FORM BASED CODES
and AFFORDABLE HOUSING
(Potential as an affordable housing tool)
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Form-based Codes</td>
<td>10</td>
</tr>
<tr>
<td>Zoning and Affordable Housing</td>
<td>18</td>
</tr>
<tr>
<td>Case Studies</td>
<td>24</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>26</td>
</tr>
<tr>
<td>City of Boulder</td>
<td>27</td>
</tr>
<tr>
<td>City of Montgomery</td>
<td>28</td>
</tr>
<tr>
<td>City of Miami</td>
<td>28</td>
</tr>
<tr>
<td>City of Denver</td>
<td>29</td>
</tr>
<tr>
<td>Arlington County</td>
<td>30</td>
</tr>
<tr>
<td>Analysis</td>
<td>32</td>
</tr>
<tr>
<td>References</td>
<td>38</td>
</tr>
<tr>
<td>Appendix</td>
<td>40</td>
</tr>
</tbody>
</table>
Introduction
The topic of affordable housing in Colorado, especially along the Front Range, has become a progressively more urgent issue as housing prices have increased exponentially over the last several years. More and more Coloradoans are feeling the pressure as the high cost of living continues to go up, especially in the metropolitan region. In the Denver Metro region alone average rent prices increased by $300 during the later half of 2014 (Estabrook 2014). The ability for the region to provide affordable housing that meets current housing demands has faced several obstacles, from both local/state policies, and the housing market, affecting housing availability and affordability (Murray 2014). Jurisdictions are now looking for innovative ways of closing the gap caused by the region’s affordable housing shortage. One innovation is the use of form-based codes. Communities across the country are using form-based codes as an additional tool to encourage the development of affordable housing. This paper aims to provide reliable information to those who may be looking at form-based codes as an alternative to conventional zoning as a method of promoting affordable housing.
Housing Colorado is a statewide housing and educational networking services organization with over 3,000 members. Housing Colorado provides tools to local agencies and organizations as they look to learn or work with affordable housing. Their member library consists of resources on development, property management, finance, home ownership, service creation and professional development. Housing Colorado’s priorities are supporting policies that increase funding and tools to aid in the development of affordable housing. The organization also promotes policies that target the diverse needs of affordable housing to “stabilize communities,” helping to reduce affordable housing development barriers (Housing Colorado 2014).

The goal of this project is to act as an affordable housing resource as part of Housing Colorado’s online library, providing basic research and analysis for jurisdictions to reference when considering zoning alternatives and affordable housing tools. Tools and strategies mentioned are for use of jurisdictions that must look to other methods beyond federal and local funding. In addition, this resource provides information for identifying possible affordable housing barriers within their existing community context and introduces a range of form-based code principles that may aid in the promotion of affordable housing. This is accomplished by presenting a well-rounded summary of affordable housing incentives and policies that may or may not be promoted by form-based codes depending on a community’s current housing stock context. This project is organized into four sections: the first section focuses on conventional zoning and form-based codes; the second section presents the relationship between zoning and affordable housing; the third summarizes six case study cities and/or counties; the fourth section integrates information gained through a series of professional interviews with research from prior sections to analysis the impact form-based codes may have on affordable housing potential. The appendix contains a sample of technical language found both in inclusionary housing ordinances and form-based codes.
Affordable housing can refer to two different concepts. The first concept is the plain meaning of the words: low costs, rents, and taxes necessary to acquire housing, whether that housing is provided by the private market or through public programs. In its other meaning, Affordable Housing refers to important government programs that directly assist some residents with housing costs. (AURA, Austin City)

New Urbanism

An urban design movement which promotes walkable neighborhoods containing a range of housing and job types. It arose in the United States in the early 1980s, and has gradually influenced many aspects of real estate development, urban planning, and municipal land-use strategies.

Inclusionary Policy

Municipal and county planning policy and ordinances that require a dedicated percentage of new construction to be affordable, as defined by HUD, to people with low to moderate incomes.

Smart Growth

A method of development that supports choice and opportunity by promoting efficient and sustainable land development, incorporates redevelopment patterns that optimize prior infrastructure investments, and consumes less land that is otherwise available for agriculture, open space, natural systems, and rural lifestyles.

Density

The number of people inhabiting an urbanized area or the size of a building on a given lot/parcel. Density can be measured in various degrees and also may come with a level of misconception.

Public Realm

Includes all exterior places, linkages and built form elements that are physically and/or visually accessible regardless of ownership. These elements can include, but are not limited to, streets, pedestrian ways, bikeways, bridges, plazas, nodes, squares, transportation infrastructure, gateways, parks, waterfronts, natural features, view corridors/sheds, landmarks and building form.
Methodology

A critical phase in attempting to answer the question of whether or not form-based codes can promote affordable housing is defining what is affordable. This definition can vary from jurisdiction to jurisdiction; what is affordable in an urban neighborhood may not be in a suburban neighborhood. A major component for developing solutions to address a community’s housing issues is defining an accurate method of measuring housing need and affordability (O’Dell et al. 2009). Part of defining affordable housing is determining a community’s housing needs. Housing need is found to have three components: housing affordability, housing condition, and overcrowding (O’Dell et al. 2009). The United States Department of Housing and Urban Development (HUD), has defined affordable housing as 30% or less of a household’s average median income (AMI) dedicated to housing costs. Any percentage beyond 30% is considered “cost burdened”. This percentage is applied to a general population without much consideration to other factors within a specific community, including concentration, socio-economic factors, and the built environment. Thirty percent AMI as a benchmark may also provide issues when the “living variability across jurisdictions is taken into account” (O’Dell et al. 2009). To overcome this particular issue I interviewed several architects and developers who completed affordable housing projects in Colorado within the last ten years to determine an appropriate AMI most relevant to Colorado. In general, affordable housing is built to the 60% AMI or higher in Colorado because additional federal and state subsidies are required when trying to build for 50% AMI or below. While the importance of building for affordable housing for extremely low-income should be emphasized, based on professional interviews and research, for this project “affordable” will be considered 40%-60% AMI.

For a resource to successfully describe form-based code’s potential/effectiveness for promoting affordable housing (as defined by that jurisdiction) the concept and evolution of form-based codes should be explained. This was done by researching the three most common types of form-based codes and identifying the contexts to which they are being applied. After determining specific indicators of form-based code principles that have evolved over time, I was able to design an effective research strategy.

With little research exclusively focused on form-based codes and their ability to promote affordable housing, I created a research strategy that illustrated possible connections between form-based code principles and the realities of affordable housing development. The initial step was conducting research on three different versions of form-based codes and familiarizing myself with existing affordable housing development funding and incentives.

The second step in my methodology was identifying and categorizing documented affordable housing barriers connected with zoning practices. Next, I interviewed experts in either form-based codes and/or affordable housing, with specific experience in Colorado. After the interviewing of several professionals, I conducted six case studies of municipalities currently using form-based codes with or without additional affordable housing ordinances. I then evaluated common form-based code principles currently in practice to determine whether or not they could eliminate the identified zoning barriers or regulations preventing affordable housing development. I conclude with a focus on the relationship between form-based code principles and existing affordable housing policies.

To identify possible links between affordable housing and form-based codes I developed a list of planning and development methods that are generally accepted as affordable housing best practices. I also listed the necessary components of form-based codes and how they have been applied to affordable housing. I then compared affordable housing best practices with form-based code principles. For example, a major component found in form-based codes is a strong and truly guiding community vision. The vision is then used as a base to generate code design and regulations. If a vision supports a diversity of housing, the code should maintain that community value by incorporating policies and objectives that encourage, directly or indirectly, a diversity of housing. Additional elements and policies may go beyond the code by building upon objectives and goals guided by the vision, providing even more opportunities for affordable housing development.

A critical step in my research strategy was interviewing experts currently working in the affordable housing, design and planning fields. I conducted a total of nine interviews. Interviewees included affordable housing advocates, form-based code experts, city officials, architects, and developers. Interviews were organized by the interviewee’s area of expertise. If the interviewee was experienced in affordable housing development but did not have experience with form-based codes, I organized the interview to identify specific barriers and indicators of affordable housing development that led to the development’s success or failure. An interview matrix can be found in the Appendix.
Types of Form-based Codes:

The following research looks at three versions of form-based codes as they are applied in different communities with and without additional housing policies:

Community-wide/City-wide Form-Based Code: This type of form-based code replaces a conventional zoning code. A number of major cities, including Miami, Florida and Denver, Colorado, have completely replaced their conventional zoning codes with a form-based hybrid code.

Parallel Code (Form-Based Code as an Option to Conventional Code): Some communities have developed a form-based code as an alternative option to conventional codes. Arlington County, Virginia and King County, Washington are two such communities that have adopted this type of zoning approach.

Area Specific Form-Based Codes: Many communities have chosen to adopt area-specific form-based codes that apply to only limited areas. They can exist as a permanent code, operating much like an overlay zone. Montgomery County, Maryland uses this type of code for the Columbia Pike Neighborhood.

Affordable Housing Programs and Tools

The following is a list of affordable housing incentives and methods I referenced as I conducted my analysis:

Table 1: Affordable Housing Programs and Tools

<table>
<thead>
<tr>
<th>Programs</th>
<th>Land Use and Zoning Tools</th>
<th>Financial Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Stock Preservation</td>
<td>Affordable/Inclusionary Housing Ordinance</td>
<td>Subsides for rehabilitation</td>
</tr>
<tr>
<td>Home ownership counseling</td>
<td>Neighborhoods Special Revitalization District.</td>
<td>Affordable Housing Investment Fund</td>
</tr>
<tr>
<td>Rental assistance</td>
<td>Density Bonus, height exceptions and parking incentives</td>
<td>Transit Oriented Affordable Housing Fund (TOAH)</td>
</tr>
<tr>
<td>Vouchers</td>
<td>Fee Reductions</td>
<td>Low Income Housing Tax Credits</td>
</tr>
</tbody>
</table>
Form-Based Codes
Over the years zoning, in the conventional sense, has become more complex as development practices, trends, and public standards have evolved. This evolution has stretched and forced conventional zoning to continually amend and add new regulations and policies. The need for amendments occur as new obstacles caused by existing regulations are realized, usually a result of barriers preventing new development or uses, causing a layering effect. This layering of regulations can cause difficulties when interpreting a zoning code leading to delays in development processes and lengthy negotiations.
Background

Conventional zoning is based on the planning practice of separating uses that are found as incompatible (Towns vs. Euclid). The basic principles behind conventional codes were in response to the growth in population and the increase in gross domestic product during the industrial era (Chicago 2008). After several decades of conventional zoning and planning, researchers began to identify conventional zoning practices as a source for some city and community issues. What many researchers have realized is conventional zoning has led to a loss in efficient use of land, limiting a mix of housing types (Power 2007). Current zoning and land use patterns are products of zoning. Form-based codes look to reintroduce and preserve elements of traditional neighborhoods, which were established prior to the enacting of conventional zoning that relied on property agreements and covenants. An example of conventional zoning found as no longer applicable in certain built environment contexts, are industrial zone districts. As industries have changed and reduced in intensity, areas currently zoned general industrial now sit vacant requiring zoning changes to redevelop the site into more flexible zone districts.

Some consequences of conventional zoning have been a transition from designing for people to designing for automobiles. This transition has lead to the promotion of low-density development, focusing on which uses to prohibit and causing the separation of uses that are in close relationship with daily activities (Chicago 2008). One of the bigger arguments is conventional zoning does not allow localities to meet the goals of their comprehensive plan by encouraging development that is not aligned with what a community has designated as desirable (Chicago 2008).

Through New Urbanism and the invention of the SmartCode, form-based codes were conceived as a new method to address increasingly complicated zoning issues. The enforceable concept of governing the built environment through form regulation instead of use has been around since the Roman Empire. Principles and concepts that define form-based codes can be traced through history as having the following founding attributes: significant enforceability; intent to prescribe the public realm, often by regulating private building; and the direct or indirect production of “time-tested forms of urbanism” (Talen 2009). Form-based codes aim to provide clear guidelines on what is allowed instead of what isn’t allowed. As a result zoning regulations are simplified and attempt to undo some of the trends bought on by conventional zoning. Sprawl, auto dependence, and a reduction in physical activity have been seen as a potential consequence of unchecked conventional zoning.

Form-based codes, being implemented in their most modern form, have been around for over thirty years but only in the last decade or so has the idea of SmartCodes been seen as having a large impact on the built environment. Hundreds of codes have been passed since 2000 and are currently being used in a variety of forms. Form-based codes were originally designed to “streamline” greenfield development but found a role in regional planning by taking the place of conventional zoning (Chicago 2013). Form-based codes were brought to the forefront in 1982 when Andres Duany and Elizabeth Plater-Zyberk’s created the master-planned community of Seaside, Florida (Gwinnett County 2011). Some communities viewed with having successful implementation of form-based codes are Petaluma, Calif.; Saint Lucie County, Fla.; and Arlington County, Va.
What is a Form-based Code?

Form-based codes can be defined as “a method of regulating development to achieve a specific urban form” (Sirkowski 2007). By addressing the form and mass of buildings, and their relationship to each other and the street, form-based codes are able to regulate the physical form of the public realm. Diagrams and words are used within the code to designate and provide guidance on a community's desired form. During a code's drafting process a charrette is conducted to engage the community and receive valuable feedback to create a strong guiding community vision. As a community vision is formed it becomes an integrated part of how and what the code will regulate.

A form-based code can be further defined as a tool that encourages “the quality of development outcomes as dependent on the quality and objectives of the community plan that a code implements” (Sirkowski 2007). Key characteristics of form-based codes are their ability to preserve and transform communities by comprehensively identifying aspects of the built environment most desired by a community. Form regulations protect and promote the desired relationship between building form and the public realm (Chicago 2013). Major principles of form-based codes are founded on the idea of redefining the urban composition by realizing elements in neighborhoods that we find most desirable and encouraging development that is supportive of those elements. Form-based code principles look to create, improve, and preserve the positive elements of the public realm by focusing on context and are generally built upon the following principles (Gwinnett County 2011):

- They are prescriptive, rather than proscriptive
- Promotes the development of a balanced community
- Ensure that private development contributes to the public realm
- Vehicle miles are reduced
- Provide readability
- Codifies a community’s DNA
Components of Form-based Codes

The Regulating Plan

The regulating plan is comparable to a zoning map but is more detailed and comprehensive, defining place and the desired character of the public realm. The plan can be organized in street frontage type, transection zone, or identifying physical regions where additional standards may apply.

Building Form Standards (or Urban)

Within the code, graphics depict existing or desirable building forms. These generally include the bulk, height, coverage, and may include additional building use standards.

Public Space Standards

These standards define the relationship between infrastructure, such as streets and sidewalks known as the public realm, and building form. Standards include width and dimensions of streets and may include standards for paths, street trees and other public realm physical attributes.

Administration and Definitions

Form-based codes include a glossary of technical terms to ensure precision of the code’s application. This also ensures a predictable and streamlined review process.

Architectural Standards

Some cities or communities may choose to include architectural standards. These standards regulate building styles and materials and define ways they may be permitted in architectural elements.

Subdivision standards

Form-based subdivision standards usually focus on block and lot standards that promote walkable communities for larger developments. Walkable communities are commonly characterized by gridded street patterns and smaller lot sizes. Sometimes landscaping standards are also included in subdivision standards.

Development Steps

Step 1

Scoping: defines the area of the community to be addressed through the form-based code and the extent to which form-based codes interact with existing regulations.

Step 2

Assessing Existing Conditions: Documents and analyzes the community’s existing urban form at different scales, providing a basis for the creation of the form-based code.

Step 3

Visioning and Creating Regulations: Defines the community’s vision for its future and determines the specific regulations and procedures of the form-based code.
Form-Based Code Types

There are three versions of form-based codes that are most commonly used. The first is a comprehensive replacement of an area’s existing code. This approach identifies a specific area in which only form-based code regulations are applicable (Chicago 2013). It is specifically used to transform or preserve an area’s desired characteristics. The second type is known as hybrid zoning code. Hybrid zoning codes combine both form-based zoning districts and conventional zoning regulations. The third type is known as an optional/parallel code. This type of form-based code is independent from the existing conventional code but does not act to replace it. This kind of code is usually used as an optional code and operates as an alternative set of regulations for developers to utilize depending on the development project (Chicago 2013).

Form-based codes are organized by principle. The Chicago Handbook for Form-based codes identifies three main organizing principles: transect-based codes, building type, and street hierarchy. Transect-based codes use the concept of rural to urban transect as a method for organization. The transect concept classifies areas by built form intensity, with urban centers as the most intense and rural areas as the least. Codes organized by building type are used for infill development and defined by standards within the code that regulate configurations of buildings. The third concept is based on street grids and hierarchy to dictate the overall built environment its resulting form.

Legal Considerations

The ability for jurisdictions to regulate form was first authorized in the late 1920’s. The 1926 Standard State Zoning Enabling Act provisions “grant power” to local governments to regulate height, number of stories and size; lot coverage; yards, courts and other open spaces; density; and location and use of structures and land (Sitkowski 2007). Uses are not completely ignored in form-based codes. Building function standards based on the concept of transect form can also be added to a code. This allows some flexibility for the market to dictate which uses may be in certain buildings. Uses are also not completely allowed to be dissolved in form-based codes due to several federal statutes, which include the Fair Housing Amendments Act, the Telecommunications Act and the Religious Land use and Institutionalized Persons Act, of which are use-based (Sitkowski, 2007). Form-based codes must also satisfy and justify requirements for enacting policing powers (public health, safety, and general welfare), which were enabled under conventional zoning.
While there exists evidence that form-based codes have accomplished much of what they were designed to do, several criticisms do surround the reality of form-based application. Some criticisms include concern with the codes ability to be accepted by a community, the codes impact on property values, and in some cases, unintentionally limitation of development options. Some research has proposed that the real estate communities' perspectives on form-based zoning regulations may lead them to become “wary” in accepting form-based standards (Read 2014). An increase in property values has also been associated with the implementation of form-based codes. Increases in property values could result in eliminating the feasibility for affordable housing development.

Form-based codes are changing the way cities look at zoning and are becoming a promising alternative to conventional zoning. While conventional zoning enforces standards that can often be confusing and unpredictable, form-based codes dictate the form of the built environment, establishing and protecting a strong relationship with the public realm. Form-based codes may lead to more predictability, preservation, and flexibility for new development. When considering form-based zoning as an alternative, a community can tailor enforceable regulations to preserve and promote forms defined by community-founded goals and objectives, such as affordable housing.

<table>
<thead>
<tr>
<th>Form-based Zoning</th>
<th>Conventional Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourages mixed use, walkability, and compact development-oriented principles.</td>
<td>Auto Oriented, segregated land-use planning principles.</td>
</tr>
<tr>
<td>Based on the public realm and the built form.</td>
<td>Organized around single-use zoning.</td>
</tr>
<tr>
<td>Based on spatial organizing principles that identify and reinforce an urban hierarchy, such as the rural-to-urban transect.</td>
<td>Use is primary</td>
</tr>
<tr>
<td>Proactive community visioning</td>
<td>Reactive to individual development proposals.</td>
</tr>
<tr>
<td>Prescriptive regulations: Describing what is required, such as build-to lines and combined min/max building heights.</td>
<td>Proscriptive regulations: Regulating what is not permitted, as well as unpredictable numeric parameters, like density and FAR.</td>
</tr>
<tr>
<td>Regulates to create places</td>
<td>Regulates to create buildings</td>
</tr>
</tbody>
</table>

Table 2: Conventional and Form-based Zoning Comparison
Zoning and Affordable Housing
Zoning can have a substantial impact on housing: where it is built, what type, and what form. Several zoning regulations are credited with having significant impact on affordable housing development. Some of the major zoning barriers include limitations on density, housing types, setbacks, parking requirements and unit size. Extensive research and case studies demonstrate existing regulatory barriers to affordable housing and the impact that zoning has on the creation of those barriers.

The relationship between housing and zoning has a complex legal history, over time determining which level of governance is responsible for the enforcement of zoning and affordable housing requirements. Affordable housing was initially recognized in need of governmental intervention in 1937 with the passing of the United States Housing Act. In 1975, a New Jersey court case, Southern Burlington County NAACP v. Township of Mt. Laurel, 336 A.2d 713 (N.J. 1975) (Mt. Laurel I), found that land use controls that encourage exclusionary zoning was in violation of the Fair Housing Act. The ruling resulted in legislation requiring local governments to exercise land use controls that provided affordable housing opportunities.
A study published by HUD in 2000 found that development proposals faced with aggressive and overly complicated regulations have shown to add up to “17% to cost of rents and 51% to home values” (Walden 2012). One possible reason for more complex processes is the result of layered regulations, causing standards and processes to become overly complicated or even redundant. Complex codes, strict design guidelines, ineffective ordinances and public opposition all pose possible barriers. A study conducted by HUD in 1991 found opposition by residents and public officials to affordable housing is also a major barrier. An additional barrier to affordable housing development is the developer’s view of the housing market’s demands. Market’s that are not supportive of affordable housing forces developers to must rely on municipalities to provide guidance by being clear and managing development expectations (Powers 2007).

Over the years, as more and more communities faced complex affordable housing issues, cities and towns began to leverage the legality of zoning as one possible solution. In the 1970’s, the use of Planned Unit Developments (PUD) was an indication of municipalities accepting denser solutions to housing issues (Ritzdorf 1985). Many PUDs provided flexible zoning not provided by the surrounding zoning district. Viewed as a necessary alternative, PUDs were “seldom connected to a vision of cultural pluralism, different kinds of family life, and more diverse communities” (Ritzdorf 1985). As a result of early zoning amendments, negotiations started playing a key role in affordable housing development. Debates between local governments and developers on density and height have led to developments, though containing affordable units, failed to achieve compatibility with the surrounding neighborhood. These results have negatively impacted the probability of new affordable housing developments.

To address current housing needs several states have taken legal action, requiring local jurisdictions to create a comprehensive housing plan (eg. CA and FL). New Jersey and Connecticut have assigned cities and towns with a specific “fair share “ of providing housing in the region. California and Florida require jurisdictions to have comprehensive housing plans. Alternatively, a Massachusetts’s state law allows some developers to by-pass local zoning and land use regulations if they provide a certain percentage of affordable housing (Wendel 2012).

It should also be noted that land use laws and regulations influence the cost of housing development, both directly and indirectly (Wendel 2012). Urban development patterns and form, which are directly effected by zoning and land use regulations, may cause housing cost inflation, pricing out those most vulnerable to higher costs of living. Zoning regulations also impact where housing can be built and has the potential to exclude certain housing types from being located in suburbs or areas of job growth, often having a greater impact on lower income households (HUD 2003). In general, barriers to affordable rental housing (including high code standards, development fees and zoning/land use regulations) make housing that is unsubsidized unaffordable for low-income households (Yates & Gavin 2005).
Land Use and Zoning Strategies

In general, developers rely on jurisdictions to provide zoning incentives and subsidies to make affordable housing a reality. Often there can be a difference between an area's designated zone district and its current land use, leading to conflicting development outcomes. New development that is compatible with an area's current land uses may be subject to zoning regulations viewed as undesirable to the current character and context of the surrounding neighborhood. It is then based on negotiations between developers and jurisdictions to ensure compatibility is maintained. Through the use of zoning incentives, a developer could have an increase in opportunity to create a housing project more consistent with a neighborhood's character (more units, increase in height) that may have been difficult previously under conventional zoning.

A diverse array of zoning tools have been designed to directly impact affordable housing creation. Tools that are designed explicitly for affordable housing are commonly found in inclusionary housing ordinances. Indirect tools can be found in form-based codes. A purposeful comprehensive plan can be detailed and supportive of housing quality, affordability and type, with a connection to community “viability” and quality of life (Walden 2012).

Affordable Housing Tools

Density

Higher density can improve these opportunities by accommodating more units on a parcel or lot and adding in a reduction in costs. Communities that do not permit higher density housing (eg. multi-family housing) can limit and even prevent affordable housing opportunities. Depending on zoning requirements, limitations imposed from other plans, and site criteria defined in numerous planning documents, density bonuses can require additional planning and review processes. For density bonuses to be effective they should be feasible in a variety of circumstances, easy to use, be monitored by benchmarks and be adjustable (Casella & Meck 2009). Additionally, successful density bonus should be easily administered.

Diversity of Housing Types

Limiting the type of housing to single family units within a zone district can lead to exclusionary outcomes. Historically, many communities developed with a mix of single family and multi-family residences. A diversity of housing types can allow for mixed-income development and accommodates a range of life-styles as well.

Development and Design Standards

Zoning and development standards also have the potential to require unnecessary amenities or high cost building materials adding to development costs. Design standards and zoning requirements that are compatible with one area's existing context applied city-wide can lead to development that is not only incompatible with the surrounding area but conflicts with a community's comprehensive and long-term area plans.

Zoning codes that limit the use of manufactured homes can limit affordable housing options. HUD housing now has stricter regulations on construction and types of building materials for manufactured homes, making them a safe alternative to custom built homes.

Inclusionary Zoning

Inclusionary zoning can be mandatory or voluntary. A main principle of inclusionary zoning is integrating affordable or mix-income into market-rate developments. One type of inclusionary zoning is known as “lifestyle neutral zoning,” which allows the elimination of residential use controls on the number of units on a lot but still retains height and yard restrictions.
existing in the current zoning district (Gellen 2012).

Mixed-Use Zoning

To encourage a compatible mix of uses that are consistent with traditional zoning, towns and cities may use mixed-use zoning districts that provide developers with zoning alternatives. Mixed-used districts provide a flexibility of uses, mix of land uses, parking agreements, increased or decreased lot size, etc. Mixed-use districts can allow the integration of different housing types, increasing a community’s ability to provide a diverse range of housing options.

Incentives

Incentive zoning may be voluntary or mandatory depending on local and state housing regulations. For mandatory incentive zoning a developer is required to provide a percentage of affordable housing in a new residential development. The percentage of required affordable housing units can vary but generally start at around 10 to 25% of the total new residential units being proposed (Wandel 2012). The utilization of voluntary incentive zoning can involve parking reductions, density bonuses, and flexible zoning, to encourage developers to designate a certain percentage of new units to affordable housing. Some states require cities to offer density bonuses to developers building affordable housing or senior housing. In other states zoning incentives may be at the complete discretion of the city or community. Communities may apply zoning incentives as a floating or overlay zone.

Accessory Dwelling Units (ADU)

Accessory dwellings units (ADUs) are generally a small apartment with a kitchen and bathroom located within the same parcel as the primary dwelling. ADUs allow additional density without substantially increasing the demand on infrastructure. They increase the diversity of housing types and promote “life-cycle” housing. ADUs can either be allowed by right or by special permit based on criteria governing the size of the unit, required minimum lot size and parking standards. In Barnstable, Massachusetts the city offers an amnesty program for non-conforming existing accessory units (Wandel 2012). Other cities and towns may offer loan programs, tax incentives, streamlined permitting and reduced development fees as incentives for ADUs. By permitting the use of ADUs, a neighborhood can preserve aspects of a single-family zone district while increasing an area’s housing resources (Ritzdrof 1985).

Affordable Housing Floating Zone

An affordable housing floating zone is one method of applying incentives for affordable housing to a specific geographic area as projects are proposed or as needed. The floating zone may define separate standards that are generally found to support affordable housing, like the preservation of existing affordable housing. Arlington County, Virginia utilizes this type of zoning method.

Subdivision Zoning

A study conducted by the NAHB Research Center in 2007 found that subdivision standards can have an effect on housing prices (Casella & Meck 2009). Costs were most influenced by lot size and width, minimum floor area, setbacks, parking, and rights of way. Researchers conducting the study produced benchmarks for less to more dense lot size. When setbacks and frontage requirements are increased required infrastructure costs also increase. A study conducted in Wisconsin concluded that increasing required minimum frontage by 10 feet increased prices by 6%-8% (Walden 2012).

Cluster Zoning

Cluster zoning, a type of subdivision zoning, allows land to be subdivided into smaller lots. By concentrating the built area, costs for infrastructure and roadways are decreased. Smaller homes are also built or more diverse housing types may also be built. Cluster communities generally have trails and path systems and depending on locality, may help reduce transportation costs (Walden 2012).
Along with the most common methods of incentivizing affordable housing development, changes to existing zoning codes and regulations can have impact as well. For instance, looking at issues within a community, such as available housing stock, and considering what affordable housing options may be available within a community or built environment as it currently exists. Accessory dwelling units are usually considered an acceptable affordable housing option. If ADUs are a viable option, a community should ask the question “What regulations may be impacting the possibility of accessory dwelling units from being a housing option?” In some communities adjusting the required lot size, parking, and permitting processes can allow the use of ADUs. It is also important to realize that even with an increase in ADU creation, the potential of rent prices to become unaffordable is still a possibility. Additional ordinances that aid in the retention of affordable housing can be effective at ensuring the original purpose of the regulations is protected.

Recognizing existing constraints is the first step in removing affordable housing barriers. As barriers are removed, the availability of sites and possibility of obtaining approval for affordable housing developments, have the potential to improve (HUD 2003). Comprehensive and regional plans that are consistent with the region’s future development and growth are essential for implementing a successful housing program (Witten 2012). An affordable housing plan can be lost if its foundation is not rooted in planning principles. By ignoring these principles and approaching affordable housing issues from only one direction, other elements that impact affordable living can go unnoticed. Marsha Ritzdof in Zoning Barriers to Housing Innovation (1985) suggests that as housing compositions and life styles change, land use and zoning patterns should change as well. The development of a comprehensive plan is the first step in identifying a community’s housing demands. A comprehensive plan should define goals and objectives aimed at creating housing diversity that targets all members of a community. Communities that are able to adapt to changing demographics, and accommodate a diversity of family types and ages, can be more resilient. A comprehensive plan should be used as a supportive tool in conjunction with clear and precise zoning. When zoning connects the desires of the community with the community’s needs, housing innovation is allowed to foster.
Case Studies
To help identify common tools used to promote affordable housing and the potential impact of form-based codes, six case studies were conducted. The following cities and counties were selected based on their having a form-base code, inclusionary housing ordinance (IHO), or a combination of both. To maintain the comparison of form-based and conventional code, one city and one county were selected as having a successful inclusionary housing ordinance while implementing conventional zoning standards and regulations. Specific zoning elements within a city’s or county’s ordinances and codes were identified with to further analyzing form-based code potential.
Located just outside of Washington, D.C., Montgomery County is known for its older, more aggressive and successful inclusionary zoning ordinance, dating back to 1974. A major component of the county’s zoning ordinance is the requirement of even distribution of affordable housing units over the region: this prevents certain areas from having either a larger proportion or a minimal amount of affordable housing. Under the County’s current regulations, affordable housing units can be built by either private investors or by the County.

In the seventies, as Montgomery County transitioned from a bedroom community to an employment center, affordable housing availability became an issue. The County responded to this issue by establishing the Moderately Priced Dwelling Unit Program. This program became the County’s first mandatory housing ordinance and is targeted towards renters and first time home buyers. Legislation requires that 12.5% of a subdivision proposing 20 or more units must be affordable to households of low to moderate incomes. Using additional funding programs, the County and non-profit housing providers are allowed to purchase one-third of affordable units created in subdivisions and rent these to low-income households (Montgomery 2012). The ordinance allows up to a 22% increase in density within the zone. As of 2015, the program has created over 13,200 moderately priced dwelling units, but only 2,300 are still under any type of ordinance or zoning control.

Guided by the County’s Comprehensive Plan, created in 2011, Montgomery County’s housing policy follows a vision set forth in the plan’s housing element. An additional housing plan defines affordable housing in four separate categories; affordable housing, moderate income, low income, and middle income. To improve the availability of affordable housing, the plan outlines the following goals: preserve existing affordable units, increase the number of units, and support new housing development in transit-oriented areas (Montgomery 2012). Plan objectives are aimed at promoting the development of affordable housing in mixed-use areas that provide several transportation options. These objectives include; creating neighborhood connectivity, providing diverse housing, ensuring the new housing is economically and environmentally sustainable, and that housing developments be based on good design. The plan also emphasizes a strategy that streamlines the development process to encourage more development.

There have been documented successes and issues with Montgomery County’s inclusionary housing ordinance. While the program has been successful in developing affordable housing units, it is directly dependent and “linked to the rate and location of private development” (Montgomery 2012). Because the ordinance was created when suburban land uses were the dominantly residential land use, there have been issues with applying the ordinance to areas defined as more urban or rural.
The City of Boulder’s strict growth management policies and the area’s high desirability have had a major impact on its housing prices, threatening the ability for the City to meet its affordable housing needs. The City has had some form of an inclusionary housing ordinance since the 1980’s. In 2002, recognizing the need to create affordable housing for individuals working below the area median household income, the City of Boulder passed an aggressive mandatory inclusionary housing ordinance. The ordinance requires all new residential developments to set aside 20% of new units created as permanently affordable to households making less than 80% AMI (Business 2005).

In addition to the City of Boulder’s housing ordinance, the City’s zoning code outlines requirements for specific housing types and density incentives in the RMX-2 Zoning District (residential mixed-use 2). Within this zoning district, only lots one acre or less are allowed to have one housing type. Any lot larger than one acre is required to have up to three housing types with no less than four dwelling units if the lot is greater than five acres. Density bonuses within the RMX-2 Zoning District are categorized by a “unit per acre bonus.” To become eligible for a density bonus increase, a percentage of the units being proposed must be designated as permanently affordable. For example, if a project is proposing five to ten units per acre, then forty percent of all units that are proposed for development must be designated as permanently affordable. To further promote diverse types of affordable housing, the City created a zoning district to preserve existing mobile home parks.

Between 2000 and 2010, the City of Boulder had created almost four hundred permanently affordable units. By 2010, the City had received over 1.5 million dollars of “in-lieu” fees, which has funded an additional fifty units of affordable housing. Fees received are added to the City’s affordable housing fund, aiding in the subsidy of almost eighty affordable housing units per year (Alexandria 2010).

Developers may pay “in-leiu” fees to the City’s Affordable Housing Trust Fund for the creation of affordable housing units off-site, or they may dedicate land for affordable unit(s) (Business 2005). Due to the City’s limited infill potential, off-site affordable housing has become concentrated in north Boulder. This has caused some tensions with surrounding neighborhoods. There has been some speculation that having permanently affordable housing contributes to rising costs of market-rate housing by reducing the number of market-rate units in the City’s current housing stock. Whether or not this is case, the City of Boulder has a measurable amount of success with developing affordable housing units. It should be noted that the City of Boulder does not have a form-based code but is presently looking to a form-based pilot.
In 2006, the City of Montgomery passed an optional form-based floating overlay to the City’s Downtown District. Before the adoption of form-based regulations, the City’s limiting regulations, including setbacks, building placement, and parking requirements, made the ability to encourage appropriate redevelopment within the district almost impossible. In October of 2014, the City of Montgomery passed a city-wide form-based code (City of Montgomery Website). The parallel code provides optional zoning for new development within city limits.

Affordable housing needs are mentioned in the City’s parallel form-based code. Under the Code’s regional purpose section, affordable housing should be distributed throughout the “region to match job opportunities and reduce concentrations of poverty” (Montgomery SmartCode 2014). The City identifies the need to provide a diversity of housing types and price levels to accommodate a range of life-styles. One zone in the code requires no less than three residential housing types. Affordable housing under the City’s code is defined as “dwellings consisting of rental units or for-sale units. Both shall be economically within the mean of the equivalent of the starting salary of a local elementary school teacher” (Montgomery SmartCode 2014). Further support for affordable housing development is demonstrated in the City’s neighborhood plans by mentioning affordable housing as a comprehensive goal or principle.

Montgomery does not have an operating inclusionary housing ordinance, but instead relies on several programs that aid in the preservation and development of affordable housing. Some of these programs and funding sources include HUD funded Community Development Grants. Theses grant funds are used to assist extremely low to low-income families and individuals through housing services and facilities. Services include home ownership counseling, housing preservation programs and financial assistance. The City has received over twenty million dollars from HUD’s Home Investment Partnership Program for housing assistance programs.

In 2009, the City of Miami, Florida passed the country’s first city-wide form-based code known as Miami21. Miami21 has been as a successful form-based code and was awarded the Driehaus Award for its development process. The code operates under the transect principle to define the city’s zone districts. Within Miami21 there exists four primary zones and three use categories (restricted, limited and open). Each zone is characterized by specific building forms and uses, which provide guidelines for existing housing stock preservation or to encourage new development. Certain districts are detailed even further by height regulations. The City’s form-based code targets the pedestrian realm by including regulations to encourage building forms that activate the lower level floors, particularly ground level floors. Additional streetscape requirements allow for a wider range of uses (Frey and Kasdin 2009). Affordable and workforce housing distribution is listed as one of the code’s guiding principles.

The City of Miami operates under an Affordable Housing Special Benefit Program included in the City’s zoning ordinance. Developers looking to participate in the program are required to set aside 80% of dwelling units within a proposed development, either for multi-family or elderly, as affordable for those 60% or below and must be affordable for thirty years. A proposed development can also provide units targeted towards various income levels but must be located in a Residential Density Increase Area (City of Miami 2014).

The City also relies heavy on additional affordable housing resources provided by federal programs to maintain funding for local programs designed to provide incentives to developers proposing affordable housing units.
The City and County of Denver approved Colorado's first context-based city-wide code in 2009. The code is defined as a hybrid form-based code, combining both form-based code principles with conventional zoning standards. A supportive comprehensive plan, known as Blueprint Denver, defines neighborhood contexts, providing guidance for approvable development projects. Blueprint Denver establishes a clear definition of future neighborhood development potential, unique to each neighborhood's distinct characteristics and desired built form. Regulations in the context-based code are tailored to encourage and preserve those desired characteristics. Affordable housing and housing diversity were added as part of overall goals for the context-based code. Affordable housing within the code is enabled by additional incentives through density and parking bonuses. Any further affordable housing regulations or standards are set forth by the City's inclusionary housing ordinance. Some concerns with the City's context-based code include the possible loss of developer incentives due to the overall reduction in parking requirements and increase in density allowed by the context-based code as it is applied citywide.

In 2002, the City of Denver passed an inclusionary housing ordinance as a response to high housing costs. Between 2002 and 2008, the City experienced success with the development of 1,135 affordable housing units. The success was short lived and by 2009 only four affordable housing units were built. In 2004, the number of units decreased as development moved to large scale residential, and developers increasingly opted out by paying “in-lieu” fees. From 2010 to 2012, only five affordable housing units were added. Acknowledging the inclusionary housing ordinance's failure to provide the area's needed affordable housing units, the City amended the ordinance in 2011 (City of Denver 2014).

Under the City's new inclusionary housing ordinance, housing developments are classified as two types, “Non-Large Scale” and “Large Scale” developments. Developments classified as Large Scale are developments that enter into a contractual agreement with the City of Denver to provide “at least 200 affordable for sale housing units as part of a master plan” (City of Denver 2014). Non-Large scale developments include developments which are 30 or more units, and ten percent of which are required to be affordable. Affordable housing incentives are based on median for-sale home prices and proximity to transit. Incentive payments and “in-lieu” fees are based on housing zones, to encourage even distribution of affordable housing units throughout the City. Amendments to the ordinance are still too new to determine their level of success and it will be within the next ten years that results from the ordinance can truly be assessed.
Arlington County, Virginia developed a form-based code for the Columbia Pike Area (Columbia Pike Neighborhoods Area Plan), a 5-mile corridor that contains the majority of the county's market rate affordable housing stock (Hickey 2013). Arlington's Columbia Pikes Neighborhood Area Plan addresses the Corridor's built form and housing needs. The vision for this area encourages in-fill and redevelopment of suburban building forms (buildings surrounded by parking) in a sustainable fashion, which will accrue community benefits such as affordable housing, new street connections, and open space. The County's adopted form-based code for neighborhoods along the Columbia Pike Corridor utilizes form-based overlays to increase density and heights. The overlay also includes affordable housing requirements and incentives. Development along the Pike Corridor is required to have between 20 and 35 percent of net new units as affordable housing.

In the County's Land Use and Housing study, adopted in 2012, priorities were outlined with the intention of preserving and increasing the number of affordable housing units along the Columbia Pike Corridor, particularly located in the Pike's multi-family areas. The affordability requirement is tied to additional development potential determined at a given site. In addition, the code provides parking and height bonuses for developers volunteering to build additional affordable housing units. The Columbia Pike's comprehensive plan explicitly includes goals to expand housing options by improving supply and "preserving affordability within a higher-density development.” By 2010, there existed 6,200 rental affordable housing units and since the adoption of the plan, 626 units were added to the affordable housing inventory (Arlington Housing 2015). An additional 83 units were expected by December 2014. Arlington County utilizes the following land use, zoning, and financial incentive tools noted in both the code and housing ordinance:

The Special Affordable Housing Protection District: Outlined in the General Land Use Plan, identifies existing areas with affordable housing units that are planned for site plan projects of 3.24 floor area ratio (FAR). Any development in this area requires replacement of affordable housing bedrooms on a one to one basis.

Transfer of Development Rights: Allows site plan projects to transfer density and other development rights from one parcel or site plan to another when it preserves affordable housing. This allows transfer of density, as determined by the County Board, to where it may be more appropriate.

Bonus Density and Height Exceptions: 25% increase in density and six-story height bonus allowing the county board to approve additional height and/or density bonuses for market-rate and low or moderate income housing.

Parking Incentive: Those projects that exceed the minimum affordable housing base-level requirements qualify for parking reduction, from 1.125 spaces a unit to .825 spaces per unit.

Arlington County also maintains several maps that identify areas containing affordable housing to be preserved and areas that would benefit from redevelopment.
Conclusion

While most jurisdictions use HUD’s definition of affordable housing at 30% AMI, it is rarely the case that affordable housing developments are proposed for 30% AMI without the aid of additional funding. All six case studies defined 40% or higher AMI as the majority of affordable housing development and look to federally funding programs to provide additional resources for low-income housing development. Code language in most of the cases studies that address affordable housing directly, mention the need to distribute affordable housing equally throughout the city or region. All six cases look to increasing the amount of affordable housing by promoting diversity of housing types. The most successful inclusionary housing ordinances have detailed density bonuses. All six case studies rely on a strong regulatory element as a means of producing affordable housing. The use of zone districts or overlays to enforce inclusion is one example of applying inclusionary ordinance requirements as a zoning regulation.

Jurisdictions may feel limited in their ability to require affordable housing development and look to zoning as a reliable tool. But, as demonstrated by the case studies, the practice of zoning for affordable housing can have some limitations. It can be assumed, with consideration to context, that successful zoning practices focused on affordable housing should be accompanied by meaningful and well design comprehensive plans and inclusionary housing policies.
Analysis
Form-based codes focus on the context of the surrounding built environment and the relationship between buildings and the street, as well as public and private spaces (Chicago 2008). Form-based code's principles promote a mix of uses, focusing on the design and preservation of the “public realm,” and are able to “tailor” regulations to a specific area providing clear implementation steps for planners, designers, and developers. Form-based codes can be useful as a valuable alternative to conventional zoning. They can increase and potentially regulate factors that are critical for affordable housing development. But, it would be misguided to conclude that form-based code use alone can resolve affordable housing issues. While ordinances and codes may succeed in creating affordable housing, their ability to maintain that affordability is just as critical. Through the combination of form regulation and regionally distributed fair housing ordinances, affordable housing can foster.
How Can Form-based Codes Promote Affordable Housing?

Form-based codes are a useful tool for promoting objectives that are key for affordable housing development by implementing a collective community vision. Additionally, three elements of form-based codes can be directly connected to affordable housing development: 1) promoting designs that lead to successful housing; 2) its ability to work in tandem with housing ordinances; and 3) its ability to integrate built environment elements that are connected with sustainability, alternative modes of transportation, and community development. Additionally, form-based codes can directly impact the development of affordable housing by encouraging mixed-use and diversity in housing types, increased density, and the ability to streamline the approval process. Form-based codes also allow for an increase in flexibility of design, as long as the development's designs are compatible with the area's context. However, the type and dimensions of the building will restrict what uses may occupy the building (Walden 2012).

Form-based codes can help create and sustain a built environment that promotes walkability, quality public realm creation and preservation, and sustainability. These are all elements that help reduce the cost of living. The number largest household expense behind housing costs, are transportation costs. By requiring improved walkability, and through incorporation of public transportation, form-based code principles may reduce overall living expenses. Form-based code’s ability to promote sustainability also decreases costs in long-term operation and maintenance of the affordable housing unit.

What Should Be Used With Form-based Codes to Support Affordable Housing?

Form-based codes rely on maintenance of a detailed comprehensive plan, community vision, and strong inclusionary housing ordinance. Effective code implementation depends on the use of a supportive comprehensive housing plan. A comprehensive housing plan should be conducted along side the form-based code process. To act as an effective supporting document, a comprehensive plan should include a profile of existing housing types to identify where there may be gaps in the existing housing stock. The goals of the plan should explicitly address housing issues and set forth locally appropriate objectives. Visioning and public outreach during a comprehensive plan development process can be an important tool in educating community leaders about why fair housing is important. Along with a community vision, the code should be supported by a strong inclusionary housing ordinance that emphasizes additional regulations. Inclusionary housing ordinances create affordable housing and form-based codes protect, preserve, and integrate affordable housing, ensuring their compatibility and success. The goal of a form-based code is to guide new development and preserve existing development that is consistent with community character. The code provides regulations based on goals and objectives established by the community’s comprehensive plan with ordinances acting as additional support.
A crucial aspect of form-based codes is community engagement and input during code development. Allowing members of the community to identify characteristics that the community as a whole would like to encourage or preserve, allows citizens to have ownership in the code. This ownership may have the ability to reduce NIMBYism by increasing the predictability of development. A research review conducted by the Arizona University on 21 case studies found that affordable housing developments that were designed to fit within the existing context of the surrounding neighborhood were found to be more accepted within the community, making the overall development more successful.

Affordable Housing Design

Affordable housing should not just be about housing but should also consider aspects of everyday life. The design of affordable housing and the development's relationship with the surrounding context can impact the potential success of a particular development. The success of affordable housing can rely on development's ability to incorporate amenities, maintain connections with the public realm, and provide diverse housing options.

They promote public space development and take into account adjacency to transit. A development that is accessible and welcoming allows residents to interact with each, developing a sense of community. There have been several notable affordable housing developments, while architecturally appealing, have failed at creating a sense of community. Some design elements that have been considered as indicators for successful developments are flexibility, equitable and intuitive use of space, maintains perceptible information, minimizes hazards, can be used efficiently, and is appropriately sized (Kessler 2006).

Design element utilization is considered in varying degrees depending on the potential housing occupants needs. Design considerations for affordable housing developments include design of parking, open space, privacy, and visibility (Crites 2012). Many form-based codes can encourage certain design elements that are more supportive of a more desirable built environment. For example, by regulating the placement of parking, ensuring that frontages are protected areas, increasing the safety of the public realm. A sense of community includes walkability, access to services and amenities, and safety. Regulations that promote and preserve these elements are more likely to sustain a sense of community. Form-based codes allow a flexible use of materials and design and what can be built as long as it is compatible with the surrounding areas form or context. They also allow for the ability to develop and design for a larger diversity of housing and encourage mix-use.
Legal Considerations

There are several legal considerations to take into account when applying form-based codes. Three major considerations include; regulation feasibility, the creation of new non-conformities, and the degree of prescription (Sitkowski 2007). Ideals and principles embodied in form-based codes may be impractical, and even legally untenable, emphasizing the importance of assessing which principles can act as legally binding objectives or policy. With any new regulations there are potential unintended consequences if the code is implemented incorrectly; communities should be prepared to adjust the code as issues arise. Additionally, an aggressively prescriptive code may negatively impact the likelihood of development occurring if regulations are overly complex (Walden 2012).

A form-based code that does not successfully reflect a community’s values can limit the potential for affordable housing opportunities. With this mind, additional ordinances that target specific areas of regulation can improve the chances for form-based codes to induce affordable housing creation. Several zoning and land use cases have established parameters on exclusionary zoning, housing availability, and regional housing share. Form-based codes can embody existing land use parameters and development incentives for developers as part of municipalities existing zoning regulations, reducing the amount of time needed for a review process and incentive negotiations. For example, conflicts with family definitions, group homes and the power of the local land use controls can be lessened or even eliminated.
Housing innovation is defined as a change in supply, design, location and reuse of housing “to make it available to a larger constituency”.

Measuring the Success of Affordable Housing

While one of the most prominent challenges with affordable housing development can involve the ability for regulations to effectively create and maintain affordable housing. A commonly overlooked aspect of affordable housing is the difference between providing affordable units and meeting community needs, and providing affordable housing that is successfully accepted as a valuable addition to a community. There also exists a difference between construction of affordable housing and the ability for the units to stay affordable. Both are needed to define affordable housing developments as successful. Form-based codes can help maintain and preserve existing housing stock by protecting specific built environment characteristics contributing to affordable housing success. These characteristics include design compatibility, accessibility, and ability to maintain affordability. Zoning can either directly or indirectly impact affordable housing creation. It is the combination of the two that helps ensure creation and preservation of affordability.
References


Chicago Metropolitan Agency for Planning (CMAP) 2008. Form-Based Codes: A Step by Step Guide for Communities. CMAP. pg 7-?


Columbia Pikes Neighborhood Area Plan.


Frey, Andrew and Neisen Kasdin (2009). First Major U.S City to Adopted Form-Based Zoning.


HUD (2003). Why Not In Our Community? Removing Barriers to Affordable Housing.

An up to the Report of the advisory commission on Regulatory barriers to affordable housing U.S department of housing and urban development 2003.

Miami21


Ritzdorf, Marsha. Iowa State University. Zoning Barriers to Housing Innovation. 1985


Interviews:


JVD Architecture. March 13, 2015


Sara Reynolds. Housing Colorado.
Appendix
<table>
<thead>
<tr>
<th>Strategies</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lot Size</strong></td>
<td>Lot size averaging allows the size of individual lots within a development to vary from the zoned maximum density, provided that the average lot size in the development as a whole meets that maximum. Housing can then be developed on lots that are smaller than otherwise permitted in a zone, allowing for greater densities in some areas and more diversity throughout the development.</td>
</tr>
<tr>
<td><strong>Townhomes</strong></td>
<td>“Townhomes are attached single family units, generally sharing one or both side walls with neighboring units. Individual units may have their own small front or back yards or share a common open space. Depending on design and underlying development regulations, units may be located on separate lots or on undivided, commonly owned land. Allowing townhomes in single family zones can promote affordable housing opportunities and increased diversity in both established and new communities.</td>
</tr>
<tr>
<td><strong>Mixed-use Development</strong></td>
<td>Multifamily housing refers to a broad range of residential development types that are characterized by multiple dwelling units contained in a single building or otherwise adjoined by shared walls. Multifamily development may be constructed at different scales (e.g., low-rise, mid-rise, high-rise) depending on the character of the district and can be developed as rental or ownership housing.</td>
</tr>
<tr>
<td><strong>Cluster Development</strong></td>
<td>Cluster subdivisions or developments locate housing around green space or other amenities, allowing houses to be closer on one portion of a site to preserve natural features elsewhere. This can increase land use efficiency, lower infrastructure development and maintenance costs, lower site grading and drainage costs, and help preserve open space and natural features. Clustering is often used when a portion of a building site is constrained by sensitive or critical areas or as a rural development technique.</td>
</tr>
<tr>
<td><strong>ADUs, single family conversion</strong></td>
<td>An accessory dwelling unit (ADU) is a small, self-contained residential unit built on the same lot as an existing single family home. ADUs may be built within a primary residence or detached from the primary residence. They can be an effective way to add variety and affordable rental housing stock to existing single family neighborhoods.</td>
</tr>
<tr>
<td><strong>Multifamily Development</strong></td>
<td>Multifamily housing refers to a broad range of residential development types that are characterized by multiple dwelling units contained in a single building or otherwise adjoined by shared walls. Multifamily development may be constructed at different scales (e.g., low-rise, mid-rise, high-rise) depending on the character of the district and can be developed as rental or ownership housing.</td>
</tr>
<tr>
<td><strong>Inclusive Ordinance</strong></td>
<td>The method of exacting on or off-site dwelling units or fees in lieu of the exaction in exchange for subdivision approval of an adjudicative permit, or a variance, is a logical tool for increasing the stock of below-market rate housing within a particular development or community at large. (Witten)</td>
</tr>
<tr>
<td><strong>Preservation and Rehabilitation</strong></td>
<td>Preservation and rehabilitation efforts are aimed at retaining existing affordable housing, including both subsidized and unsubsidized housing. Programs include preservation/rehabilitation of subsidized affordable units with expiring affordability covenants, affordable housing at risk of redevelopment or conversion, and repair and maintenance (including weatherization) for affordable multi-family units and single-family homes suffering from disinvestment.</td>
</tr>
<tr>
<td>Funding/strategies/programs</td>
<td>Affordable Housing Floating Zone</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td></td>
<td>Detail standards for affordable or senior housing but may not be connected to specific geographic areas but applied when relevant, City of New Rochelle, New York, may be applied to residential zones, non-residential, and urban renewal areas</td>
</tr>
<tr>
<td></td>
<td>Density Bonuses</td>
</tr>
<tr>
<td></td>
<td>Transfer of Development Rights</td>
</tr>
<tr>
<td></td>
<td>Incentive Zoning</td>
</tr>
<tr>
<td></td>
<td>Promotion of infill</td>
</tr>
<tr>
<td></td>
<td>TOD Funding</td>
</tr>
</tbody>
</table>
Expedited approval process

Reduce development costs associated with delays, unpredictability, delay and excessive process in project review and approval can drive up the cost of housing. Regulatory complexity or rigidity can also restrict a jurisdiction’s ability to attract certain types of desired development or may discourage developers from building in a community. To ensure that local regulations are supportive of adopted development and housing goals, jurisdictions should consider reviewing and streamlining their permitting processes and development regulations to eliminate unnecessary costs and barriers and facilitate development of affordable or innovative housing types.

Reduction in infrastructure requirements (parking), subsidies

Reduces infrastructure costs, Reduced parking requirements (particularly for properties in a developed area, such as a downtown or a village center, or for projects near transit).

---

Table Four: Interview Matrix

<table>
<thead>
<tr>
<th>Feasibility</th>
<th>Affordable Housing</th>
<th>Developers</th>
<th>Architects</th>
<th>Planners/City Officials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Form-base codes may reduce effectiveness of affordable housing incentives.</td>
<td>Compatibility with surrounding neighborhood, reducing NIMBYism</td>
<td>Flexibility in design, development of the public realm</td>
<td>Form-based codes can make development more affordable.</td>
</tr>
<tr>
<td>Regulations</td>
<td>Need more regulations that focus on affordable housing.</td>
<td>Flexibility with density and parking.</td>
<td>Need a easy to understand code</td>
<td>Parking and density applied equally to all zoning districts has negative and positive impacts.</td>
</tr>
<tr>
<td></td>
<td>There exists limited policies addressing affordable housing at the zoning enforcement level.</td>
<td>Predictability in development process.</td>
<td>Form-based codes can help create a well-rounded development.</td>
<td>Form-based codes can be easier to implement.</td>
</tr>
<tr>
<td>Development Process</td>
<td>Provides opportunity for housing negotiations.</td>
<td>Conventional zoning process can be time and cost consuming.</td>
<td>Form-based codes seem to streamline the development process.</td>
<td>Form-based codes provide a clear regulations for developers and planners.</td>
</tr>
<tr>
<td>Affordable Housing Barriers</td>
<td>Zoning and land use regulations can pose barriers.</td>
<td>Extensive zoning requirements that add costs to the development process.</td>
<td>Strict zoning and design standards can limit the success of a development.</td>
<td>The housing market can create additional obstacles.</td>
</tr>
<tr>
<td></td>
<td>Form-based codes may limit factors of negotiation.</td>
<td></td>
<td></td>
<td>More funding and subsidies are needed to make affordable housing a reality.</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>Type of Zoning Code</strong></td>
<td>Conventional Zoning</td>
<td>Regional/Optional Form-Based</td>
<td>City-wide Parallel Form-based Code and mandatory form-based for Downtown</td>
<td>City-wide hybrid form-based code, context based</td>
</tr>
<tr>
<td><strong>Housing Ordinance</strong></td>
<td>(Mandatory) 2002</td>
<td>First created in 1974</td>
<td>None, Affordable Housing Fund</td>
<td>2002 (amended in 2010)</td>
</tr>
<tr>
<td><strong>Defining Affordable</strong></td>
<td>80% to 100% AMI</td>
<td>40%-80% AMI</td>
<td>60% AMI</td>
<td>50%-95% for high-costs developments and 50%-80% AMI for standard-costs developments</td>
</tr>
<tr>
<td><strong>Regulations</strong></td>
<td>25% of all housing units be permanently affordable</td>
<td>12.5% of development of 20 or more units is required to be affordable.</td>
<td>None</td>
<td>Master plan requirements: (200 units), 30 or more units must have 10% affordable</td>
</tr>
<tr>
<td><strong>Incentives/developer options</strong></td>
<td>&quot;in-lieu&quot;, on-site and off-site unit development, density and height bonuses.</td>
<td>22% increase in density determined by number of affordable housing units proposed.</td>
<td>Local and Federal Funding Programs, Density Bonus Program</td>
<td>Density and parking bonuses, and pay &quot;in lieu.&quot;</td>
</tr>
<tr>
<td><strong>Units created</strong></td>
<td>Between 2000-2010, 380 units, a total of 1,57 rental units and 822 ownership units.</td>
<td>The ordinance has created 10,300 units, only 400 currently under the ordinance</td>
<td>Undetermined</td>
<td>Created units from amended ordinance is still to be determined</td>
</tr>
<tr>
<td><strong>Affordable Housing in Code</strong></td>
<td>Zone districts have been created for mobile homes and affordable housing.</td>
<td>Lists a required percentage of units</td>
<td>Diversity of housing types regulated by zone districts.</td>
<td>Density and parking bonuses based on affordable units proposed.</td>
</tr>
<tr>
<td>City of Miami, Fl (2010)</td>
<td>Arlington County, VA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory city-wide Smart-Code</td>
<td>Columbia Pike Neighborhood, Neighborhood form-based code</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affordable Housing Special Benefit Program</td>
<td>Arlington County Zoning Ordinance 2005 (amended 2013)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80% AMI is considered low income and 120% is considered moderate income.</td>
<td>40%-80% of AMI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must be affordable for 30 years. 80% of units proposed are required to be built to 60% and below. Also require mixed income developments.</td>
<td>20% to 30% of new net housing, affordability for 60 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash contributions to the city's Affordable Housing Fund, increased FLR, height and density.</td>
<td>Special Affordable Housing Protection District, Transfer Development Rights, Density/height exceptions, and parking incentives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undetermined</td>
<td>6,622 Committed Affordable Housing Units (14% of the county's housing stock)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For each sq. ft. of affordable housing created on-site, the developer is allowed two sq. ft. up to the bonus height and density. Off site is allowed equivalent sq. footage.</td>
<td>Incentives are listed direct in the form-based code.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>