groton, where 90 percent of developments since 1980 have been cluster-design.¹⁸ Yet, several municipalities in eastern Massachusetts with cluster zoning on the books have built no clusters at all, including Milton, which adopted cluster zoning in the 1970s.¹⁹ The vast majority of cities and towns have seen only a handful of cluster developments within their borders. Cohasset is representative of this group; its Master Plan reads: “Since 1981 Cohasset has provided a cluster development special permit option for subdivisions on sites of 10 acres or more.... Three developers have taken advantage of this option. Disincentives to developers include the need for a special permit, which can increase development costs, the need for a development site of at least 10 acres, and the excellent market for conventional subdivisions.”

Left: Tara Leigh Development built Carter Fields as a cluster subdivision in North Andover on a 110-acre-parcel (50 acres of which are wetlands). The project includes 17 houses arranged on less than ten acres; the rest of the parcel is preserved as open space.

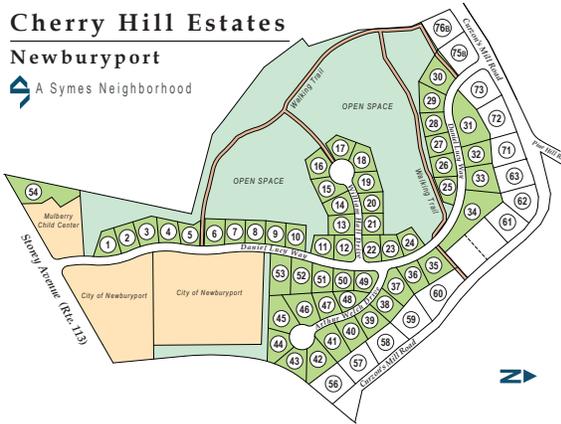


PHOTOS BY SANDRA COSTELLO

Cherry Hill Estates

Newburyport

A Symes Neighborhood



20



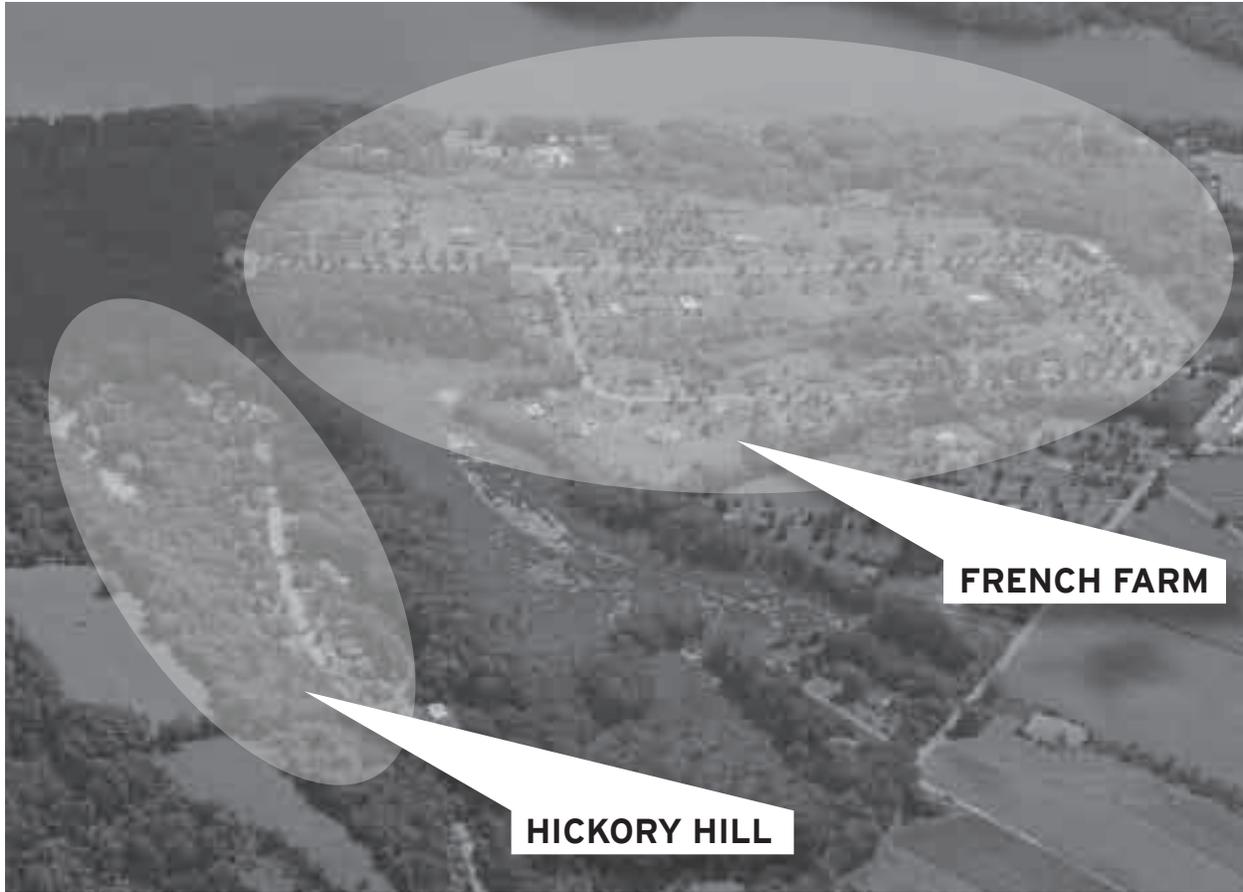
H. INCENTIVE ZONING

Many local voters believe that they have much to lose from new development, and little to gain. In their view, all of the financial gain goes to the landowners and developers involved in the projects, while residents are left with increased traffic, loss of open space, and potentially an increased tax burden to support services to the new residents. To capture benefits from new development, an increasing number of municipalities have adopted zoning provisions that could broadly be classified as incentive zoning. Under these provisions, the developer can obtain a special permit to build more units than are allowed by the conventional, by-right zoning if the developer delivers benefits to the community such as open space protection, development of affordable units that can be counted on the community's subsidized housing inventory, infrastructure improvements, or donation of funds. Incentive density bonuses are often included in cluster zoning provisions, or are offered as part of an "inclusionary" program²⁰ to increase a locality's inventory of affordable units.

Incentives are far from universal, though. There are a significant number of municipalities that have not adopted this zoning tool. At least 40 percent of municipalities with cluster zoning in eastern Massachusetts do not allow any kind of density bonus for cluster. Additional communities only offer density bonuses for cluster developments that are age-restricted.²¹

Some communities have structured their incentive programs such that developers are discouraged from using them. Some of the zoning bylaws/ordinances that allow the special permit granting authority²²

Left and above left: Symes Associates built Cherry Hill Estates as a cluster subdivision in Newburyport. On the 49-acre parcel, the firm built 69 houses on lots that averaged 12,000 square feet (less than 1/3 of an acre) and protected 23 acres of open space.



Two subdivisions in North Andover, one conventional and the other cluster design. Both subdivisions have approximately 40 houses. The cluster, Hickory Hill, arranges the houses on 27 acres; 55 acres were preserved under agricultural and conservation restrictions. The conventional subdivision, French Farm, uses significantly more land for housing.

to grant density bonuses tightly limit the applicability of the bonuses. For example, in Norfolk, as of 2004, no developer had used the Affordable Housing Development option to gain bonuses, probably due to the way the bonus is structured. The Norfolk 2004 Community Development Plan ex-

plains: “This provision needs to be reviewed and possibly revised in order to make it more attractive to developers. Currently, the provision only provides a density bonus for the affordable housing units themselves. In addition, it requires affordable units to be single-family dwellings. It may be more attractive if it allowed multi-unit buildings designed to look like comparable single-family homes in the neighborhood.”



PHOTO BY SANDRA COSTELLO

Newbury’s Open Space Residential Design (OSRD) bylaw provides density bonuses for historic preservation, creation of affordable housing, and protection of open space. Newbury approved four more housing units at Caldwell Farm than would be allowed as-of-right on the parcel because the developer, C.P. Berry Construction Company, designated 80 percent of the 125-acre parcel as protected open space and preserved a historic farmhouse on the property. The project clustered 66 units on 25 acres, leaving 100 acres as open space.

I. ROAD DESIGN STANDARDS

Just as many municipalities are missing the opportunity to use cluster and incentive zoning to achieve better design and other goals, many communities are also undermining good design through their local road design standards. Randall Arendt writes in *Rural by Design: Maintaining Small Town Character*: “the typical subdivision road required by many municipalities today is oversized, needlessly expensive to build and maintain, dangerous to neighborhood residents, problematic for storm-water management, and decidedly non-rural in appearance.” (Arendt 1994, p. 178)



PHOTO BY JEFF RHUDA

A six-lot cul-de-sac road in Beverly wide enough to fit four SUVs side by side. Beverly requires that the pavement in most subdivision roads be 32 feet wide.

Twenty percent of municipalities in eastern Massachusetts (37 municipalities) require that typical residential roads be 30 feet wide or more. The average car or pickup is 5.5 to 6.5 feet wide. Thirty feet of pavement is enough for two lanes of traffic plus two lanes of parking — and this is for low-density suburban neighborhoods, not downtown corridors. Wide impervious surfaces are bad for the environment; cars go faster on wide roads, putting pedestrians at risk; wide roads cost more to install; and a sea of pavement that looks like an airplane landing strip is not usually aesthetically pleasing. While some

municipalities argue wide roads are necessary to accommodate emergency vehicles, at least 20 municipalities find that 22 feet of pavement width is adequate for their emergency vehicles. Wealthy communities like Lincoln and Carlisle require no more than 20 feet of pavement width for their subdivisions.

While 37 municipalities require 30-foot widths of pavement for all or some types of neighborhood roads (“minor”, but not “lane” or “court”, for example), the following list 30 or more feet for all types of subdivision roads (with no exceptions listed for lanes or courts):

1. Avon (30 for Residential)
2. Ayer (36 for Minor)
3. Brockton (34 for Residential)
4. Chelsea (32 for Minor)
5. Hamilton (32 for Minor)
6. Hopedale (30 for Minor)
7. Leominster (34 for Minor)
8. Lynn (34 for “All roadways”)
9. Medford (30 for Class B&C)
10. Melrose (32 for “Roadways”)
11. Mendon (30 for Secondary)
12. Merrimac (35 for Secondary)
13. Milford (30 for Minor)
14. Milton (32 for Subdivision)
15. Peabody (32 for Secondary)
16. Reading (30 for Local)
17. Rockland (30 for Local Residential)
18. Salisbury (30 for Subdivision Type I)
19. Seekonk (30 for Local or Minor)
20. Shrewsbury (30 for Minor)
21. Stoneham (32 for Roadways)
22. Stoughton (30 for Minor)
23. Taunton (30 for Minor)
24. Waltham (30 for Residential)
25. Wilmington (32 for Minor)
26. Worcester (30 for Residential)

The following municipalities require no more than 22 feet of pavement:

1. Boxborough (20 for Private Lane; 22 for Local Access; 22 for Subcollector)
2. Boxford (20 for Minor)
3. Canton (22 for Residential Streets; 18 for Residential Lane)
4. Carlisle (20 for Local Roads serving 15+ lots; 18



PHOTO BY SYMES ASSOCIATES

Newburyport required only 22- and 24-foot road widths in the Cherry Hill cluster development.

- for Local serving under 15 lots)
- 5. Dover (22 for Minor)
- 6. Duxbury (22 for roads with 11+ lots; 18 for 4–10 lots; 14 for 1–3 lots)
- 7. East Bridgewater (20 for Local and Minor)
- 8. Groton (22 for Minor; 20 for Lane)
- 9. Hingham (22 for Minor; 18 for Limited Residential)
- 10. Hopkinton (22 for Minor; 20 for Rural)
- 11. Kingston (22 for Local)
- 12. Lincoln (20 for Secondary; 16 for Minor)
- 13. Manchester-by-the-Sea (22 for Minor; 15 for Lane)
- 14. Marshfield (20 for residential streets under 25 lots; 18 for residential streets for 8 or fewer lots)
- 15. Nahant (22 for Minor)
- 16. Newbury (22 for Minor; 20 for Minor cul-de-sac)
- 17. Stow (22 for Access; 22 for Marginal Access; 22 for Cul-de-sac; 18 for Rural Lane)
- 18. Upton (20 for Minor)
- 19. West Newbury (20 for Minor)
- 20. Westford (22 for Minor; 18 for Private)

More than half of the municipalities surveyed require granite curbing. Randall Arendt writes: “The necessity for curbing is often overstated.... Curbing actually increases the amount of storm water that must be handled because it does not allow any natural absorption into the soil.” (Arendt 1994, p. 184)

Another area where many municipalities exceed recommended standards is the maximum grade, or slope, of roads. Twenty percent of the municipalities list a maximum allowed grade of seven percent or less for typical subdivision roads. In its chart (below) of recommended



PHOTO BY SANDRA COSTELLO

Excessive pavement on a cul-de-sac turnaround in West Newbury.

maximum allowed grades for various road types on rolling terrain, in no case does the Massachusetts Highway Department recommend limiting the slope of minor roads to a maximum grade of seven percent or less, given that minor roads are not designed for speeds of 50 miles per hour or faster.

The Massachusetts Highway Department 2006 Project Development and Design Guide offers the following recommendations for grade of subdivision roads with “rolling terrain” (Section 4.3.1 “Grades”):

Collectors and Local Roads (Rural Villages, Suburban High- Intensity, Suburban Town Center, and Urban Areas)									
Percent Grade for Selected Design Speed (mph)									
Speed	20	25	30	35	40	45	50	55	60
Grade	12	12	11	10	10	9	8	8	7
Collectors (Rural Natural, Rural Developed, and Suburban Low-Intensity Areas)									
Percent Grade for Selected Design Speed (mph)									
Speed	20	25	30	35	40	45	50	55	60
Grade	10	10	9	9	8	8	7	7	6
Local Roads (Rural Natural, Rural Developed, and Suburban Low-Intensity Areas)									
Percent Grade for Selected Design Speed (mph)									
Speed	15	20	25	30	35	40	45		
Grade	12	11	11	10	10	10	9		

Note: Short lengths of grade in urban areas, such as grades less than 500 ft in length, one-way downgrades, and grades on low-volume urban collectors may be up to 2 percent steeper than the grades shown above.

While the Highway Department only recommends a cap of six percent for collector roads with a design speed of 60 miles per hour, the following municipalities do not

allow slopes steeper than six percent on any residential subdivision roads (although some may grant waivers or variances):

1. Beverly (6% for secondary streets; 3% for principal streets)
2. Bridgewater (5% for residential subcollector, collector, arterial)
3. Carver (6% for local, 3% for collector)
4. Cohasset (6% for streets, with waivers)
5. Easton (6% for residential streets)
6. Foxborough (6% for residential streets)
7. Georgetown (6% for streets)
8. Halifax (6% for minor residential, 5% for collector, 3% for major)
9. Lakeville (6% for minor, 6% for secondary, 4% for primary and major)
10. Medfield (6% for streets)
11. Mendon (6% for secondary, 4% for principal)
12. Sudbury (6% for all streets, with waivers)
13. Taunton (6% for minor residential, 5% for collector, 3% for major)
14. Westborough (6% for streets)
15. Weston (6% for streets)
16. Wilmington (6% for minor streets in low density areas, 5% for minor in high density areas)

IV. ANTI-DEVELOPMENT CONSENSUS AND OTHER BARRIERS TO EFFECTIVE REGULATION

This paper has outlined how typical zoning standards inhibit good design, discourage the production of needed workforce housing and deplete natural resources through unsustainable development patterns. To properly evaluate past and present land-use policy reform initiatives and understand this paper's recommendations, it is essential to consider the underlying causes of the regulatory status quo. This section will briefly explain how two political factors—one a matter of voters' perceptions, the other a consequence of decentralized planning policy—sustain an anti-development consensus in Massachusetts. These factors are, first, that many local voters and officials do not perceive new development in their communities to be a net benefit for them, and second, that the Commonwealth's 351 municipalities do not have the resources/capacity/will to develop and adopt truly effective regulations.

There are a number of reasons why municipal officials and residents perceive that the local benefits of residential growth do not compensate for the costs associated with growth. They are concerned that new development will lead to increased traffic, loss of open space, stress on limited water supplies and other environmental resources, strain on local services, and increased school populations. To highlight just one of these issues, a recent report prepared by Northeastern University's Center for Urban and Regional Policy finds that in some communities, taxes on new moderately priced homes are not enough to

cover the cost of educating children who may live in those homes: "When new single family homes are built in a non-foundation aid community, the community will experience increased school costs above the amount the community will recover through taxes from the property, if the assessment on each new home is \$550,000 or less and the number of school children per home is a little less than 1."²³ (Carmen, Bluestone, and White 2005) The report finds that for typical mixed income multi-family developments, 43 percent of communities face net costs in excess of new revenues. Some reports have differed with the findings,²⁴ but many municipal officials certainly are concerned about school costs associated with new development.

An article from the Boston Globe in 2005 about a proposed 56-unit age-restricted (55+) affordable housing complex in Carlisle illustrates the range of negative reactions local residents can have towards new development (Rosinski 2005). The article quotes a resident in the neighborhood abutting the proposed project: "To us, this is Manhattan come to Carlisle. It doesn't fit in any way, shape, or form." Another Carlisle resident is quoted: "We always anticipated someone would build on this land, but we thought it would be single-family homes.... This is a lot of people. What they will be doing is undercutting the quality of our life, which is really sad." The article summarizes: "The concerns listed by neighbors are many.... Among those concerns are how the complex will affect property

values, schools, an already dangerous and winding Concord Street, the volunteer Fire Department, and the town's water supply."

Even if traffic, school costs, infrastructure and environmental issues were not a concern, local policymakers would still have incentives to restrict the supply of housing. As Glaeser argues: "It is economically rational for homeowners to want high housing costs, and it would be political suicide for a politician in a small community to inform his (or her) homeowner voters that his (or her) main objective is to increase housing supply so that their housing values will fall." (Glaeser, Schuetz, Ward 2006) William Fischel explains in the *Homevoter Hypothesis* that homeowners get involved in local decision-making not only to improve their quality of life, but also to protect the value of their largest asset, their home, which unlike other investments cannot be diversified to insure against risk (Fischel 2001). Homeowners promote restrictive zoning because they perceive it to be insurance against the risk of falling property values.

On top of these political incentives to limit development, local officials and planning volunteers who want to facilitate development in their communities face other barriers to creating an effective set of zoning bylaws or ordinances. Each of Massachusetts 351 cities and towns has its own land use regulations, but few have the capacity to develop effective ones. Many municipalities, especially along the state's growth frontiers, lack planning staffs altogether. Even in towns that employ professional planners, drafting land use regulations and ushering them through the approval process is still time consuming, expensive and risky.

Most communities adopt zoning through town meeting, which can assemble as infrequently as once or twice per year.²⁵ Attendance at town meeting is unpredictable, especially in the open town meeting format, in which all of the town's voters can par-

ticipate. Of the 187 municipalities surveyed, 31 have city councils, 124 have open town meetings, and 32 have representative town meeting (where elected membership can be as few as 45 or as many as 240).²⁶ In addition, unlike at the state level where new legislation is reviewed by committees and legal staff in the Senate, House, and Governor's office, local bylaws approved by town meeting may lack appropriate vetting, and sometimes are amended in ways that do not make sense.

Town meeting can attach a number of requirements to bylaws, severely limiting their applicability and sometimes creating hurdles too high for people to take advantage of the opportunities that the bylaws originally were intended to allow. On an email list-serve for planners in January 2006, one town planner wrote about his town's accessory apartment bylaw: "Honestly, it is unreasonably restrictive and compliance is hard to enforce, but politically it was the only thing that would have passed Town Meeting."

V. PAST AND CURRENT POLICY INITIATIVES

Policymakers have long grappled with many of the issues outlined in this analysis, and have launched several initiatives to ameliorate the situation. Some existing state policies go far in addressing the problems, but the persistence of large-lot, large-road, low-density requirements suggests that more must be done. A coalition of planners, municipal and state officials, and housing advocates known as the Zoning Reform Working Group are advancing new proposals as well. Although their proposals to reform zoning and subdivision statutes aim to advance legitimate policy ends, this section will explain why these proposals, taken alone, do not provide an effective challenge to the anti-development consensus. It is time for the state to consider new approaches.

A. CHAPTER 40B: MASSACHUSETTS COMPREHENSIVE PERMIT LAW

Adopted in 1969, Chapter 40B has been a major source of market-rate development, in addition to producing housing subject to long-term affordability restrictions. Chapter 40B mandates that ten percent of the housing stock in each municipality be restricted as affordable to low- and moderate-income households. In communities short of the ten percent threshold, developers can bypass local zoning and seek a “comprehensive permit” from the local zoning board of appeals for projects in which 20 to 25 percent of the dwelling units are under long-term affordability restrictions.²⁷ Approximately 43,000 hous-

ing units in 736 developments statewide have been created through 40B since its inception (CHAPA Fact Sheet on Chapter 40B, 2006). From 2002 to 2005, approximately a third of housing production in Massachusetts was under 40B (CHAPA Fact Sheet, 2006).

Although 40B comes with restrictions that might make it unattractive to developers—such as limits on the developer’s profits and the requirement to designate at least 20 percent of the units as affordable—many opt to build under 40B because of the lack of alternative permitting options. Westborough’s Master Plan explains (Section 3.2.1): “Although the Town nominally has several provisions on the books to allow multi-family housing, in reality these are very difficult for developers to use.... Therefore, it is not surprising that most developers seeking to build multi-family housing have sought Comprehensive Permits under Chapter 40B.”



PHOTO BY SANDRA COSTELLO

Forty-three townhouse units permitted through 40B in Groveland.



PHOTOS BY BILL DAIN

National Development received a Comprehensive Permit (40B) to construct Arborpoint at Woodland Station, a 180-unit rental development on the MBTA's Green Line in Newton.

B. CHAPTER 40R: SMART GROWTH ZONING AND HOUSING PRODUCTION LAW

Chapter 40R, the Smart Growth Zoning and Housing Production Act, adopted in 2004, and its companion Chapter 40S (2005) introduced a framework for giving municipalities incentives to allow compact development in certain areas. The 40R/40S package of incentives²⁸ encourages communities to adopt Smart Growth Zoning Districts that allow significant housing density as-of-right in town centers, along transit lines, and in other areas with existing infrastructure to serve the development. Six communities have already adopted Smart Growth Zoning Districts, with the potential to create 1,700 units of new housing (Bluestone and Heudorfer 2006, p.



12).²⁹ 40R/40S is a good approach and will likely have a positive impact on both production levels and development patterns. Still, for several reasons, many municipalities have expressed a lack of interest in adopting the smart growth districts. The initiative's positive influence is limited to increasing certain types of needed development; it should not be taken as a panacea to all of the current problems with housing development in Massachusetts.

C. COMMONWEALTH CAPITAL

The Commonwealth Capital program, introduced in 2004, bases decisions about capital allocations to municipalities for roads, sewers, parks, etc. at least partially on communities' achievements in meeting statewide development goals.³⁰ Like 40R, the program is designed as an incentive for municipalities to

improve their land use practices. Unfortunately, Commonwealth Capital's potential impact is quite limited. The program is not attached to that much funding;³¹ communities' ratings only count for a small part of decision-making about grant allocations;³² and with so many issues being rated under Commonwealth Capital, municipal action on any one item will not dramatically impact its rating, which moderates the incentive to act.

D. EXECUTIVE ORDER 418: COMMUNITY DEVELOPMENT PLANS

To address the lack of planning for new housing development, the state enacted Executive Order 418 in 2000, offering communities up to \$30,000 worth of planning services to create Community Development Plans. A total of 223 communities (64 percent) participated, costing the state under \$10 million.³³ While there is certainly a need for communities to plan for growth, this initiative had only a modest impact on planning. Many communities used the grants to hire consultants who produced reports that were specific in their analyses about current land use patterns and demographics, but were quite general in their recommendations. Reports suggested adopting inclusionary zoning, allowing accessory apartments, and zoning for mixed-use in the commercial districts, but the plans usually did not offer a road map for what the new regulations would look like or how the process for adopting them would work. The plans, prepared by outside consultants, often lacked buy-in on the part of voting constituencies.

E. COMMUNITY PRESERVATION ACT

Adopted in 2000, the Community Preserva-

tion Act (CPA) was meant as a tool to help communities fund implementation of their 418 plans.³⁴ The CPA allows communities to create a local Community Preservation Fund through a surcharge of up to three percent of the real estate tax levy to be used for open space protection, historic preservation, and low- and moderate-income housing. The act created a state-matching fund, which serves as an incentive for communities to adopt the program. Almost a third of Massachusetts's communities participate. While this land-use tool helps communities to be proactive about land protection, a critical component of sustainable land use, and has contributed to development of housing under long-term affordability restrictions³⁵, it is not designed to address market-rate housing production.

F. SMART GROWTH TOOL KIT

The state recently released a Smart Growth Tool Kit with model bylaws for open space residential design and accessory apartments, among other things.³⁶ This was a needed step towards increasing local capacity to create effective regulations. Nonetheless, the tool-kit offers a limited set of options; the model bylaws may not all represent the best options or most cutting edge regulatory practice; and it will still take time, research and political mobilization for municipalities to tailor the model requirements to their local zoning needs and usher the new regulations through the approval process.

G. PROPOSED COMMUNITY PLANNING ACT

In recent years, a coalition has formed known as the Zoning Reform Working Group made up of legislators, municipal officials, planners, and environmental and housing advocates to advance a legislative package

to reform zoning and subdivision statutes.³⁷ They filed a bill originally known as the Land Use Reform Act, later renamed as the Community Planning Act (CPA-II). The legislative package includes a number of reforms, generally aimed at local capacity and ability to plan and control the permitting process. Each recommendation has some merit, yet developers have expressed concern that the package would only slow approval of projects, while doing nothing to increase production. Indeed, the package is not designed to address the state's housing shortage or local opposition to new housing. It might make sense for the state to consider adopting parts of the package together with other policies that would help achieve the state's development goals. CPA-II includes six main items:

- **Zoning consistency with master plans:** CPA-II would require that a community's zoning ordinance/bylaw not be inconsistent with an adopted master plan. The purpose of the proposal is to increase the relevance of planning, a worthy goal. Development of master plans often involves a longer, more inclusive planning process than is typical for the lead-up to votes on zoning amendments. While the proposal for consistency may represent an incremental step in the right direction, it does not address many of the underlying reasons that communities oppose development. If a town meeting does not want to adopt a bylaw allowing accessory apartments, why would it adopt a master plan making the recommendation? If the town adopts a master plan that includes the recommendation, but then rejects a zoning amendment to allow accessory apartments, how would consistency be enforced?³⁸
- **Grandfathering:** Massachusetts freezes zoning for eight years for land shown on subdivision plans. CPA-II would reduce to three the number of years that projects

would be grandfathered, and make other changes to the grandfathering protections. The coalition argues that excessive grandfathering allowances encourage a flood of premature development applications every time a community looks to implement a zoning change. However, it is unlikely the floods of applications are coming when zoning allows more intensive uses; they are generally submitted when communities look to place new restrictions on development. Restrictions may be for good reasons, but this reform would, if anything, reduce building levels, not increase them. Builders argue that with weaker grandfathering protections, it can be harder to finance projects, and it becomes especially risky to undertake projects that require large initial investments in site work and infrastructure but involve a phased buildout over an extended period of years. Still, there may be room for compromise between eight years, the most generous grandfathering in the country, and three years, which is not always enough time to move a legitimate project through the approval process.

- **Approval not required:** The Subdivision Control Law exempts the division of roadside properties into building lots from the local review process for a subdivision. CPA-II would remove that exemption so that development along roadways would be subject to conditions and standards. Municipalities could use this tool to slow development and increase the cost of some projects, but, at the same time, some poorly designed projects would be subject to greater oversight.
- **Zoning vote:** Massachusetts requires a two-thirds super majority vote by local legislative bodies to adopt or amend zoning. CPA-II would give municipalities the option to reduce the requirement to a basic majority-rules vote. Town meeting or city

council could only adopt the change to a majority-rules vote with a two-thirds vote of approval. This proposal is worth adopting. Its effects may not be dramatic, but it would be informative. It is unlikely many communities would adopt the change quickly; policymakers could see what the impact is in communities that do make the change. Currently, the two-thirds threshold is a hard one to achieve for progressive zoning reforms; at the same time, it also works as a barrier to misconceived zoning reforms.

- **Inclusionary zoning:** CPA-II would add a section to the Zoning Act to explicitly enable communities to adopt inclusionary zoning that requires a percent of new housing to be designated as affordable. Communities already are adopting bylaws/ordinances that mandate developers to include affordable units in all projects.³⁹ Adoption of the CPA-II proposal would make it harder for developers to challenge local inclusionary requirements in court. Inclusionary requirements are controversial, and their success can depend on the details of the requirements and the health of the housing market. On the positive side, inclusionary zoning would lead to deep integration of affordable housing with market-rate housing. On the negative side, the mandate to include below-market price units in residential developments can undermine the economic feasibility of some projects. In any case, while proponents of the CPA-II proposal argue that inclusionary zoning addresses the need for affordable housing, it would not lead to increased development of market-rate housing.
- **Impact fees:** CPA-II would authorize municipalities to require impact fees on development to offset the municipal service costs associated with growth. Developers of projects that impact a community beyond

the construction site itself could be required to pay fees to create or improve streets, sewers, water supplies, parks, police/fire facilities, affordable housing, schools, libraries, or other capital facilities. The CPA-II coalition argues that the use of fees will lessen local resistance to new development projects. This is indeed possible, although developers are concerned that the fees will be used as another tool to make development financially infeasible. On the other hand, communities often condition special permits on developers donating funds to the community; the inability to gain fees from by-right development is a reason for communities to make by-right zoning more restrictive to steer developers towards options allowed by special permit.

VI. RECOMMENDATIONS

This report has made the case that current local zoning and subdivision practices are inadequate to meet the state’s growth priorities, and that existing and proposed policy initiatives to address the current system’s shortcomings are not sufficient. Therefore, to address the reasons that municipalities are discouraged from accepting development, and to create a regulatory framework that promotes superior design and environmentally sustainable development, Pioneer Institute recommends a series of policy innovations at the state level. The first recommendation is for the state to give financial incentives to municipalities to increase both the quantity and quality of their housing production. The next three recommendations are for the state to exempt certain types of desirable development from local zoning authority. The intention is to make “smart growth”⁴⁰ the path of least resistance for developers. The last three recommendations are aimed at giving local permitting bodies regulatory tools, or options, to facilitate better development and negotiate increased development.

1. INCENTIVES TO COMMUNITIES

Recommendation: Create incentives for municipalities to improve their performance in housing development. This recommendation is based on ideas presented by Harvard economist Edward Glaeser.⁴¹ The state should base allocations of new state aid to municipalities at least partially on levels and patterns of housing development. Communities would be rewarded for greater building levels, with higher allocations given for building in areas that have

(1) high demand (based on prices), (2) existing density, and (3) proximity to Boston or other economic growth nodes; bonuses could also be granted for housing built on small lots or near public transit or town centers. In communities with low demand for housing and less regional need for development, grants could be allocated based on other considerations, not as incentives for building. The state, probably in conjunction with regional planning agencies, would need to implement a new comprehensive system for reporting permitting of new housing, as existing systems do not capture all of the housing that is permitted.

The case for incentives

Incentives respect local control, while addressing the problem that localities do not currently account for the costs that restrictive zoning imposes on the region and on individuals who are not already homeowners. The incentives make new construction more attractive to localities. Recent state initiatives in the form of 40R/40S and Commonwealth Capital have pioneered the use of incentives in this way. To the extent that wealthier communities would choose to permit fewer housing developments, this system would have the progressive effect of allocating more state funding to lower-income localities.

2. ACCESSORY APARTMENTS

Recommendation: Allow by right accessory apartments in owner-occupied single-family homes. The state should allow by right accessory apartments that meet certain specifications:

1. The owner of the house resides there, with limited absences (no more than three months per year);
2. The house is located in a residentially zoned district;
3. The accessory unit makes up no more than 40 percent of the floor area of the house;
4. The accessory unit is contained within or attached to the primary dwelling;
5. The accessory unit has no more than two bedrooms;
6. The gross floor area of the house (as existed up to 5 years prior to the permit application) is expanded no more than twenty percent to accommodate the new apartment (this requirement would not be applicable to new construction);
7. The appearance of the house is maintained as single-family.

Municipalities would not be able to prohibit accessory apartments that meet these specifications, but they could pass bylaws/ordinances that are less restrictive – for example, allowing accessory apartments that are detached from the primary dwelling unit or make up more than 40 percent of the floor area of the house. The state-exempted accessory apartments and the primary dwellings would need to meet all local non-zoning requirements such as on-site sewage disposal where applicable, the state building code, and all local zoning requirements such as setbacks from the property line and parking.

The case for accessory apartments

Accessory apartments could be a low-impact source of rental housing in the suburbs, where the supply of rental units is currently inadequate. Many municipalities prohibit accessory apartments, and others restrict occupancy of the units to relatives of the homeowners. By allowing accessory apartments, the Commonwealth would enable the market to provide

more rental units—many of which will be affordable—with no subsidies from the state, no construction of new roads, sewer or other infrastructure, and no building on greenfields. The apartments would also provide a source of income for homeowners, especially for elderly homeowners on fixed incomes.

The number of new accessory apartments that might be created under this policy is hard to estimate, but experience indicates that it would be unlikely for any one municipality to absorb hundreds of new units; impacts should be quite dispersed. On the high end, municipalities now grant up to a dozen permits in one year for accessory dwelling units. On the low end, others grant as few as one permit only every several years.⁴² Since the state provisions would apply more broadly than most existing bylaws/ordinances that allow accessory units, we would expect greater permitting levels than are currently happening. If on average municipalities granted permits for three more apartments per year than they are now permitting, the state would gain over 1,000 new apartments per year, with dispersed traffic impacts and no new infrastructure.

3. TRANSIT-ORIENTED MIXED-USE DEVELOPMENT

Recommendation: Allow by right (with site-plan review)⁴³ certain mixed-use developments within a half-mile of public transit stations within districts that are zoned for commercial development. State statute should allow developers, as a matter of right, to build two stories of residential units above ground floors that contain commercial uses. The commercial use would be permitted per local requirements. For each dwelling unit, at least one parking space must be provided either on site or nearby, unless the zoning board of appeals chooses to waive the parking requirement. Transit stations could be defined

broadly or narrowly, potentially including bus stops. The statute could authorize municipalities to assess impact fees on dwelling units developed through this mechanism.

The case for transit-oriented mixed-use development

The state invests in developing and maintaining public transit, but by zoning for low-density development near transit nodes, localities discourage the increased ridership that would make such investment worthwhile. The exemption of mixed-use development from local zoning authority would increase residential construction, lead to livelier business districts, and increase the use of public transit.

Traditionally, zoning has served as a tool for segregating uses — isolating noxious industrial uses from other uses, for example, or business uses from residential. Increasingly, planners and architects have been advocating for zoning that allows mixed uses, such as dwelling units and businesses in the same buildings. Municipalities have been slow to adopt such provisions, and where they are adopted, the municipalities often narrowly define what geographic areas and building types the provisions might apply to.

4. CONSERVATION SUBDIVISION

Recommendation: Allow by right (with site-plan review) conservation subdivisions (also known as cluster) that contain protected open space and clustered residential development, if built on parcels of five or more acres. The state should create provisions for conservation subdivisions that specify densities (units per acre) allowed, and give developers the option to build more units on a parcel in exchange for protecting part of the parcel as open space. At

a minimum, all conservation subdivisions would have at least 20 percent of the parcel set aside as open space; density bonuses would be granted for setting aside up to 60 percent open space. The number of dwelling units allowed on these parcels would be determined by a formula in state statute. The development rights for the open space portion of the parcel would be transferred to the municipality, which could negotiate development of the open space in exchange for funding to be used for open space protection at another site. The statute could include a cap on the total number of units any single locality would have to accept through this mechanism. It would be the developer's choice to build either under the local zoning requirements or under the state's by-right conservation subdivision provisions. The statute could authorize municipalities to assess impact fees on the by-right conservation subdivisions.

The developer would have flexibility in laying out the parcel, as units could be clustered either as single-family, townhouses or multi-family housing. There would be a three-story limit on the by-right development. The municipality could conduct site-plan review. All development would need to be set back from the edge of the parcel at least 30 feet. The open space must include buildable land; it should not be entirely wetlands. The statute could specify that a percentage of the open space be non-wetlands.

With a 20 percent set-aside, the developer could build at an overall density of 1.25 units per acre of the whole parcel (which means 1.5 units per acre on the 80 percent of the parcel that is developed). At a maximum, with a 60 percent set-aside, the developer could build three units per acre of the parcel (which means 7.5 units per acre on the 40 percent of the parcel that is developed).

Fig. 5: Chart of Densities

Percent open space	20%	30%	40%	50%	60%
Overall density for whole parcel, units per acre	1.25	1.8	2.2	2.6	3
Density of housing on the developed part of parcel, units per acre	1.5	2.6	3.7	5.2	7.5

Examples: Units allowed and open space set-aside, assuming no wetlands

Parcel size	Percent open space set-aside				
	20%	30%	40%	50%	60%
5 acres	6	9	11	13	15
10 acres	12	18	22	26	30

The case for conservation subdivision

Conventional zoning governs subdivision of parcels of land by requiring that each new lot meet a series of dimensional requirements including minimum lot size, lot frontage, setbacks from lot lines, minimum lot width, and the shape of the front yard and/or the overall lot. The requirements turn neighborhood design into a geometry problem that yields gerrymandered lots and undermines design and environmental goals, such as avoiding development near wetlands and on steep slopes. Moreover, most suburbs' conventional zoning requires very large lot sizes for new subdivisions, leading to sprawl and development of open space.

Conservation subdivisions would be a tool to allow the market to meet demand for housing while also protecting open space. It would make for a superior pattern of development compared to conventional subdivision patterns. It would also give developers the flexibility to organize subdivisions around the contours of the land, setting units away from

environmentally sensitive areas. The challenge would be for the state to establish a single set of density allowances that would be appropriate in most communities.

5. ZONING TOOLS IN STATE STATUTE

Recommendation: Create zoning tools (similar to “friendly 40Bs”) in state statute that could be used at the discretion of local planning boards to grant special permits for cluster developments, mixed-use, conversions of old houses and mills to multi-family, and transfer of development rights, even where such tools are absent from the local zoning provisions.

Even where the local zoning bylaw/ordinance includes no provisions for cluster, conversions, etc., the planning board could permit such developments using options in state statute. Just as a number of municipalities have used “friendly 40Bs” to permit desired dense residential development that would not be allowed by local zoning, planning boards could use these tools to grant special permits for other types of desired development.

While statute would set the parameters of the zoning tools, the Department of Housing and Community Development (DHCD) could develop the regulations. Examples of zoning options to be included are:

- **Conversion of old houses:** Houses built before 1950 can be converted to up to four dwelling units by special permit.
- **Mill conversion:** Existing mill structures of more than twenty thousand (20,000) square feet of floor area can be converted to residential, commercial or mixed-use buildings by special permit.
- **Cluster development:** On parcels of three

or more acres, the planning board can grant special permits for “flexible design.” The planning board can waive dimensional requirements such as setbacks in exchange for superior site design. For each ten percent of the parcel set aside as open space, developers could increase the number of units by a certain percent. For inclusion of affordable units, installation of solar panels, preservation of trees on the parcel, and infrastructure improvements, developers could gain additional density bonuses to be specified in the regulations.

- **Transfer of development rights:** Developers can purchase land in zones designated by the municipality as priority for land protection and “transfer the development rights” of those properties, by special permit, to other parcels to be developed. The ‘receiving’ parcels could contain as many units as would be allowed on all of the parcels together without the transfer. For example, if a developer purchases 10 acres in a zone designated for protection where ten housing units can be built by right and 10 acres in another zone where 15 units can be built by right, the developer could build 25 units on the receiving 10-acre parcel while protecting the other 10-acre parcel (through donation to the municipality or land protection trust or through permanent easement). So that 100 units could not be “transferred” to a small parcel in a low-density zone, the law should specify a minimum parcel size required to receive a certain number of units. For example, for every 10 units received from a protected zone, the receiving parcel might need to have at least 3 acres. In this scenario, to receive 20 units, a parcel must be 6 acres and to receive 40 it must be 12 acres. The provision should be written with a density bonus as an incentive for developers to make the transfers: use of the transfer mechanism could enable the builder to include five per-

cent more total units than would be allowed under the conventional by-right plan on both parcels.

- **Mixed-use:** In commercial zones, planning boards can grant special permits for up to three stories of residential units in buildings that also house commercial uses.

The case for zoning tools

Each of the Commonwealth’s municipalities writes its own zoning bylaws or ordinances, and most are poorly designed to meet the municipality’s and Commonwealth’s goals for growth management. Municipalities face multiple barriers to creating effective zoning requirements. First, it is expensive to hire expert consultants to draft bylaws. Second, many municipalities adopt zoning through town meeting, which can assemble as infrequently as once or twice per year. The town meeting is highly unpredictable, and many municipalities do not even have a professional planner to usher proposals through the town meeting process. While state spending to improve local capacity to plan and adopt new zoning can help, it is highly unlikely that the state would be able to allocate enough money for the majority of municipalities to establish truly effective zoning rules. Zoning tools in state statute would lead to an incremental increase in permitting for new construction and would enable better design and efficient use of land.

The current use of these zoning tools by localities in eastern Massachusetts is mixed:

- **Conversion of old houses:** Less than half of municipalities studied explicitly allow conversion of either dwellings or non-residential buildings to multi-family housing (three or more units). Most often, the regulations limit reconfiguration of dwellings to contain no more than three units, although some

allow more units. Conversions are usually limited to certain districts.

- **Mill conversion:** Clinton, Dracut, Millbury, Northbridge and Westford specifically allow mill conversion. Other municipalities have more general regulations that allow conversion of “non-residential structures” or “large buildings” to multi-family.
- **Cluster development:** Most municipalities allow some form of cluster development, but as described above, many of the provisions are written in ways that undermine their use.
- **Transfer of development rights:** Pioneer Institute researchers did not specifically track provisions for transfer of development rights in local zoning bylaws and ordinances. Only a handful of municipalities have such provisions on the books, including Acton, Raynham and Townsend.
- **Mixed-use:** Eighty-four zoning bylaws/ordinances include explicit provisions for combining dwelling units with other uses.

6. INCENTIVE ZONING: NEW AUTHORITY FOR PLANNING BOARDS TO NEGOTIATE INCREASED DENSITY

Recommendation: The state should delegate to local planning boards the authority to grant special permits that would double the number of units allowed in local zoning by right (and waive many of the dimensional requirements). The authority would be triggered by residential projects that by right would include five or more dwelling units. This new authority would be a form of “incentive zoning” or “contract zoning” where the planning

board could negotiate the increased density in exchange for a range of possible benefits, including the following:

- Open space set asides
- Improved site design
- Infrastructure improvements
- Inclusion of affordable units
- Donations to a fund that could be used for open space protection in other areas, infrastructure improvements, or schools.

Under this proposal, each local planning board would have the discretion to negotiate density bonuses whether or not the local zoning bylaw/ordinance gives the board that authority. The density bonuses could be granted for any type of development—single-family, townhouse, multi-family or mixed-use, as long as the project could by right include at least five dwelling units.

This recommendation is not for a clarification of zoning authority; localities already have the authority to adopt incentive zoning. Instead, the recommendation is for a direct empowerment of planning boards to negotiate density, even where the town meeting or city council has not granted that authority.

The case for incentive zoning

Currently, some municipalities grant the special permit granting authority (locally designated as the planning board, board of appeals, or city council) the power to negotiate increased density in exchange for such benefits, but often the discretion is limited to adding one or two additional units above what is allowed by right. Without the ability to negotiate benefits as a condition of development, municipalities have little incentive to allow much development beyond the minimum that must be allowed according to constitutional law; municipalities absorb all of the impacts of development such as school

costs, loss of open space, and increased traffic, while enjoying little of development's benefits. When municipalities negotiate increased density in exchange for benefits, they are more likely to allow the market to meet the Commonwealth's housing needs. Harvard professors Alan Altshuler and Jose Gomez-Ibanez conclude in *Regulation for Revenue* (Altshuler and Gomez-Ibanez 1993): "At the local level, in practice, the most realistic alternative to exactions in communities facing development pressures tends to be growth controls."

At the same time, when special permit granting authorities have the authority to negotiate increased density, they do not always use that authority. Nonetheless, if some progressive planning boards opt to use this new authority and developers take the risk of going through the process in the hope of gaining a permit for more units, it will be an improvement over the status quo.

7. ROAD DESIGN STANDARDS

Recommendation: Amend the state Subdivision Control Law to include standards for road design. Local planning boards could adopt amendments to state road design standards, making local standards more or less strict than the state's. The state standards would include minimum width of pavement and right of way for various types of streets (arterial, local, etc.); sidewalk and curbing standards; and requirements for cul-de-sacs, intersections, grade, etc.

The case for road design standards

Many local road design standards represent "worst practices" in terms of landscape design, and some appear to be designed to increase the cost of subdivision for developers. Some planners have commented that they frequently waive requirements that do not make

sense, but that they do not have the resources to re-write and promulgate better subdivision rules, so the poorly crafted rules remain on the books. The state standards for road design would represent "best practices" in the field, and would be the default standards for towns without resources or inclination to revisit their outdated rules.

VII. CONCLUSION

Many municipalities lack the capacity to write and adopt effective zoning and subdivision rules. In addition, municipalities face incentives to inhibit residential growth, and the regulatory tools used to slow growth also tend to undermine good design and sustainable patterns of development. Currently, too many municipalities view land use regulation as a method to slow or prevent development, not to shape it. Harvard's 2002 Master Plan describes this issue: "Harvard's present zoning bylaw appears to have evolved as a tool for quantitative more than qualitative development control." Unfortunately, local regulations aiming at slowing or stopping development have serious negative consequences for the entire region.

Massachusetts' inadequate framework for land use regulation has caused hyperinflation in housing prices, loss of population, poorly designed neighborhoods, and sprawling development that threatens the state's environmental, agricultural, and recreational resources. The resolution of these problems will require state action to reward municipalities for meeting state goals for development, to allow certain types of desired, compact residential development, and to give municipalities tools to negotiate for better development.

The North Reading Zoning Bylaw states (Article III, Section 340-7.B): "We wish to preserve the blossom of springtime, the green landscape of summer, the changing colors of fall, the snowy cover of wintertime, and the celestial display of nighttime." At first reading, this bylaw seems intended to prevent all new development, as surely new subdivisions will bring streetlights that block out the evening stars. At second look, though, Section

340-7.B is part of the preface to the Main Street Overlay District provisions; rather than opposing new construction, this bylaw expresses a growing acknowledgement that to protect country landscapes, we must allow some dense development, at least on our Main Streets. Unfortunately, while state and local policymakers and environmental activists have spoken volumes about the concept of "smart growth," progress on the ground has been slow. Greater progress will only come if state government actively encourages municipalities to work towards statewide smart-growth goals. It is time for Massachusetts policymakers to consider new approaches and tools to promote housing development, good design and sustainability.

ABOUT THE AUTHOR

Amy Dain is Pioneer Institute's research manager on housing and environmental issues. Prior to coming to Pioneer in 2004, Ms. Dain coordinated government affairs at the Jewish Community Relations Council of Greater Boston, served as an intern at the Massachusetts Executive Office of Environmental Affairs, volunteered in Israel, and worked as an environmental organizer in the Berkshires. Ms. Dain received her Master's in Public Policy from Harvard University's Kennedy School of Government in 2003 and her B.A. in Russian Studies from Wesleyan University in 1996.

ENDNOTES

1. According to the US Census, Worcester permitted 12,499 housing units from 1980 to 2002. The nine municipalities that border Worcester (Auburn, Millbury, Grafton, Shrewsbury, Boylston, West Boylston, Holden, Paxton, and Leicester) permitted 13,733 dwellings during that time. Shrewsbury permitted the most housing with 4,548 permits, and Paxton permitted the least, 357. In 1980, Worcester had 58,720 housing units, while all of its neighbors combined had 33,083 units.
 2. Road design standards in Massachusetts are not a part of local zoning ordinances and bylaws. Local planning boards have authority to promulgate subdivision regulations that include standards for road design.
 3. This author served as project manager of the survey. Jenny Schuetz, the project's senior researcher, helped design the survey and coded all of the answers for statistical and comparative use. Researchers included: Janelle Austin, Casey Barnard, Brian Chirco, Anna Doherty, Molly Giammarco, Michael Kane, Shannon McKay, Emily Mechem, Adriana Nunez, Hayley Snaddon, Eva Claire Synkowski, and Gabrielle Watson.
 4. One zoning bylaw lists in one section that multi-family development is a "by-right" use, and in another section the same multi-family was listed as requiring a special permit. A Pioneer researcher emailed the town planner for clarification, and received this response: "You have identified one of several contradictions in our by-laws regarding the level of review necessary to undertake certain uses. We hope to clean up such discrepancies soon, when we revise and update our by-laws."
 5. See "Reference Guide to Local Land Use Regulation in MA" by Amy Dain, in particular the discussion of setbacks from vernal pools.
 6. Researchers entered into the database both short answers such as yes/no, a year, or a quantity, and longer answers with the text of bylaws and commentary.
 7. Multi-family housing is defined in this study as any building with three or more dwelling units, including townhouses, conversions, mixed-use, and freestanding new construction.
 8. Note that in 2006, Westborough did amend its zoning to allow multifamily housing.
 9. "As-of-right" uses (also called "by-right") are allowed uniformly throughout a zoning district. Special permits are designed for uses that are generally compatible with a particular zone, but that the municipality would not want to allow as a matter of right in any location in the zone. The special permit mechanism gives municipalities leverage over an applicant—approval can be made contingent on an applicant meeting certain conditions.
 10. The survey included a question about whether multi-family development is allowed by right or by special permit; it did not include a question about requirements for town meeting approval of projects. In many cases, though, researchers found that zoning bylaws listed multi-family as an allowed use (technically by right or special permit), but then specified that town meeting approval would also be required, or did not include the multi-family district on the map so that re-zoning would be required for each project. Communities that technically allow multi-family housing, but require town meeting approval of projects include: Bellingham, Chelmsford, Dover, Northborough, Randolph, Scituate, Wenham, and Weston.
 11. More communities, without explicitly allowing conversions, do permit them in districts where multi-family housing is allowed in general.
 12. Municipalities that allow mixed-use do so through conventional use regulations, special regulations such as planned unit developments, or mixed-use overlays. Canton, for example, has a mixed-use overlay; Dunstable allows "Planned Unit Development for Mixed Uses" in the Mixed-Use District; Hanson lists mixed use in the "Flexible Zoning Bylaw/Special District"; Millis allows mixed use development in the Millis Center Economic Opportunity District; Shirley has a Mixed Use Zoning Overlay District that pertains to the C-1 Commercial Village district; and mixed-use is allowed in Townsend's Downtown Commercial District.
 13. Forty-six of the municipalities only allow accessory apartments for relatives of the homeowner. Eleven more municipalities restrict residence to certain categories of people in addition to relatives: caretakers, low-income residents and the elderly.
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14. Paxton, Princeton, Rehoboth, Sutton, Boxford, Plympton, Carlisle, Lincoln, Medway, Berlin, Bolton, Groton, Dunstable, and Townsend.
15. In addition to the fourteen listed for two-acre lot sizes, the following zone more than 90 percent of the land area for one-acre lot sizes or larger: Pepperell, Harvard, Mendon, Sudbury, Sherborn, Berkley, Carver, Norwell, Newbury, Ipswich, Wenham, Topsfield, and Lunenburg.
16. The nine communities that require 250 feet or more of frontage in at least one zoning district are Acton, Blackstone, Boxford, Carlisle, Marlborough, Newburyport, Sherborn, Sutton, and Weston.
17. Only a handful of municipalities within 50 miles of Boston allow a flexible option as-of-right—Belmont, Gloucester, Raynham, Sutton, and Upton.
18. Researchers obtained information on the results of cluster zoning for 112 of the 150 municipalities that have it on the books and are located within 50 miles of Boston. Municipalities that have seen significant levels of cluster development include Acton, Bolton, Braintree, Carlisle, Concord, Groton, Holliston, Hopkinton, Ipswich, Lexington, Lincoln, North Andover, Southborough, Taunton, Tewksbury, Walpole, Westborough, and Weston.
19. Communities that reported no cluster development despite allowing it include Canton, Carver, Dedham, Douglas, Framingham, Lynn, Manchester-by-the-Sea, Medway, Merrimac, Millis, Milton, Sherborn, Sutton, Townsend, and Wellesley. Merrimac and Douglas only adopted their flexible provisions in 2004.
20. Inclusionary zoning requires or encourages developers to include housing under long-term affordability restrictions within new developments of market rate homes. Ninety-nine (53 percent) of the 187 zoning bylaws/ordinances surveyed have some kind of provision for inclusionary zoning. Almost two-thirds of those municipalities offer some kind of density bonus or incentive to include affordable units in developments. Many communities with inclusionary provisions on the books have seen no affordable units, or very few, developed with the mechanism, often because the incentive is insufficient to make the option worthwhile for developers.
21. Berlin, Hanover, Norwell and Paxton, for example, only allow cluster development if it is age-restricted.
22. Each community designates in its zoning which entity (the planning board, zoning board of appeals or city council) serves as the special permit granting authority for each use that requires approval with a special permit.
23. According to the report, 113 communities received “Foundation Aid” for schools from the state in 2005.
24. For a discussion, see two reports prepared for the Citizens’ Housing and Planning Association: <http://www.chapa.org/pdf/HousingSchoolAgeChildren.pdf> and <http://www.chapa.org/pdf/fiscalimpact.pdf>.
25. City council is the legislative body in cities. Town meeting, which can be “open” or “representative”, is the legislative body in towns.
26. For more information on town meetings see Citizen’s Guide to Town Meetings, <http://www.sec.state.ma.us/cis/cistwn/twnidx.htm>
27. As of January 2006, 33 of 351 communities have achieved the ten percent goal (CHAPA Fact Sheet on Chapter 40B). In communities that have reached the ten percent threshold, developers may still apply to build 40B projects, but they cannot appeal the community’s decision.
28. The incentive package includes: (1) a payment to the community when the zoning is passed of approximately \$1,000 per housing unit allowed; (2) a payment equal to \$3,000 per housing unit when a building permit is issued; (3) increased priority for requests for state capital funds for communities that have passed 40R districts; and (4) an annual payment to contribute to the cost of educating children living in the new housing in Smart Growth Districts, when the cost of educating the children exceeds approximately 50 percent of the new property taxes from that District.
29. According to a progress report released by the Commonwealth Housing Task Force on June 30, 2006, Lunenburg, Norwood, North Reading, Plymouth, Dartmouth and Chelsea have passed 40R districts. Thirty other communities are actively exploring the 40R option. Other communities have expressed interest.
30. Capital spending programs included under the umbrella of Commonwealth Capital include Public Works Economic Development Grants, Community Development Grants, Transit Node Grants, State Revolving Loan Fund, Brownfields Fund, Self-Help Program, Urban Self-Help Program, Agricultural Preservation Restriction Program, Land Acquisition Program, and Off-Street Parking Program.
31. Commonwealth Capital programs cover \$97 million in grants and approximately \$450 million in loans annually.
32. Commonwealth Capital rankings can count for about 30 percent of the allocation decisions for most of the capital spending programs.

33. Background information on the Community Development Plans is available at <http://commpres.env.state.ma.us/content/cdplans.asp>.
34. For more information on the Community Preservation Act, see <http://www.communitypreservation.org/index.cfm>.
35. As of August 2006, CPA funds have contributed to the development of 871 units of affordable housing, according to the website for the Community Preservation Coalition: <http://www.communitypreservation.org/CPAProjectlist.cfm>.
36. The tool kit is available at http://www.mass.gov/envir/smart_growth_toolkit/index.html.
37. The Zoning Reform Working Group maintains a website at <http://www.massmunilaw.org/zoning.htm?sid=60>.
38. CPA-II proponents explain that when the building inspector denies an application for an accessory apartment in an area that the master plan indicates would be appropriate for such an apartment, the applicant can then appeal the denial to the Land Court based upon the statutory consistency requirement. At the same time, it remains un-tested whether the courts would decide that a planning document would trump a more recent vote by the legislative body that rejects a recommendation in the planning document. The Zoning Reform Working Group's brief "The Community Planning Act on Housing" (3/28/06) states: "a community with a master plan containing housing goals, such as diversity, accessibility, integration, and affordability, must adjust their regulations so those goals may reasonably be achieved, or face a legal challenge." Would the courts rule that an abstract series of goals that may not expressly identify where each concept applies trumps a detailed, district-specific zoning ordinance/bylaw?
39. Communities that have already adopted mandatory inclusionary zoning include Berlin, Bolton, Duxbury, Framingham, Groveland, Kingston, Mansfield, Norton, Peabody, Southborough, and Stow.
40. There are many definitions of "smart growth." Anthony Flint defines it as "a call to build more compactly, to place homes and stores and workplaces closer to each other, and to take advantage of existing infrastructure, especially trains and buses, instead of laying down so many miles of new asphalt." (Flint 2006, p. 4)
41. For a brief discussion, see the opinion piece Glaeser had published in the Boston Globe: http://www.boston.com/news/globe/editorial_opinion/oped/articles/2006/09/03/balancing_housing_options/
42. The Assistant Town Planner in Acton estimates that on average three building permits per year are granted for accessory apartments. The Duxbury Town Planner noted in January 2006 that only one accessory apartment was approved in the last five years. According to a Boston Globe article on Franklin's accessory apartments, the town has approximately 30 registered apartments, but in recent years applications have increased, with 12 requests in 2005 (Ryan 2006). Westwood and Easthampton permit two to three per year. Chelmsford and Westford see five to ten applications per year. Yarmouth receives approximately four applications per year for family-apartments and two per year for accessory apartments that are specially designated as affordable.
43. Massachusetts Chapter 40A, the Zoning Act, contains no reference to site-plan review. Site-plan review usually focuses on parking, traffic, drainage, screening, lighting and other design aspects of a project. When a given use is allowed as-of-right with site-plan review, the review can only be used to shape a project; it cannot be used to deny a project, except in rare circumstances. The board reviewing a site-plan may impose reasonable conditions at the expense of the applicant. (For more information, see Citizen Planner Training Collaborative's site-plan review module, <http://www.umass.edu/masscptc/toolkit.html>.)

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