Volume 2

DENSITY through DESIGN

Research Reports

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1. INTRODUCTION

1.1. The National Housing Crisis

A paradox exists in the current U.S. housing market. Due to the 1990s' economic boom, nearly two-thirds of Americans are homeowners. However, at the same time, housing has become more expensive because of the country's prosperity and costs associated with new housing construction. With wages and purchasing power of working people stagnating over the last two decades, the cost of adequate housing in a decent neighborhood has soared beyond the reach of many.[1] It is predicted that the affordable housing crisis will worsen because of a widening income gap and a limited number of affordable units.

Not surprisingly, the lack of affordable housing has also become a growing problem in the suburbs. It is increasingly more difficult for residents to find affordable housing near their place of employment. This trend affects a corporation's ability to recruit and retain employees, which adds an economic development component to the housing crisis.[2] For this reason, there is a major need to provide adequate housing for moderate-income people, also known as workforce housing. [3]

1.2. The Greater Boston Region

The Greater Boston region is experiencing an acute housing crisis. As is the case in many areas nationwide, the lack of affordable housing threatens the continued economic growth of the region. Evidence of the situation within the Greater Boston region includes soaring apartment rates, high home prices, and low vacancy rates. The insufficient variety of housing options forces many workers out of the market, often including entrepreneurs engaged in the initial phases of a new business or recent college graduates, which in turn drives businesses from the region.[4] As the Greater Boston region continues to grow and thrive economically, providing affordable housing and managing density within the communities of the I-495 corridor has become a significant challenge.

2. PROJECT OVERVIEW

Encouraging denser suburban development is the focus of the ongoing research study sponsored by the 495/MetroWest Corridor Partnership. The 495/MetroWest Corridor Partnership is a business-civic

[1] Emmons, Garry. "No Place Like Home: America's Housing Crisis and its Impact on Business." *Harvard Business School Bulletin* (2000).
[2] Grunwald, Michael. "The Housing Crisis Goes Suburban," *Department of Affordable Housing*, 2006.
[3] Emmons.
[4] Euchner, Charles G. Getting Home: Overcoming Barriers to Housing in Greater Boston. *Pioneer Institute for Public Policy Research*. www.pioneerinstitute.org. Accessed 14 February 2007.

organization that promotes the economic vitality and quality of life in the 495/MetroWest region while sustaining its natural resources. Central to the economic vitality and quality of life for the region known as the "Arc of Innovation" is affordable housing for a wide range of incomes and lifestyles.[5] For this reason, the Partnership recently sponsored the "Suburban Residential Development Density Project." Communities interested in participating in this study submitted a letter of interest to the Partnership, which outlined the steps they have made to address the current housing crisis in their community and the reasons they would benefit from being included in this project. The towns of Medway and Sudbury were chosen as participants.[6]

The Partnership teamed with the Department of Regional Planning and Landscape Architecture at the University of Massachusetts-Amherst to examine the following:

- Regulatory barriers that impede higher density housing from being constructed;
- Driving factors behind community opposition to density;
- Innovative design techniques that address the challenge of developing higher density housing that will be both successful in the marketplace and sustainable; and
- Precedents throughout the U.S. that show how municipalities have addressed public fears about density and how innovative zoning regulations allow for greater density.

The end goal of the study is to identify barriers to increased residential density of housing in the I-495 region, and design solutions to overcome those barriers.

This report informs the overall study by suggesting regulations that would increase residential density and methods to gain public approval for enacting such regulations. The research question driving this report was: How have municipalities changed or adopted zoning regulations to allow for greater residential density? This central question was addressed through two interrelated questions: how have municipalities addressed public fears on housing density as they advocated for greater residential density and how did the municipalities' zoning regulations allow for greater residential density?

[5] The "Arc of Innovation" is defined by Route 9 and I-495 from Route 1 to Route 2. This region contains thirty-two communities and half a million residents. In addition, it hosts the headquarters of numerous national corporations and has an annual payroll of $15.6 billion, second only to Boston. For these reasons, this region is known as the "Arc of Innovation."

[6] "Homepage," 495/MetroWest Corridor Partnership, accessed 02/11/2007, http://www.arc-of-innovation.org/index.html; "Arc Update," January/February 2007 newsletter, 495/MetroWest Corridor Partnership, http://www.arc-of-innovation.org/ARC_Update_January_February_07.pdf.

2.1. Methods

The objective of this report is to make practical recommendations for the two identified towns as well as all of the communities facing similar challenges within the MetroWest region. Too often well-intentioned initiatives fail when the public formally stops them because of communication barriers and ungrounded fears. Thus, an understanding of the methods used for gaining public approval is critical. In addition, an analysis of municipal best practices will generate a set of precedents that will aide these two towns in their rezoning efforts to increase residential density.

The research for the report is based on municipal zoning by-laws that have allowed for higher density development. The purpose underlying the method of analysis was to find model municipal examples of both innovative regulations and development projects. Two steps initially narrowed the focus from several thousand municipalities nationwide. First, the study looked at previously published studies to locate exemplary municipalities that have enacted creative zoning techniques. Contact was made with planning agencies or business/civic organizations of particular regions to provide potential examples. Several factors then further narrowed this portion of the analysis. The socioeconomic makeup needed to be comparable to that of Medway or Sudbury. Examples needed to fall within large metro regions and be located along corridors similar to the 495 / MetroWest region. A list of best practices was then compiled from many of these regions and municipalities that are successfully dealing with residential density through incentives or creative zoning measures. Secondly, the report examines innovative techniques used throughout the public process. By identifying and analyzing the methods of community participation, the study aims to further assist the MetroWest region in actualizing the aforementioned creative zoning.

2.2. Our Challenge

Ironically, communities that desire economic vitality and an enhanced quality of life for its residents often let their adversity to density impede the attainment of these two goals. Density faces much opposition, as it is often construed to be the source of an increase in traffic, crime, parking shortages and monotonous architecture. These objections are not without basis and poorly designed areas of higher density feed public frustration. For example, office parks with no access to transit or subdivisions with no sidewalks have forced a vehicular based method of transportation. High-rise projects have created unsafe neighborhoods due to limited retail activity. Finally, dense development without proper open space

creates environmental concerns and allows for limited recreation opportunities.[7] A common community response has been to oppose any and all density.

Density refers to the "number of housing units to the area of land," which is typically measured in dwelling units per acre (the larger the number of units permitted per acre, the higher the density; the fewer units permitted, the lower the density).[8] Jurisdictions that prohibit higher density thus create an environment where low-density development is the only option. As a result, open spaces are consumed, environmental problems mount, traffic congestion increases, people face longer commutes, subdivisions develop without any town center, and people begin to lose a sense of community.

Developers must jump through numerous hoops interacting with state and local appeals boards. Local zoning laws govern what kinds of structures can be built and in what parts of town. State building and specialty codes regulate the physical design of buildings. Because local officials enforce state regulations, local interpretations of state regulations can pose a formidable barrier. Every such barrier has an associated cost, which is passed along to the homebuyer or renter.

As communities confront the consequences of low-density development, a more balanced perspective emerges. In a recent report conducted by the United States Environmental Protection Agency, it was found that "people are beginning to realize that areas of more intense development within a community can help achieve local economic development goals, provide housing options, create walkable neighborhoods," and protect air, water, open space and other natural resources. This balance allows a sense of place to cultivate. To create these great places, communities are zoning areas to allow for higher density, a mix of houses types, open space, and mixed-use. As stated by the EPA, "this more balanced perspective changes the discussion from *'Should we have density?'* to *'What should the density look like and how should we create it?* "[9] The discussion invites citizens to think about designing great places, rather than just thinking about density.

3. REGULATIONS AND TOOLS TO ACHIEVE GREATER DENSITY

It is important that municipalities interested in higher density development have a "toolkit" to achieve denser patterns of suburban development. This section will first address this objective in the context of

[7] *Creating Great Neighborhoods: Density in Your Community.* U.S. Environmental Protection Agency. www.epa.gov. Accessed 31 January 2007.

[8] Lincoln Institute of Land Policy, "A Bird's Eye View of Density," *Visualizing Density*, 2005, http://www.lincolninst.edu/subcenters/VD/tour/t3.aspx, Accessed 26 May 2007.

[9] *Creating Great Neighborhoods.* U.S. Environmental Protection Agency.

statewide initiatives. Next, it will examine the specific measures municipalities have undertaken to achieve greater residential density and affordability. Finally, this section will close with several case studies that illustrate these measures and tactics.

3.1. State Policies

The ability of local municipalities to utilize flexible land-use measures depends on the authorization of local power by act of the state legislature. In Massachusetts the legislature passed the Home Rule Amendment in 1966 that granted cities and towns municipal powers to adopt, amend, or repeal local ordinances or by-laws for the "protection of the public health, safety, and general welfare," which were powers they previously did not inherently possess. Zoning particularly falls within these powers designated to towns through this amendment. Naturally, this amendment gave local governments greater legal control to make decisions on issues that affect their community, adhering to the vernacular that a community knows what is best for its people. The state, however, has also passed legislation that effectively undercuts the authority of local governments to make land-use decisions while at the same time passed legislation that provides incentives to municipal governments. For this reason, it is important to have an understanding how the state of Massachusetts has addressed affordable housing and sustainable development.

Chapter 40B or The Comprehensive Permit Law: Chapter 40B, enacted in 1969 due to a shortage of affordable housing in the state of Massachusetts, encourages the creation of affordable housing without using state or federal funds. Over the years, 40B has produced over 35,000 housing units with approximately 62 percent of these units available to people making 80 percent or less than the state's median income level. Municipalities with an affordable housing stock of less than 10 percent of their total housing must provide developers of affordable housing with a streamlined process through the permitting phase.[10] In addition, developers may also build multi-family structures or single-family houses at higher densities than normally permitted through local zoning. This state law has allowed for the construction of many projects that most likely would not have been built under the existing zoning regulations. These projects include mixed-income condominiums, single-family subdivisions, multi-family rental units and elderly housing.

Chapter 40R, or Smart Growth Zoning Districts: Chapter 40R, signed into law in 2004, encourages municipalities to establish "smart growth zoning districts," or zoning which overlays one or more current districts and allows developers to follow the zoning codes of either of the districts. These districts must be

[10] Massachusetts Smart Growth Alliance. www.ma-smartgrowth.org. Accessed 15 February 2007

located near transit stops, town centers, commercial areas or industrial properties.[11] Smart growth zoning districts can occur in residential or commercial parts of town. In these areas, the smart growth zoning requires that a minimum of 20 percent of new residential developments with 12 or more units be affordable. As stated by the Smart Growth Alliance, "the Commonwealth will give the following 'housing incentive payments' for having this kind of development: $10,000 for up to 20 units; $75,000 for 21-100 units; $200,000 for 101-200 units; $350,000 for 201-500 units and $600,000 for 501 or more housing units. In addition to this, a payment of $3,000 for each new unit will be given to a town or city when the building permit is issued. [12] As of January 2006, only one community had submitted an application for 40R.[13]

Chapter 40S or Smart Growth School Cost Reimbursement: Passed in November 2005, Chapter 40S provides funds to communities with Smart Growth districts (40R) to help mitigate the impact of school costs. It enables communities to keep up with any increase in school enrollment caused by the increase in housing density.[14] (At this writing, Chapter 40S funding is being debated in the Legislature for the 2007-08 state budget.).

3.2. Municipal Policies

There are many tools a municipality can use within their own by-law that can spur affordable housing development. After reviewing housing studies prepared by regional planning agencies all around the country, it is clear that many regions similar to Massachusetts' MetroWest region have similar concerns about residential density. Many of these regions and municipalities are successfully dealing with residential density through incentives or creative zoning measures. It is from these examples a following list of "best practices" has been compiled:

a) Creating Incentives for Developers

By easing the process for developers, and giving them something of value, a municipality broadens its options for development. Some of these incentives include:

Density Bonuses

This type of ordinance provides developers a greater density or Floor Area Ratio (FAR) than traditionally allowed. In return, the developer agrees to restrict the rents or sales prices on some of the units. The developer can then use the additional cash flow from these extra units to offset the reduced revenue from

[11] Ibid.
[12] Ibid.
[13] Corporation for Enterprise Development**,** http://www.cfed.org/focus.m?parentid=34&siteid=1581&id=2413
[14] Ibid.

the affordable units.[15] Density bonuses are also used to motivate developers to build public amenities such as underground parking, daycare centers, and parks. Generally, municipalities require developers to construct a certain percentage of affordable housing units in the project before they qualify for a density bonus. For example, Santa Cruz County's density bonuses are available to developers who build rental projects with 5% of the units for very low income, 10% for low income, or 100% of the units designated toward a senior project, as well as owner occupied project with 10% of its units designated for moderate income. In this municipality, each of these can qualify the developer for a 20% or 5% base density bonus depending on which of these housing types is being built. In addition, if the developer is choosing to add even more than the required percentage of affordable units, they can qualify for an increased density bonus. Depending on the housing type being built, the density bonus can increase beyond the minimum bonus by 1%-2.5%. Developers favor these programs because they receive rewards. In many programs, the density bonus that developers can earn may go up to as much as 30 or 40%. In Santa Cruz, if a developer meets the basic affordable housing requirements as outlined in the by-law, and goes beyond the requirements for a density bonus to build an additional 10% of very low income units, their density bonus can increase to 32.5%. [16]

Streamlined Application Process

Speeding up the permit and application process for developers could save them months of waiting time. In many municipalities, developers and contractors wait months to get through the approval process, only to be told that they need to make changes to their plans. The San Francisco Planning Urban Research Association (SPUR) released a number of reports on how to increase the supply of housing within their region. One report they released included an article entitled *Rationalize the Permit Approval* Process in which the authors noted, "Uncertainty and delay are deadly to the efficient production of housing, both affordable and market rate projects. Uncertainty in the approval process means more risk for developers, investors and lenders. And that translates directly to higher costs to developers for both equity and debt, leading to less housing being built and ultimately higher costs to housing consumers."[17]

Recognizing this issue, some municipalities have started to make changes that have helped this process become more streamlined. One example is the city of Elgin, Illinois that has worked to create a permit approval process that on average takes roughly two weeks. In some cases, larger-scale projects can take

[15] Jonathan Levine, Zoned Out: Regulation, Markets, and Choices in Transportation and Metropolitan Land-Use. (Washington D.C.: Resources for The Future, 2005).

[16] County of Santa Cruz Planning Department, http://www.co.santa-cruz.ca.us. Accessed 12 February 2007

[17] SPUR Housing Committee, "Rationalize the Permit Approval Process," (2000) http://www.spur.org/documents/000901_article_01.shtm

longer, but generally the city has prioritized making the process as fast as possible for developers. One of the benefits of doing this is that a faster process can mean saving a great deal of money for the developers, and therefore a price reduction in the overall cost of construction.[18] Another municipality that has made streamlining the approval process a priority is Highland Park, Illinois. The city has a program that waives fees for developers who build a certain amount of affordable housing as part of their projects. This program benefits the developer because the fee waivers add up to a significant amount of money, and benefits the town because it creates more opportunities for the construction of affordable housing. In order to receive the fee-waiver, the development being built needs to be 20%.[19]

Recent advances in technology have offered a number of possibilities for streamlining the approval process including new computer software that can allow linkage between a municipality's departments. The software helps streamline the process because it eliminates a lot of the legwork and waiting that occurs when documents are being passed from department to department. Another benefit of this new software is that developers and contractors are able to initiate many steps of these processes online, such as applying for permits and checking the status. In many municipalities, developers have to physically come down to the city hall or call on the phone to check the status of these applications. Having this information available via the internet saves developers time. In addition, when developers and contractors have the opportunity to review the status of their applications online, they have the opportunity to correct any problems or setbacks immediately while their applications are still in review with other departments, as opposed to having to wait for the applications to be sent from department to department and back to them before they could address any issues. "This feature will allow contractors to get ahead of the game and fix issues sooner, thus making the whole process faster" says Gene Bradham, director of the city/county Inspections Department, in Durham, North Carolina.[20]

Tablet computers are another recent development that has helped municipalities streamline this process. These hand-held computers enable city and county field inspectors to enter the results of their inspection directly into the system, which eliminates the delay in the transfer of data using paper records into the system. Again, this enables contractors and developers to review inspection results in far less time. [21]

[18] Home Grown, *Streamlining the Development Process.*
[19] Ibid.
[20] City of Durham, North Carolina. *One-Stop-Shop Initiative Brings Better Customer Service to Durham Developers and Contractors.* 2005.
[21] Ibid.

In 2005, the city of Durham, North Carolina made the decision to invest in such software for the benefit of their various departments and potential developers. The new software they are using is called One Stop Shop Initiative. When asked about the program, Marcus Bryant, GIS administrator for the City's Technology Solutions Department stated "This new system will make it a lot easier for developers and contractors to get through our processes in a timelier manner." Although the city had to deal with the costs of installing this new software in their system, they strongly feel that these technological improvements will save a great deal of money in the long run. Currently, the city is taking four percent of permit fees to put towards a fund to pay for the new technology.[22]

Transfer of Development Rights

This land use regulatory tool allows landowners or developers who wish to develop in an area where growth is encouraged, the ability to transfer the development rights from areas where growth is discouraged. This reduces development in the "sending" zones or areas of discouraged growth and creates a mechanism to permanently sell the development rights to the land.[23] TDRs have been used for the protection of open space, natural resources, farmland, and urban areas of historical importance. Massachusetts is one of 20 plus states that have enacted or amended statutes accommodating the TDR concept. When looking at these programs, it is important to remember that the development right is independent of land ownership. The most common TDR program lets landowners sell the development rights to a developer who then uses those development rights to increase the density of houses on another piece of property in a different location. Another method of TDR program allows a local government to establish a TDR Bank for the purpose of transferring development rights. In this method, developers who wish to develop at a higher density than a municipality's zoning allows can purchase development rights from the local government. The local government could then utilize this money to buy the development rights of properties in areas that it wants to protect from development. In these programs "the development right becomes a separate article of private property and can be shifted from one area to another and can have economic value."[24]

[22] City of Durham, North Carolina, 2005.
[23] Levine.
[24] Ohio State University. "Fact Sheet." http://www.ohioline.osu.edu. Accessed 25 February 2007.

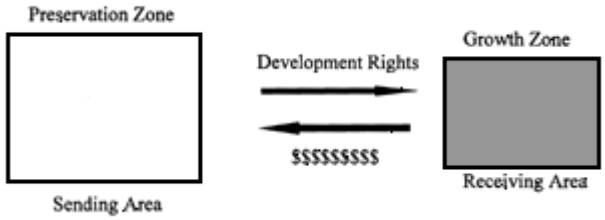


Figure 1. *Transfer of Development Rights (Platt, 1996)*

TDR program are often extremely difficult and complicated to enact. Some of the features that make them effective include:

- Programs that are accessible and understandable for landowners and the public as a whole;
- Programs that are part of a growth-management program in the municipality. It is difficult to have a TDR program if the municipality does not have a comprehensive plan and updated zoning ordinance;
- Adequate incentives for landowners to sell rights to developers, and adequate density bonuses for developers to purchase development rights; and
- Careful management by planning staff is vital. It is always important that members of staff are well skilled not only in the fundamentals of planning but also in public relations to explain the program to politicians, landowners, developers, and the public.

There are a few drawbacks to TDR programs that are important to consider when structuring and running such a program. TDRs appear to be an effective way of preserving farmland, open space, and natural resources, but in reality they have been primarily effective within urban settings because this is where planning programs tend to have the most support whereas rural areas may not have as structured or strong of a planning office in place. In Tom Daniel's work *Holding Our Ground: Protecting American Farms and Farmland*, he notes that "… TDR is the most difficult farmland preservation technique to establish."[25] .

b) Creative or Flexible Zoning

Flexible zoning measures are generally grouped together because, if adopted, they provide for a greater range of land-development patterns than allowed under traditional zoning. They can be used within a municipality's zoning to attract development as well as encourage affordable housing and the type of density the town is looking for. Once adopted, these zoning by-laws can greatly add to a town's ability to

[25] Daniels, Tom and Deborah Bowers. *Holding Our Ground: Protecting American Farms and Farmland.* (Washington D.C: Island Press, 1997).

approve residential development projects with higher densities.[26] The following land-use tools described below are examples of flexible zoning or examples of development patterns allowed by flexible zoning.

Inclusionary Zoning

Unlike the incentive or bonus approach used by municipalities to obtain affordable housing units, inclusionary zoning is a type of local zoning by-law that requires affordability. It does this by mandating a set percentage of units in a new residential development (or one that is being converted to residential) be made affordable. Municipalities usually offer incentives for constructing more than the required minimum number of affordable units—a form of density bonus. Developers typically have the option of making a payment to a designated affordable housing fund in-lieu of constructing the specified amount. This optional by-law proves attractive to planning staff because it integrates affordable units throughout a town.[27]

Municipalities across the nation have been using inclusionary measures to promote affordable housing since the late 1960s. Montgomery County, Maryland is an early example. The county enacted a Moderately Priced Dwelling Unit program in 1974, which requires all residential developments of over fifty units to make 12.5% to 15% of all units affordable. The county also provides a density bonus of up to 25% to developers who exceed the 12.5% minimum. According to a study conducted in 1997, the program has created over 10,000 affordable units in the county.[28]

Although successful examples abound, this method is still not widely used nationwide. Highland Park, Illinois was the first municipality in the Chicago metropolitan region to approve an inclusionary zoning ordinance in 2003. As of the summer of 2005, three developments were in the works, which will add 11 new affordable homes to the community.[29] Municipalities in Massachusetts have the option of adopting the by-law, but only a few have acted on this incentive. The Massachusetts Housing Partnership Fund conducted a 1999 study which found that 105 communities had adopted inclusionary zoning or similar provisions.[30]

[26] The process to obtain flexible-zoning by-laws or approval for a development project that requires a special permit can be time-consuming, and ultimately fail. The next section of the report will address how planning officials can make sure these initiatives pass.

[27] Levy, 135.

[28] Alex Schwartz and Kian Tajbakhsh, "Mixed-Income Housing: Unanswered Questions," in Cityscape Vol. 3, No. 2 (1997), 88.

[29] Home Grown

[30] "Inclusionary Zoning: Lessons Learned in Massachusetts" in the *NHC Affordable Housing Policy Review.* National Housing Conference. Vol 2, Iss. 1 (JANUARY 2002), 3-4.

Compact Development

One of the best ways a municipality can achieve denser suburban development is to encourage compact development. This form provides a range of benefits to a community. Foremost, it lowers the cost of land as well as the cost of developing roads and running utilities to the site. In many cases, it provides for an array of diverse housing types, since this form diverges from the typical single-family detached housing unit on a quarter of an acre lot. Compact development also encourages the preservation of open space, which allays fears that new subdivisions will eradicate a community's natural resources.[31] Communities can achieve this type of development through various forms of development patterns such as planned unit developments, cluster developments, transit-orientated development, traditional neighborhood development, and mixed-use developments. These forms, many of which are only possible through the adoption of new zoning measures, will be explained more thoroughly below.

Cluster Zoning and Cluster Development: Cluster zoning is a specific residential zoning technique that permits the building of residences on smaller lots provided that the space saved from the reduction of the lot size is compacted together to form open or recreational spaces. Cluster zoning, then, concentrates residential development to specific areas. Depending on the size of the development, generally known as a cluster or open space development, open space can be grouped in several locations or in one large preserve. In many cases clustering requires a combination of zoning and subdivision regulations. The subdivision regulations component may narrow the street width and set alternative lot configurations.[32]

Planned (Unit) Development: In its basic form, Planned Unit Developments (PUD) allow for various land-uses to be placed side-by-side, emphasizing compact development, and providing for open space. PUD's are designed to increase residential density while maximizing open space. They usually contain a range of residential uses such as single-family detached homes, duplexes, and multi-family units as well as a little commercial. The number of allowable units for multi-family housing and building height may be substantially greater than what would normally be allowed under traditional zoning.

How does a PUD get developed? PUD's are often treated as a floating zone or overlay zone under a local ordinance. Municipalities identify a large parcel of land that they want developed and place conditions on it such as the amount of open space, residential use, commercial use, and parking spaces required. Since PUD's speak to compact development, these conditions also specify requirements such as decreased

[31] *Planning for New Hampshire's Housing Needs*, 2005.

[32] Oliver Gillham, The Limitless City: A Primer on the Urban Sprawl Debate. (Washington D.C.: Island Press, 2001).

setbacks and lot sizes, minimum building heights, and minimum units allowed. In the case of floating zones, the conditions set for the parcel are triggered in the event the parcel is developed. PUD's have proved to be popular in many areas throughout the country because they offer an alternative to the traditional pattern of development. The compact pattern of development may appeal to people who desire a greater sense of community or enjoy the ability to frequent commercial establishments within close-proximity. For municipalities, the addition of commercial establishments helps to increase the town's tax-base.[33]

Traditional Neighborhood Development: Traditional Neighborhood Development (TND), also known as new urbanism, has become an increasingly popular design concept that stresses compact development on smaller lots with reduced setbacks, narrow streets, wide sidewalks and traditional style architecture complete with front-porches. It places an overriding emphasis on "connectivity." Residents should be able to walk to community institutions like the local school, post, office, and library, as well as the commercial businesses. TND believes the development's walkability aides in the formation of meaningful relationships amongst neighbors, which hopefully will result in shared civic ideals and public responsibility. [34] The residential development is not a subdivision; rather, they are a group of neighborhoods. The most well known examples of TND include the "Kentlands" in Gaithersburg, Maryland and Seaside, Florida, and "Charleston Place" in Boca Raton Florida. The design firm Duany Plater-Zyberk (DPZ) oversaw all three in the 1990s. DPZ are the leading proponent of New Urbanism, the overriding philosophy behind TND. HomeTown Aurora in Aurora, Illinois is an excellent example of a characteristic traditional neighborhood development, which is discussed as a case study on page 19.

Transit Oriented Development: Transit Oriented Development (TOD) includes all of the elements of Traditional Neighborhood Development, but places a greater emphasis on connecting development to mass transit. In addition, traditional-style architecture is less important. TOD's are appropriate for sites that are in close proximity to public transit nodes or soon will be. Given the right conditions, this development concept is very popular, and can be eligible for government incentives in states like Massachusetts.

Variety of Housing Types

[33] Jurgenmeyser, 291-293; Levy, 135-136.

[34] Landon, Phillip, A Better Place to Live: Reshaping the American Suburb, (Amherst: University of Massachusetts Press, 1994), 123.

The simple act of increasing the variety of housing types allowed in zoning districts across a municipality automatically enhances a developer's affordable housing options. These housing types include:

- Multifamily housing;
- "In-law" apartments;
- Duplexes;
- Manufactured homes; and
- Accessory apartments.

Permitting these residential uses by-right through the zoning by-law instead of by special permit greatly improves the chance they will get built. Also, zoning should allow for the conversion of larger homes, mills, and old schools to multiple units. All of these options encourage greater density. These options also will meet the needs of a range of different people and households including those with children, the elderly, the disabled, as well as lower-income, middle-income or "workforce" residents.[35]

Mixed-Income Housing

Mixed-income housing is the most effective way to increase affordable housing options in a community.[36] Research indicates that mixed-income housing comes in a variety of forms—it is not synonymous with multi-family housing nor is it always rental. It means that a certain percentage of the housing units constructed in a development are marked for households of varying income levels. The central idea is for each residential structure to maintain a similar outward appearance. That way, residents who live in the housing units designated for low to medium income levels will not be stigmatized. The HomeTown Aurora case study below offers an example of a development that had single-detached housing for lower to moderate income levels scattered among those intended for higher income levels. There, the absence of high-end features like Jacuzzis or granite counter-tops lowered the asking price of the home. In the case of a multi-family housing structure, the size would be smaller as well as an absence of high-end interior features. Mixed-income housing can be accomplished through inclusionary zoning, by negotiation with the developer, or through the developer's own volition.

3.3. Case Examples

The particular case studies for this report were chosen on the basis of topic relevancy, scale, use and application. Several towns researched were worth citing due to unique approaches to their local residential density. It is important to note that municipalities utilized several of the recommendations made above.

[35] Planning for New Hampshire's Housing Needs.
[36] Schwartz & Tajbakhsh, "Mixed-Income Housing: Unanswered Questions."

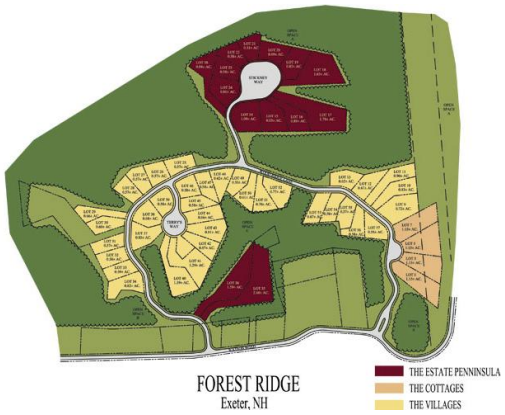
Amherst, New Hampshire

Located in the southern part of the state, just north of Nashua, Amherst has been progressive in its approach to inclusionary housing and residential density. The town adopted an incentive-based "affordable housing" provision within its zoning ordinance. By permitting variation in the dimensional requirements and offering a density bonus, the provision gives flexibility to the developer and his/her design. It also encourages a wider range of housing and developable land, as well as lowers the cost of each unit.[37] One outcome from this provision is the reduction of market rate townhouses, once priced at $350,000, now available at $170,000.[38]

Exeter, New Hampshire

The Exeter inclusionary housing ordinance has been considered to be one of the most practical and streamlined zoning techniques in the state of New Hampshire.[39] The ordinance grants a 15% density bonus in exchange for 20% of the total number of units provided as affordable. All affordable units have a deed restriction and a housing agreement that that limits the resale value of the property to no more than the purchase price plus two times the accumulated consumer price index for a period of 30 years.

Exeter's Watson Road mixed-income subdivision is an example of the ordinance's success. The subdivision consists of 86 homes. A variety of housing types were used in the development, including single-family homes, townhouses, condominiums and cottages. Twenty, two-bedroom condominiums are priced at $180,000 or higher, which is $60,000 below their market price. Eight additional units start at $300,000. The rest of the homes start at around $400,000.[40]



[37] Planning for New Hampshire's Housing Needs, 2005
[38] Innovative Land Use Planning Techniques, 2007
[39] Ibid.
[40] Ibid.

***Figure 3.3a**. Watson Woods: Forest Ridge Housing Subdivision*
Source: www.chinburgbuilders.com

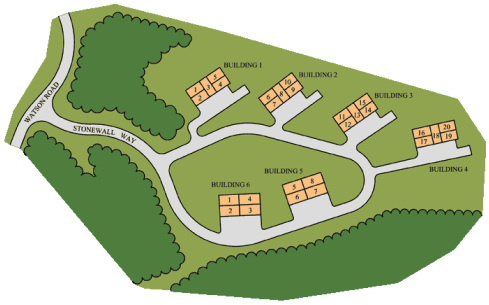


***Figure 3.3b**. Watson Woods Condominiums*
Source: www.chinburgbuilders.com

***Figure 3.3c**. Watson Woods Town Homes*
Source: re.boston.com

Arlington Heights, Illinois

Arlington Heights, Illinois can be considered somewhat of a model suburban municipality in the Chicago Metropolitan region.[41] As a northwest suburb located in proximity to Interstate 294, Arlington Heights, like many other Chicago suburbs, has experienced a dire need for work-force housing. Timber Court, a 108-unit condominium development became the first project to embody these new provisions when it was approved in 2005. A planned unit development, 21 out of 108 condominium units will be affordable. The village achieved this project by granting the developer a density bonus, changing industrially zoned land

[41] According to Joshua Ellis, Community Development Associate, Metropolitan Planning Council.

to multi-family residential, increasing allowable building height, and decreasing lot area and minimum setbacks.[42]

Community opposition came in two waves. The first centered on the developer's request to rezone the property from manufacturing to multi-family residential.[43] According to the housing planner, a tactic to obtain community support during the public hearing process was to stress the possibility of manufacturing uses for the site. Did neighbors want a factory, which was allowed by-right, or an apartment complex?[44] The property was rezoned to multi-family residential in 2005. Community opposition shifted to the actual Timber Court condominium development mainly centered on the developer's request for an increase in density, rather than affordable housing. The developer sought a variance to increase density at the site because his intentions exceeded what was allowed by-right under multi-family. The housing planner for the village cited that the developer's willingness to work closely with the community by attending public hearings and with village staff was a central reason for the project's approval. For example, tree preservation at the site became an issue. As a result, the developer incorporated these landscape features into the site plan. Northwest Community Hospital, a major area employer, voiced strong support for the project, thus corporate leadership was also cited as a reason for the projects' approval.

Site Rendering

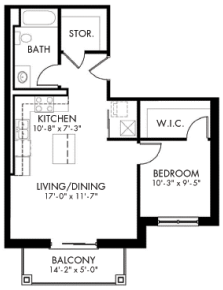
[42] "Timber Court" in *Home Grown: Local Housing Strategies in Action* by the Metropolitan Mayors Caucus, Chicago Metropolis 2020, Metropolitan Planning Council. (2006)

[43] This is the second rezoning of the property. Housing planner Nora Boyer said the property was originally zoned commercial. In the 1990s, the developer requested that it be rezoned to manufacturing, which the town granted him.

[44] Nora Boyer, Housing Planner, Village of Arlington Heights, Illinois, phone interview, (02/21/2007)

Project Rendering

Building Rendering



1 Bedroom, 784 sqft

1 Bedroom, 1183 sqft

***Figures 3.3d**. Arlington Heights, Illinois*

Aurora, Illinois

HomeTown Aurora in Aurora, Illinois is an excellent example of a characteristic traditional neighborhood development. This 1,288 unit development of single-family detached, single-family attached, and loft-style homes strive to "create a sense of community, provide housing options, and build the local tax base."[45] The developer based the plan on a design philosophy, "which emphasizes building communities that have 'mini-neighborhoods,' each with a community green space – a Living Court – surrounded by

[45] "HomeTown Aurora" in Home Grown

twelve to sixteen single-family residences."[46] The project's successful design earned it the Illinois Chapter of the American Society of Landscape Architects' 2005 Public Recognition Award. According to the development's website, HomeTown offers all the provisions typically associated with a TND: "Traffic-calmed streets, neighborhood parks, living courts, private cul-de-sacs, gazebos, white picket fences, livable front porches and big bay windows convey the warm friendly atmosphere of small-town America."[47] Integral to the site plan is the HomeTown Aurora town center. Homes in this community range in price from $150,000 to $300,000. Of the 1,288 housing units, 600 are affordable to families earning 80% below the area median income.[48]

Extensive negotiations took place in order to obtain approval for the project. The provisions of this traditional neighborhood development, such as smaller lot sizes and narrow streets, did not conform to city codes and current zoning. After its approval in 2005, HomeTown Aurora became a successful example of a development offering an alternative form of community living and providing affordable homes.

***Figure 3.3e**. Bigelow Homes, Aurora, Illinois*
Source: www.bigelowhomes.com/HomeTown_Aurora

[46] Illinois Chapter of the American Society of Landscape Architects, http://www.il-asla.org/awards_2005_public_recognition.html
[47] http://www.bigelowhomes.com/HomeTown_Aurora/
[48] "HomeTown Aurora" in Home Grown

Figures 3.3f. *Home Town, Aurora / Optional Floor Plans*
www.newhomesource.com/search/basic_search.aspx

Figures 3.3g. *Examples of Residences, Hometown Aurora, Illinois*
www.bigelowhomes.com/HomeTown_Aurora

Arlington County, Virginia

Arlington County, Virginia provides an early example of successful integration of higher density development into the community fabric. Since the 1970's, the county has concentrated its development along its two rail transit corridors. The process created a community with expanded transportation and housing choices, a strong economy, low property taxes and a diversity of livable neighborhoods. Density has given residents the opportunity to live in neighborhoods that meet their lifestyle preferences and economic means. Residents can choose to live in any number of amenity-rich neighborhoods where they are a short walk or bike ride from shopping, parks, schools and restaurants and a subway ride or drive to work and regional destinations. Although less than seven percent of the county's land area is high-density development, it generates 33 percent of the county's real estate taxes, allowing the jurisdiction to have one

of the lowest tax rates in the region. Integrating density in a concentrated area lets the county offer urban living to some and protects suburban living for others while increasing property values and maintaining community character throughout.

Arlington, VA

Mix of Urban Homes

Condos and Town Houses

Pocket Park

Images Source: Creating Great Neighborhoods: Density in Your Community. U.S. Environmental Protection Agency. www.epa.gov. Accessed 31 January 2007.

Figures 3.3h. *Arlington County, Virginia*

Newton, MA

In this west Boston suburb with a population of about 85,000, the majority of housing is priced on the upper end of the Boston suburban market. A mere 12.5 percent of land in Newton is zoned for multifamily housing use. However, the municipality has historically been proactive in taking action to increase the amount of affordable housing in the area. Newton crafted an inclusionary housing ordinance in 1977, which has provided roughly 225 units in the thirty years since its inception. The original ordinance that was passed required all developments seeking special permit to provide 10 percent of the units as affordable. In 1987, the ordinance was modified to require 25 percent affordable units for developers seeking special permits in an attempt to increase the amount of affordable housing. To increase its applicability, the city has made any development being planned with more than two units to require a special permit.[49]

Newton also has a program called the Accessory Apartment Incentive Program (AAIP) that grants funds up to $90,000 to Newton homeowners who create accessory apartments. The grant money goes towards expenses including design, permit, and construction. The main requirement for receiving these funds is that the homeowner makes the apartment they are building affordable.[50]

[49] Inclusionary Zoning, 2002
[50] http://www.ci.newton.ma.us/cdbg/general.htm

4. CONVINCING THE PUBLIC

Even though many planning officials, whether they are paid staff or volunteer planning board members, may see the importance of dealing with issues like residential density, the reality is that the community may not see it that way. Planning officials need to make the public understand that the current pattern of residential development will only continue to consume open spaces, exacerbate environmental problems, increase traffic congestion, and generate placeless subdivisions. For this reason, municipalities need practical methods to gain public approval for their proposed measures.

How have municipalities addressed public fears on housing density as they have advocated for greater residential density? Our survey of several communities across the nation and a review of published studies have shown that municipalities employed a variety of methods or actions. Some of these are essential steps to take or factors to be cognizant of such as engaging the media, involving the public in the planning process, and carefully choosing one's words. Others are methods that are very useful, but require more money, expertise, or time, such as visualization tools that allow people to see in 3-D form what a proposed scenario would be. Overall, there is not just one winning method. This section should point out how interrelated these concepts are, making them all the more practical and hopefully economically feasible.

4.1. Public Input

Residents are stakeholders in the well being of their community, and must be included in the planning process. As Douglas Porter declares in *Breaking the Development Logjam: New Strategies for Building Community Support*, "The single most important step developers can take to minimize opposition to their proposals is to reach out to the community by informing citizens about the positive consequences of proposed projects."[51] Involving the public in the planning process should be the first thing to achieve a zoning change or a project approval. On the whole, initiatives that have received extensive public input tend to fare better at town meetings or public hearings than those that do not. Methods to obtain public input usually involve charrettes, public forums, public hearings, targeted discussions, focus groups, and/or tours, further discussed later in this paper.[52]

[51] Douglas Porter, Breaking the Development Logjam, (Washington, D.C.: Urban Land Institute, 2006), iv.
[52] Douglas Porter, Breaking the Development Logjam: New Strategies for Building Community Support. (Washington, D.C.: Urban Land Institute, 2006), 37.

4.2. Key Community Members

It is imperative that the city councilors or board of selectmen as well as the mayor voice support for proposed changes to zoning or special permits. Citizens elected these officials to lead them, so it makes sense that they would pay attention to whether or not these officials endorse the proposed plan. If elected officials do not see the merits of the proposed plan, the initiative will likely result in failure.

4.3. Corporate Support

Communities need jobs in order to provide employment for residents and stabilize a municipality's tax-base. Corporate support, then, is important to obtain because the future well-being of these corporations is tied to affordable workforce housing. Corporate leadership was cited as a reason for the approval of the Timber Court condominium development in Arlington Heights. Northwest Community Hospital, a major area employer, voiced strong support for the project.[53] The Hospital recognized the need for workforce housing for their staff. This successful case demonstrates that planners need to empower the privae sector to become more involved in the process to secure affordable housing in the region. Corporations are important community stakeholders too. They need to be shown that inaction will do them a disservice in the long-term. For these reasons, the private sector should *publicly* voice support for new residential development projects.[54]

4.4. Local Media

Wide-spread distribution and regional focus makes the local newspaper a good public relations tool. It is an effective way to disseminate and promote information to the citizens of the community and thus involve them in the planning process. For this reason, it is an important way to gain the trust of the public. Promoting your agenda through the local newspaper will only help your cause. The type of people who read the newspaper are likely the people who often form the main obstacle to any type development. Therefore, disseminating information prior to a large public hearing can help allay fears and counteract misperceptions.[55] Working with the media allows planners to address issues in a less heated manner before or after the issue goes public. Newspaper coverage gives planners the chance to clearly explain why citizens of the community should support the issue at stake. If, for example, a public hearing is scheduled to gather feedback on changes to a town's zoning by-law that will encourage mixed-use development, a letter to the editor explaining why this initiative is important to citizens of the community

[53] "Arlington Heights," Home Grown

[54] "Recommendations for Attainable Workforce Housing in the Chicago Region" by *Chicago Metropolis 2020,* (Summer 2002).

[55] Porter, *Making Smart Growth Work*, 136. Michael Dear, "Understanding and overcoming the NIMBY syndrome" in the *Journal of the American Planning Association,* Summer92, Vol. 58, Issue, 3.

will aid in the project's goals. Finally, the planning department should look at media coverage as a medium to connect with the public. When reporters cover town meetings or public workshops, they usually quote members of the public in their printed story the next day, thus producing a written record of public opinion. This is important because people are apt to forgo participating in future planning events if they feel like their opinions were not considered the first time.

As the American Planning Association's Planner's Communication Guide asserts, "Media coverage doesn't just happen."[56] It is the duty of the municipality to show the newspaper as well as the public how important planning-related issues are to the community. Planners should:

- Personally invite reporters to meetings
- Supply reporters with press releases
- Share the good and the bad—Alerting the paper to a potentially controversial issue that will be broached at an upcoming meeting affirms that the planning department or board values the democratic process.

4.5. Charrettes

Charrettes are a form of a public workshop in which experts or stakeholders draft solutions to a design problem. Charrettes are usually structured around a specific issue or topic and are comprised of a very strict agenda. In the planning world, a charrette can be an effective way to initiate public involvement in the development of subdivision, neighborhood or master plans. If planned and publicized properly, a charrette will involve a diverse cross-section of a community. Charrettes are led by trained community volunteers or paid-professionals. Their structure varies depending on the issue the session hopes to address. Sometimes a larger group of designers splits up into subgroups, and then each sub-group then presents its work to the full group. Attendees usually meet for a couple of hours, brainstorming and creating proposals. Planners will then utilize these ideas and compile them into a more concise document for later review.[57] It is important to remember that even the most well-attended charrette will not always represent a true cross-section of the community. For this reason, the official running the session should take note (preferably formally) of who attended in order to gain a more complete understanding of who did not. Conducting a charrette is a good option during the planning process because it promotes joint ownership of finding solutions to problems between planners, developers and residents. The point: by giving residents a real opportunity to provide input on future plans, they will be less likely to strongly oppose them. Key points for successful charrettes include:

[56] American Planning Association, *Planner's Communication Guide*
[57] Local Open Space Planning Guide, 2004

- Meetings should be well publicized;
- Make the location and meeting times convenient for *all* to attend;
- Invite the general public;
- Invite local planning professionals as well as community leaders and business owners;
- Take note of who attends and does not attend the session;
- Have a clearly defined goal; and
- State what will be next in the planning process.

4.6. Visualization Tools

The most important component to the realization of a development plan is the understanding and acceptance of the general public. While good analysis is important and data quality is a key factor, the most critical matter is the method of communication. Yet often the average citizen becomes lost among regulation terminology, maps, analysis, and wordy comprehensive plans. However, exciting new visualization software has helped to narrow this gap of understanding. Planners, urban designers, landscape architects, and other planning professionals use computerized visualization techniques to encourage public participation. Many of the techniques they employ—digital maps, digital imaging and video, urban simulation, virtual reality, and web-based interactive maps—can be incorporated into public meetings to garner a visual understanding among residents of a community.[58] Imagine being able to experience a proposed development project by walking, driving, or even flying over it, regardless of time and season, while the project is still in its conceptual stage. By allowing the public to understand development projects or scenarios through simulation, the municipality increases the chance of obtaining public approval for a future proposal. The ability to visualize different design scenarios, then, would be a strong method for engaging and fostering local involvement in the effort to change one's zoning by-law.[59]

Three-dimensional digital modeling constructs a physical model from the base up, layer by layer. These physical models, created from three-dimensional GIS or CAD data, can display more information than a flat screen image or paper printout. With virtual reality, the viewer is projected into a computer-generated three-dimensional space that creates the illusion of reality. Virtual reality can be applied to two types of

[58] Many software packages are available to planners that allow them to produce digital maps, digital imaging and video, virtual reality, Web-based interactive maps and simulation. All of which can often be incorporated into the town's own GIS.[58] Although ArcGIS and its extensions, ArcScene, ArcGlobe and 3D Analyst are commonly used for these visualization tools, numerous other software exist that can produce the similar data. Other 3D building software includes AutoCAD, Google's SketchUp, Graphisoft's ArchiCAD, Map 3D, and Softimage, among others.

[59] Porter, Breaking the Development Logjam, 59, 65-66.

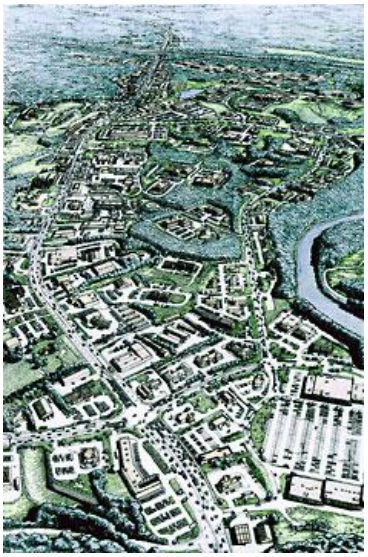
simulations—real environments, such as the interior of a building or a streetscape, and imagined environments that can incorporate proposed development changes.[60]

The challenge with these types of visualization software comes with the required technical skills. Many development companies have the software and personnel. Therefore, a municipality should require in their contract with the developer that the proposed development plan or growth scenario be visualized. That way, the municipality can use this visual toolkit at future meetings. With visualization tools, local and regional planning agencies and development organizations can create simulations that foster public participation.

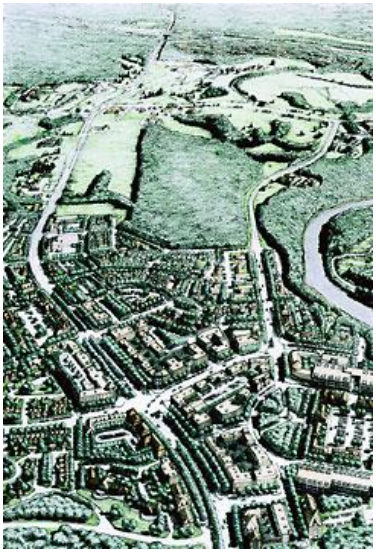
4.7. Website

Even though almost every municipality maintains a web-site, planners need to make sure that it is updated constantly. An up-to-date web-page is useful to inform your community because concerned citizens often go straight to a municipality's web-site to see when and where meetings are, what the upcoming agenda or issue is, and any other information. The municipal website can be a useful medium for showing maps and other visual aids that may have been utilized at public workshops or hearings. The following examples are comparative visualizations of what can be presented to the public.

Existing Conditions



Current Zoning Projection



Smart Growth Proposal

If the town is conducting a public education campaign on density, it may be useful to link the municipal homepage to an interactive, design scenario that shows how different design alternatives for a lot. For

[60] Three Dimensional Models Encourage Public Participation. www.esri.com. Accessed 21 February 2007.

example, the Lincoln Institute of Land Policy has a free game available on its website called "Building Blocks: A Density Game" that allows a user to create their own neighborhood by arranging houses, streets, yards and parks.[61] In addition, there are websites that have older versions of mainstream, popular games available for free download, including: Sim City, City Creator, City Life, Lin City, and Civilization. With the inclusion of multi-media learning tools and access to materials, the town's website will not only become valuable resource for the community, but will also encourage greater public involvement.

4.8. Word Choice

Proper word choice during meetings and presentations is imperative when speaking to a public about potential changes that could be taking place within their community. The way a planner presents themselves during such meetings can help or hinder any trust that they may build with the public. A careful balance between syntax, semantics and discourse styles must be found and used carefully. Effective communication will engage, comfort or even entertain the public planners are reaching out to.[62]

Avoid Loaded Words

Ineffective communication will impede the exchange of good ideas and information. The term *"affordable housing"* may not necessarily be the appropriate phrase for the plans being proposed. Often, the term has a negative connotation and is associated with poverty, crime, and other undesirable elements. "Affordable housing" refers to housing designed for 80% of the area median income. An alternative term like "workforce housing" has a much more positive connotation. This "workforce housing" includes housing to be made accessible for the firefighters, police, nurses and teachers who work in town but cannot afford to live there.

"Density," the theme of this report, has also become a negative word in the field of planning.[63] The Arlington Heights case study exemplified a typical scenario: community opposition mainly centered on the developer's request for an increase in density. Although planning officials should emphasize the benefits associated with an increase in residential density, it is important to convey these sentiments using alternative words. Consider the example of a traditional neighborhood development. Planning officials should steer clear of mentioning what is in fact the essence of this type of residential development pattern—compact, dense form—and instead reinforce how it is *traditional*. The success of neotraditional

[61] Lincoln Institute of Land Policy, "Building Blocks: A Density Game" http://www.lincolninst.edu/subcenters/VD/blockgame/index.aspx#

[62] Trenholm and Jensen, *Interpersonal Communication.* (Belmont, CA: Wadsworth Inc., 1992)

[63] Douglas Porter, Making Smart Growth Work, (Washington, D.C. : Urban Land Institute, 2002), 15-16.

residential projects demonstrates a popularity for the 'traditional.'[64] Focus attention on the development's other defining characteristics such as walkability. Let community members draw their own conclusions on the type of density traditional neighborhood development brings. The same concept goes for cluster developments. Planning officials should speak to the *value of open space preservation*, not to dense housing. Too often language skews an idea and paints a picture before the entire proposal can be explained thoroughly and defended.

Forgo Technical Lingo

The use of acronyms and industry jargon can confuse and distance the public. Speaking in a way that the public can easily understand is likely to reduce resentment and distrust. For example, planners use too many acronyms like "PUD" or "TOD" that do not translate to reporters, which, in turn, cause these concepts to lose meaning when presented to the public in the paper.[65] By speaking in layman's terms, a planner will convey the message more clearly in addition to fostering an environment where the public is comfortable asking questions about the proposed plans.

Outline the Consequences of Inaction

The Planner's Communication Guide suggests a planner remain clear about whether challenges or opportunities in the community are seen as immediate or in the distant future. Excitement generally builds if the issue is viewed as pressing. First, this requires creating a sense of urgency about an issue, then outline the consequences of inaction. For example, in the case of Medway or Sudbury, one might explain that if the town does not take some kind of action to account for the need for workforce housing, important community members such as firefighters, nurses, utility workers and others might find themselves needing to move out of town to find housing that they can afford. The bottom line: enlightened, excited publicity can motivate your community to respond favorably to current and forthcoming issues you are advocating. [66]

[64] Langdon, 107-132.

[65] John. McCarron, "Viewpoint" in *Planning*, Jun 2001, Vol. 67, Issue 6

[66] American Planning Association, "Message Basics" in *Planner's Communication Guide: Strategies, Examples, and Tools for Everyday Practice*, June 2006.

5. CONCLUSION

The lack of affordable housing in the MetroWest area of greater Boston has become a growing problem and an issue for the region's economy. As Massachusetts copes with a population that is growing outside of the urban boundary of its I-95 loop, housing concerns must be addressed beyond this region. As plans move forward and new opportunities for development are explored in communities like Sudbury and Medway, increasing the density of development will be the most important issue facing the planners, developers and the community. Communities across the nation have used various methods to spur relatively dense, affordable housing development. Thus the "best practices" compiled in this study will hopefully aid the municipalities within the I-495 region coping with a shortage of workforce housing.

This report identifies regulations that would increase residential density and methods to gain public approval for enacting such regulations. The research question driving this report was: how have suburban municipalities changed or adopted zoning regulations to allow for greater residential density? This central question was addressed through two interrelated questions. First, how have municipalities addressed public fears on housing density as they advocated for greater residential density? Second, how did the municipalities' zoning regulations allow for greater residential density?

There are many tools a municipality can use within their own by-law that can spur development of moderately priced housing. A review of nationwide exemplary cases suggests these best practices:

- Create incentives for developers
  - Density bonuses
  - Streamlined application process
  - Transfer of development rights
- Adopt creative or flexible zoning measures that allow
  - Planned unit developments
  - Cluster zoning
  - Traditional neighborhood developments
  - Transit orientated development
  - Inclusionary zoning
  - Mixed-income housing
  - Various housing types across the zoning districts

Measures designed to increase density and affordability in municipalities will have all been for naught if they fail at town meeting. For this reason, the study outlined practical methods municipalities can use to gain public approval for their proposed measures. Some of these are essential steps to take or factors to be cognizant of include:

- Engaging the media
  - Local Newspaper
  - Websites
- Involving the public in the planning process
  - Charrettes
  - Corporate support
  - Word choice
  - Visualization tools

Examples from across the country show that the implementation of development incentives, progressive zoning laws, and successful citizen participation process can help cities and towns implement relatively dense housing developments that are affordable and sustainable. As the report indicates, municipal methods to achieve greater suburban residential density and the resultant public education campaign really go hand in hand. One does not function without the other. It is the goal of the study, that with the aid of these proposed "best practices," communities of MetroWest will be able to create new methods for implementing workforce housing initiatives.

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