An Evaluation of Form-Based Zoning and its Potential to Stimulate Economic Development and Reduce Housing Costs

Research Report Prepared for the Crosland Foundation and the Piedmont Public Policy Institute

David Walters
Professor Emeritus of Architecture and Urban Design
University of North Carolina - Charlotte

&

Dustin Read
Assistant Professor of Real Estate and Property Management
Virginia Tech College of Liberal Arts and Human Sciences

2014

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Piedmont Public Policy Institute

Though the concept of Form-Based Zoning has been around for decades, its practice can vary widely from one community to the next, as can its implications for housing costs, market rents, and economic development. Real estate developers are often wary of the approach, which in some municipalities produces a costly and time-consuming process through which elected officials, planners and neighbors dictate every detail of a building project, from the placement of windows and doors to the color of bricks and trim.

This wariness is often well deserved. If a Form-Based Code is written and implemented in a manner that allows politicians and other stakeholders to micro-manage every element of a development proposal, it can quickly become a barrier to the efficient entry of real estate capital into a local market. Developers and property investors will instead gravitate to neighboring or competing communities where a less rigid regulatory environment allows them to deliver the product demanded by the marketplace more quickly, with less risk and at a lower overall cost.

But if implemented correctly, Form-Based Zoning can sometimes function as a welcome alternative to the more traditional and widely used Euclidian codes, which segregate land uses and require developers to navigate a lengthy and complex entitlement process. By prescribing clear and reliable design standards that can be approved administratively, a Form-Based Code or Overlay District can often serve to reduce the time required for a developer to obtain construction permits, resulting in projects that integrate effectively with the character of the existing community, and deliver housing and commercial space at a lower cost.

But this approach is not followed everywhere. What one jurisdiction considers Form-Based Zoning may differ significantly from the methodology adopted by another. For that reason, it is important to start with a universally accepted definition of what Form-Based Code actually is, and what it is intended to achieve.

As the following analysis explains, the true intent of the form-based approach is to reorient the planning process to regulate only the *public realm* – the scale and mass of the building, its setbacks, height, and integration with the pedestrian and automobile environments. A form-based code is NOT intended to regulate the *private realm*, which would be its use, aesthetics, colors, design, internal components, and so on.

As you will see in the paper that follows, the most effective Form-Based Zoning ordinances are those that offer real estate developers with by-right flexibility and streamlined entitlement approvals in exchange for compliance with clearly delineated design principles that focus exclusively on the building's interaction with the public realm. The key to this approach is in distinguishing between form and aesthetics in building design. Planners should focus on building

elements that are easily defined, such as height, mass, setbacks, and the placement of driveways and entrances, rather than on subjective elements like architectural style, color and design.

If a form-based ordinance clearly specifies what is required of the developer, and those specifications can be consistently relied upon for streamlined entitlements, the zoning code can serve as a simulative tool for economic development by reducing project approval times and the associated risk premium priced into a real estate project. By attracting developers and capital to a community, the ordinance will in turn increase the supply of new housing and commercial space, helping to moderate the natural escalation in rents that occurs in a growing community.

In addition to reducing entitlement risk and approval time, a well-written form-based zoning code also gives developers significant latitude in deciding which uses to incorporate into a specific project. This is particularly beneficial for communities that seek to promote the increased construction of mixed-use developments that integrate housing, retail and office components. By allowing project developers to easily switch out one type of use for another, a form-based ordinance all but eliminates the need to obtain a zoning or site plan amendment should the need arise to replace one type of tenant with another.

However, a form-based code that requires compliance with extensive, predetermined design standards *along with* a lengthy process of public review and approval, will instead serve to deter economic development by driving quality development to neighboring jurisdictions with a more simplified entitlement process. Following a basic law of economics, when the supply of new apartments, townhomes and single-family homes in a community goes down as a result of costly entitlements, the price of housing will consequently rise more quickly.

It is therefore critical that, before drafting a Form-Based Zoning ordinance, all affected stakeholders in a community understand how this approach can serve to either *stimulate* or *discourage* the construction of quality development, depending on how it is implemented. It is also important to consider the resulting impact that the new code may have on local housing costs and commercial rents by either streamlining the entitlement process, or conversely making it riskier and more complicated.

The Board of the Piedmont Public Policy Institute is grateful to David Walters, Dr. Dustin Read, and the real estate students at the MSRE program at the University of North Carolina – Charlotte for producing this important analysis. We hope it will serve as a guide for elected officials, municipal planners, real estate developers and neighborhood stakeholders who are considering the implementation of a Form-Based zoning ordinance for the purposes of encouraging economic development and increasing the supply of affordable housing in their community.

Collin Brown
Chairman
Piedmont Public Policy Institute

Section 1: Introduction

The Crosland Foundation and the Piedmont Public Policy Institute commissioned the research presented in this white paper to provide policymakers, real estate developers and other interested parties with a better understanding of form-based zoning. This progressive type of zoning encourages pedestrian-oriented, mixed-use development by focusing on the external form of buildings rather than the type of activities allowed therein. Key features of this regulatory tool are considered throughout the analysis, as are the potential advantages and disadvantages for municipalities interested in using it to encourage sustainable economic growth and housing affordability throughout their jurisdictions. The results suggest form-based zoning can stimulate or stifle real estate development depending upon the way in which it is implemented at the local level. Consideration must therefore be given to the structure of a form-based code and the political environment where it will be put in place when evaluating this type of regulation.

Evidence from across the United States indicates that form-based codes are most effective when they offer real estate developers by-right flexibility in allowable land uses within their projects in exchange for complying with time-tested principles of good urban design. For the purposes of this paper, "good urban design" simply refers to the use of established design practices proven to encourage desirable interactions between privately-owned buildings and the public realm. It does not refer to the imposition of controls on the aesthetic features of buildings such as color palettes or construction materials, which should remain at the developer's discretion. This fine, albeit important, distinction between "design" and "aesthetics" will be discussed throughout the paper to address common misconceptions about the principles of form-based zoning. When these regulations are well crafted they allow real estate developers to respond quickly to market forces, while creating a manageable balance between private rights and public responsibilities.

In addition to the benefits associated with flexibility, thoughtfully designed form-based codes are capable of kick-starting development activity by reducing entitlement risk and the amount of uncertainty surrounding a municipality's desires for future growth. These factors serve to attract reputable real estate developers to a community in search of a fair and predictable regulatory environment. At the same time, poorly structured form-based codes may act as a deterrent to real estate development when they amplify entitlement risk as a result of ad hoc policymaking. Developers are likely to respond to such risk by increasing return requirements or reducing the supply of new product, both of which tend to slow economic growth and impinge upon housing affordability throughout a market.

The aforementioned issues are considered in this paper as follows. Section 2 provides an overview of the key features of form-based codes and examples of their use in practice. Section 3 discusses the distinction between this type of land use regulation and aesthetic requirements commonly adopted by municipal governments. Section 4 reviews the fundamental design principles upon which form-based codes are built, while Section 5 explores what can go wrong when municipalities stray from these principles. Two case studies are presented in Section 6 to examine the potential benefits real estate developers can derive from form-based codes when they are implemented in a constructive manner. Section 7 offers concluding remarks and a series of best practices that can be followed by municipalities drafting form-based zoning ordinances.

Section 2: Key Features of Form-Based Codes

The scope and purpose of form-based codes varies greatly across jurisdictions, but all modern, effective regulations of this type contain two unifying principles:

1. They trade greater flexibility of uses, sizes and development mix for stricter controls on the form and layout of buildings and public spaces; that is, those elements that *define the character of a neighborhood or district*; and

2. They provide *by-right* approvals for development proposals that follow the specific requirements of the code. This predictability makes it easier for developers to meet municipal expectations.

Form-based zoning has a long history across different cultures, locations and time periods, but its recent resurgence in the United States has been driven by three primary motivations:

1. Desire on the part of property owners and real estate developers for a predictable set of regulations that will reduce the risk inherent in the entitlement of new projects.

2. Desire on the part of communities for new development that blends architecturally with existing and desired patterns.

3. Desire on the part of by municipalities to rectify many perceived weaknesses in conventional, use-based zoning practices.

From these starting points, form-based codes have been adopted to influence the physical arrangement of urban and suburban areas in ways that are:

1. More efficient in terms of the cost of providing public services.

2. More resilient to future changes in eternal factors such as energy costs.

3. More responsive to changing market conditions and shifting demographics.

Form-based codes achieve these goals by providing real estate developers with the unilateral ability to alter the size, use and product mix of a project so long as they comply with specific controls on design elements of buildings that create the *"public realm."* This term is best defined as the network of public streets, squares, plazas, alleys, parks and so forth that together make up the shared spatial infrastructure of a community. Both the public and private sectors can derive substantial benefits from this type of zoning when managed appropriately. Real estate developers are provided with the opportunity to quickly respond to market forces without the expense of a rezoning, while municipal governments retain the ability to control how these projects influence the scale, pattern, connectivity, safety and efficiency of public spaces used by all citizens. These outcomes are often preferable to those derived from conventional zoning ordinances that discourage mixed-use development and pay little attention to the design quality of public areas.

The shift towards form-based zoning in the United States can largely be explained by problems, both real and perceived, with conventional zoning practices. Contemporary planning scholar Emily Talen[1] points out that use-based zoning promotes random and disorganized patterns of segregated land use. Phoenix, AZ is put forth as an example, where there are 264 zones, including a wide variety of overlaid permutations and hundreds of amendments. Zoning ordinances in most American cities evince similar characteristics, with many imposing additional aesthetic requirements that add to their complexity. British planning specialist John Punter notes that these practices result in a regulatory environment where "only a handful of professionals (and highly skilled lawyers) can understand" the requirements of the code.[2]

Complexities and inefficiencies in use-based zoning ordinances administered by local governments are perpetuated by two related protocols:

1. The desire of municipalities to define, control and separate every possible type of use by their own zoning notation; and

2. The need for developers to go through a cumbersome and expensive rezoning process should a proposed project deviate from the requirements of the zoning ordinance in even the slightest manner.

Taken together, these two conditions contribute to segregated land use patterns that bear little relationship to adopted community plans or common-sense relationships between density, market forces and transportation patterns. These problems are exacerbated by the fact that most conventional zoning ordinances rigidly separate land uses simply because they are different, rather than based on any real or perceived incompatibilities. This obsolete approach to land development, which dates from the late nineteenth century when pollution in industrial cities was at its peak, can today present a tangible hardship to property owners and developers looking for market flexibility throughout the development process. It can also, ironically, thwart municipal policies aimed at fostering more compact, pedestrian-friendly and mixed-use developments that are increasingly favored by both consumers and policymakers.

Form-based codes offer a means of overcoming the shortcomings of conventional zoning. Instead of attempting to control the minutiae of a development's use, or mandating that different uses be kept away from each other, form-based codes *regard a flexible mixing of uses as a good thing* to be encouraged. Moreover, whereas use-based zoning has little or nothing to say about urban design quality, form-based codes go right to the heart of the matter. They focus extensively on the design of the "public realm" – the spaces between buildings, and, importantly, the frontages of the buildings that define those spaces. This emphasis on the "public good" of development projects is thus balanced by much greater flexibility of use and development mix for

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1 See "Zoning For and Against Sprawl: The Case for Form-Based Codes," by Emily Talen, *Journal of Urban Design*, April, 2013., p. 176.

2 Punter, J. (1999). Design Guidelines in American Cities: A Review of Design Policies and Guidelines in Five West Coast American Cities. Liverpool: Liverpool University Press. p.141

the private sector. This provides developers with the ability to respond more quickly to changing market conditions with less time and money expended on costly rezoning.

Both historic and contemporary examples of form-based zoning illustrate the potential advantages of this type of land use regulation. When aristocratic landowners developed their holdings west of the medieval city of London in the 19th Century, in what are now Bloomsbury and Belgravia, codes were created to create a standard type of development suitable for the times -- residential squares lined with impressive town houses linked together with a series of connected major and minor streets. These codes, here in the form of restrictive covenants, covered many of the details of building scale and external appearance, enforcing relative uniformity of urban character. By contrast, the backs of the properties were far more flexible, and the interiors of the dwellings were often individually customized to owners' requirements. These internal spaces and rear façades have seen many generations of changes of use and a myriad of different plan arrangements, but with almost no changes to the public front of the buildings that frame the public spaces of the streets and squares. (See Fig. 1.) This example of codes that protect and enhance the quality of the public realm, while providing significant flexibility in internal uses and spatial arrangement to property owners and developers, is key to contemporary issues in form-based coding.

Fig. 1. Housing at Ecclestone Square, Belgravia, London, UK.

19th century developer housing was laid out according to form-based criteria. The organization of public space and the architectural character of the building fronts were determined by the code. The rear of the buildings, facing private back yards was unregulated, and over the past 170 years, the internal functions and spatial layout has changed multiple times without affecting the building frontage of the urban relationships.

This illustrates a major premise of form-based codes -- that uses change much faster than form, and regulations should permit those changes of use to occur easily while maintaining the design integrity of the public realm.

Two contemporary examples of developments produced under a form-based code in North Carolina are Rosedale and Birkdale Village, both in the Town of Huntersville. The municipality rewrote its zoning ordinance in the mid-1990s on form-based concepts.[3] This new code stated one over-arching principle: buildings (with only a few exceptions) should front onto public streets. This meant that, for example, grocery stores could no longer be set back behind large surface parking lots. In the context of the multi-use development at Rosedale, the Harris Teeter grocery store and later the adjacent Bi-Lo grocery store, both front a town street lined with smaller stores and on-street parking. (See Fig. 2). Across the street in both cases, sits a surface parking lot that serves the grocer and adjacent shops, sized for future redevelopment into a deck lined by shops

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3 In the spirit of full disclosure, one of the authors of this paper was a co-author of the original Huntersville form-based ordinance in 1996.

and apartments if the market ever grows to that level of intensity. Streets, convenient to car drivers and pedestrians alike, connect to form a coherent network linking the different uses of shops, offices, and housing. The design innovation in this case was simply for the conventional fire lane that exists in every grocery store parking lot to become a public street with convenient parking as part of a connected street network.

Fig. 2. Rosedale multi-use development, Huntersville, N.C. Shops, offices and housing line a network of public streets. The Harris Teeter grocery store is front and center in the photograph, with a town street between the store and the parking lot.

Birkdale Village, by contrast, is a *mixed-use* development with different uses vertically integrated within the same structures – offices over shops or housing over shops. Here the developers and their designers took advantage of the concepts of the form-based code to create one of the most innovative and successful developments of its type – the urban village – that has now become a standard across the USA. (See Fig. 3). Birkdale Village is denser and more complex than Rosedale, and illustrates a very useful collaborative attitude between developers and the municipality. In one instance, where urban designers devised a clever layout for a small courtyard that did not meet the precise wording of the code, the Town created a text amendment to allow for this design element. This provision later became a standard element of the form-based code, illustrating how municipalities can learn from experience to make this type of land use regulation more manageable for real estate developers when interests align.

Although Birkdale Village offers an excellent example of the type of development form-based codes can encourage, the regulatory process itself was somewhat more complex, with ongoing negotiations occurring between the municipality and the developer. Effective form-based codes eliminate this type of ad hoc policymaking by providing by-right entitlements for projects that conform to the requirements of the code.

Fig. 3. Birkdale Village, Huntersville, N.C.

The buildings define "Main Street," as required by the form-based code. Offices over retail (in the distance) merge seamlessly with housing over retail to create a unified design for the public space by means of well-organized building frontages.

The design of public space -- the "public realm" - is a major focus of form-based codes. As a trade-off, uses can be mixed and matched easily to suit market priorities.

It is important to note that the form-based code requirements for Rosedale and Birkdale *in no way mandated the aesthetic appearance of the buildings*. These were derived from conversations between the developers and their designers. In Birkdale, for example, the developer asked his architects to travel to New England to study the vernacular aesthetics of New England villages. Based on these studies, the designers created an aesthetic that the developer believed established a distinct brand and market differentiator for the development. These decisions were purely market-based and had nothing to do with any code provisions. This point leads to the next section that clarifies some misconceptions about form-based codes and their scope.

Section 3: Common Misconceptions

One common, albeit erroneous, objection to true form-based zoning can be summarized as follows: "The government can't tell me what color to paint my house!"

This statement is indicative of the belief that form-based codes dictate the aesthetics of development projects. On the contrary, conventional zoning practices are more apt to impose aesthetic controls of this nature through overlapping regulations that are sometimes confusing and contradictory. Form-based zoning aims to clear away this clutter by setting out clear and straightforward design principles for building massing, layout and overall site planning. Generally these principles are based on sound concepts of urban design relative to the particular condition of a site, be it urban, suburban or rural in character. The emphasis is always on regulating the design of only those parts of the development that create the public realm – the spaces used by all residents and citizens.

The key issue here is a fine distinction between *design* and *aesthetics* as it relates to the built environment. One of the founding premises of all properly constructed form-based codes is that they are "style neutral," that is, they do not concern themselves with the detailed aesthetics of buildings. Buildings can be built in a variety of styles; they can look modern, classical, arts and crafts, Victorian: That is not the concern of the code. What is of concern is the *design* of the buildings and their site planning.

Form-based codes set out to answer questions such as:

1. What is the appropriate size and massing of buildings relative to the surrounding pattern of development?

2. Does the front façade form a good entrance and transition from the public space of the street? How well is the public space of the street designed?

3. Is the street a good "multi-model" environment? Does it work as a safe and attractive place for pedestrians, cyclists, cars, buses, and other kinds of transit?

4. Does the street design facilitate effective retail operation, commercial activity and convenient residential access as appropriate to each location?

5. How effectively is the car parking screened from view to create a more attractive and inviting environment for pedestrians?

6. Does the street layout form a connected network for efficient, cost-effective delivery of public services?

7. Are there parks or recreation spaces in appropriate locations to serve both residents and employees working in the area?

This is by no means a complete list of the factors taken into consideration by competent developers, urban designers and site planners, but it is indicative of the design issues handled by form-based codes. All the examples have to do with shaping an attractive set of public spaces as the setting for public and private activities. Conventional zoning has always dictated the size and massing of buildings. A good, publically administered form-based code simply goes a bit further and requires, for example, that a building be placed in a particular location on a site that allows it to contribute to the formation and maintenance of coherent public spaces, such as lining the public street and screening the parking lot. It will also require that building entrances operate off the public street, and that ground floor walls along a sidewalk have plentiful doors and windows for safe access and visibility. These are legitimate matters of public health, safety and welfare enshrined within principles of good urban design.

Once again, it is important to note that effective form-based codes promote good urban design without dictating aesthetics, such as the style and color of buildings or the materials from which they are constructed (See Fig. 4). These issues remain private matters. Developers are, however, provided with a more flexible menu of building uses, coupled with by-right approvals for projects that comply with mandatory urban design standards.

Fig. 4. Illustrative development plan for a mixed-use development utilizing a form-based code.

Note the mix of development types, ranging from grocery store (top right) and outparcels (arranged so they line the streets and screen parking lots), and a series of smaller mixed-use buildings that line the streets, screen parking lots and front onto a public park which contains new civic buildings (center left). These buildings fronting the streets may contain offices, retail, housing or any mixture of the above to suit the market.

A multiplex cinema terminates a mixed-use "main street" (bottom right) as another commercial anchor to the project. Town homes (darker yellow) and single family lots (lighter yellow) are located close by, along streets that form a connected network for walking, cycling and driving.

Section 4: Theoretical Foundation and Practical Application

Successful form-based codes strike an appropriate balance between private property rights and public responsibilities. Real estate developers are interested in working in environments with fair and reliable administrative processes that provide them with flexibility to respond to market forces; whereas municipalities seek to provide safe, attractive and functional public spaces with cost effective infrastructure. This section considers how different types of form-based codes are used in practice to help municipal governments manage these competing interests.

Since form-based codes focus on "form", or more accurately the "urban character" of a neighborhood, it is important to summarize the urban design concept that serves as a foundation for almost all land use regulations of this type. It is called the Transect; a method of urban and environmental analysis that addresses all scales of planning and development, from the overall region down to the individual building. The most well-known example of this method in the United States is the SmartCode, which offers an overall template intended for local calibration to suit any scale or setting. (See Fig. 5).
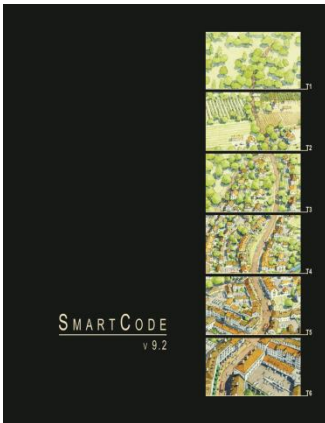
Fig. 5. SmartCode Version 9.2 Cover Illustration

The cover drawing captures the basic concept of a range of urban conditions, from rural, through suburban to urban as the basis for development regulations.

The idea of zoning by urban character, rather than by uses within buildings creates the founding premise from which regulations are developed that highlight the quality of public space and building frontages. Mixed uses within buildings and developments are written into the code and allowed by-right.

The Transect draws a cross-section through an imaginary landscape, identifying six types of character zones, from T1 (rural preserve) through ascending scales of suburban and urban intensity leading to the densest area T6 (urban core) (See Fig. 6).[4] A seventh classification, an "assigned" or "specialized district," similar to conventional planning's "special use district," exists for uses such as hospital complexes, airports, landfills and the like that do not fit easily into urban or suburban zones, or which, because of noxious by-products such as dust and noise, need to be kept away from residential areas. This hierarchical scale enables developers, designers, planners and the public to see the various kinds of rural and urban landscapes as a continuum that balances the development intensity, scale and environmental factors of particular zones.

The Transect sets out urban design principles suitable to the scale and character of each area, and allows appropriate flexibility of uses within buildings constructed in that zone. This simplified spectrum enables developers, designers and planners to work out where different scales of development fit best in terms of their *character and qualities as places* rather than according to their uses. All parties can focus on creating the right kind of character for each development, knowing that in many cases, a variety of uses can be mixed by right, with the inclusivity of uses increasing as the zones become more urban (T-4, T-5 and T-6). (See Figs. 6 and 7).
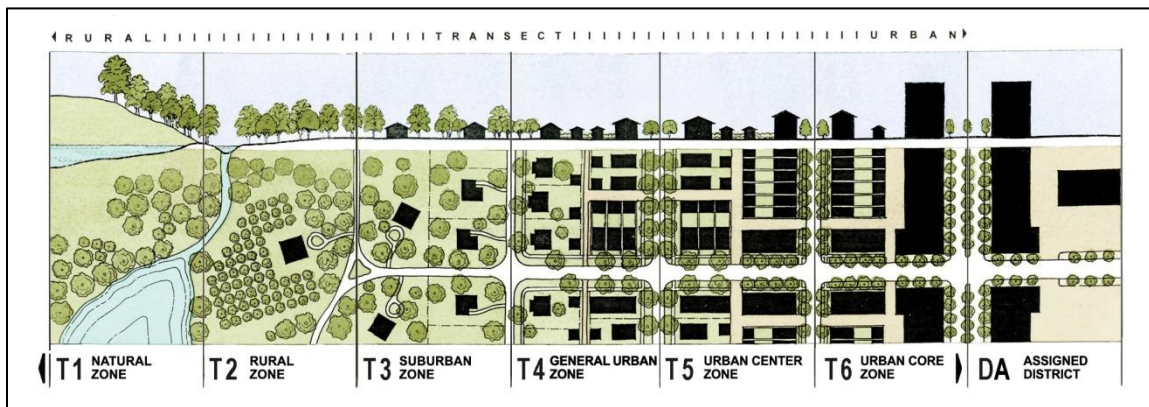
Fig. 6. The Transect Conceptual Diagram

In a "sliding scale" from rural to urban, the Transect defines a variety of environments with different characters, defined by building type, scale and density and by types of open space – parks, plazas and different street conditions. These physical characteristics – not different uses -- are the criteria that establish the different zoning classifications.

4 Duany Plater-Zyberk & Co. (2002). *The Lexicon of the New Urbanism, Version 3.2.* Miami, FL.: DPZ.
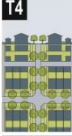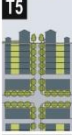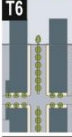
Fig. 7. Transect Zone Descriptions

Mixed uses are permitted by right as follows:

T-3 Suburban Zone: Home occupations and outbuildings ("Granny flats" etc.)Buildings 1-2 story

T-4 General Urban Zone: Wide range of different types of housing – single-family, townhomes and small apartment buildings. Scattered commercial activities permitted by right. Buildings 2-3 story

T-5 Urban Center: Offices, shops, townhomes, larger apartment and condo buildings and civic buildings are permitted by right. Buildings 3-5 story

T-6 Urban Core: The greatest variety of uses permitted by right with continuous building frontages of high-density development. Also features major entertainment, civic and cultural buildings. Buildings 4 stories and higher (occasional smaller buildings allowed)

Appropriate types of public space and street configuration are also noted. These different types of space have their own set of designed options and dimensions in separate tables to suit different locations.

The ability to calibrate place-specific form-based codes from the generic conditions noted in the "universal" SmartCode is a vital feature of the Transect. For example, T-6 equates to Uptown and SouthPark in Charlotte, NC, whereas T-6 is a modestly scaled town center in Davidson, NC. It is all a question of the scale and hierarchy of urban character within a given community.

There are three main types of form-based codes designed to address different scales, locations and development contexts:

1. Those that are incorporated into a master plan or small area plan to manage development within a relatively confined geographic area or neighborhood;

2. Those that comprise 'floating zones', which can be overlaid onto particular areas according to the request of a property owner; and

3. Those that are comprehensive and cover all of the territory in a municipality and most aspects of real estate development therein.

Small Area Planning: Form-based codes adopted as part of the small area planning process can be beneficial because they establish clear standards for future development, which are vetted through an intensive public process involving multiple stakeholder groups. This provides an opportunity to align the interests of public officials, local residents and real estate developers when regulatory requirements are put in place to supersede previous zoning categories. Developers are provided with the ability to construct conforming projects by right; residents are given confidence that new development will reflect their vision for the area; and the public sector is able to ensure planning concepts are supported by the underlying zoning ordinance. The resultant code is not intended to be stagnant and can be modified as circumstances change, but this must be done cautiously to provide predictability in both the regulatory environment and the urban character of different parts of the neighborhood that have been established by the code. As for the downside, incorporating form-based zoning into the small area planning process can be time consuming because urban design details must be developed at a sufficient level to reveal the development potential for each site in a neighborhood, which ultimately provides the information needed to draft the code. A good example of form-based zoning in a small area plan can be found in Greenville, SC as illustrated in Figure 8 below.

Fig. 8. Haynie-Sirrine Neighborhood Master Plan, / Small Area Plan, Greenville S.C. The Lawrence Group

The redevelopment plan for this relatively small neighborhood was developed by a community charrette involving property owners, residents, local developers and city officials.

The plan defines a simple urban hierarchy of Neighborhood Edge (NE), Neighborhood General (NG) and Neighborhood Center (NC)—essentially a simplified Transect arrangement equivalent to zones T3, T4 and T5 in Figure 8. A "Special District," entitled "University Ridge Village Center" (UVRC) was created as a holding category for a large disused shopping center whose development future was held in political limbo at the time of plan development.

Floating Zones: Floating zones overlaid on a site at the request of the property owner share many of the attributes of form-based zoning implemented as part of the small area planning process. They operate on the same classification system of Transect Zones, impose similar formal design regulations, and offer developers by-right flexibility in allowable land uses within projects. In many instances, the purpose is to encourage mixed-use development by eliminating the need for a standard rezoning process when a desirable development project does not conform to the strict requirements of a traditional, use-based zoning ordinance. The floating overlay typically supersedes conflicting land use regulations, while leaving non-conflicting regulations in place.

Comprehensive Form-Based Zoning Ordinances: Implementing a form-based zoning ordinance throughout an entire community is clearly the most complex option available to municipalities and the full ramifications of this approach are beyond the scope of this paper. In practice, most citywide codes are hybrids with some conventional districts and some form-based districts.[5] This approach is often necessary when there are pre-existing development patterns in the area that are not expected to change in the short term or even the medium term.

Irrespective of the type of form-based zoning adopted, there are several key principles that must be taken into account to increase the likelihood of success.[6]

1. The code should be style neutral and should not seek to regulate the aesthetics of buildings or neighborhoods.

2. Emphasis should be placed on form, not use, thereby providing flexibility in density and allowable land uses in exchange for controls on neighborhood form.

3. The code should be organized around spatially defined districts, neighborhoods and corridors that manifest particular urban and suburban characteristics.

4. Recognition should be given to the importance of well-defined and well-designed public spaces. This generally means that buildings in urban areas must be built close to the street to achieve definition and create a sense of place.

5. Great attention should be paid to the design of the streetscape and the role of buildings in shaping the public realm. In suburban areas, buildings should screen parking and help define pedestrian-friendly public spaces such as streets and parks.

6. Street level activity should be stimulated by mixing uses when possible to create different rhythms of pedestrian activity during the day, night and week. Care should be taken to provide observable windows and doorways at the street level that encourage a safe, attractive and meaningful pedestrian experience.

7. Parking lots should be concealed behind buildings, on-street parking provided wherever possible, and pedestrian activity protected from fast-moving traffic.

8. Neighborhoods should be compact, pedestrian-friendly, mixed-use, and offer a range of housing types.

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5 One notable exception is the new Miami 21 Zoning Code, which applies to the entire jurisdiction of Miami, FL. See http://www.miami21.org/zoning_code.asp

6This summary is adapted and extended from definitions and commentary by Crawford, P. (n.d.). 'What are form-based codes?' in *Form-based Codes: Implementing Smart Growth*, Sacramento: [California] Local Government Commission, unpaginated. www.lgc.org; and Lewis, C. (2003). 'Design Based Codes.' *New Urbanism in Practice: The Newsletter of the New Urbanism Division of the American Planning Association*, Vol. 1, No. 2, Fall, 1, 3-4, 12.

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9.   Clear and concise language should be used throughout the code with design standards tied to measurable purposes and outcomes.

10.   Codes should be presented in an easy to read format with clear narrative in addition to graphics, photos and illustrations in generous quantities.

11.   A design-focused process of stakeholder participation should be undertaken to produce the code in order to reduce conflicts, misunderstandings, and the need for contentious public hearings as individual projects are reviewed.

12.   The most important tool in the successful implementation of a form-based code is the facilitation of permits. Requiring developers to comply with predetermined design standards and then sending their development application through an extensive public review process is the equivalent of hitting them with two sticks and taking away the carrot. This is totally unreasonable. In general, developers are much more willing to abide by design standards if they know that compliance will ensure a permit. Well-written design regulations ensure this sense of predictability.

The last of these points is vital to the success of form-based codes. The extensive public process in formulating the code is designed to give plentiful opportunities for the public, developers, city staff and elected officials to weigh in on matters of interest and concern. If this process is handled well, the resulting code can gain strength by some resolution of these sometimes competing interests. Once the code is adopted, however, the provisions in the document are largely *by-right*. That is the major point that cannot be emphasized strongly enough: when developers are required to commit to key community design standards in the code, their reward must be a faster, more predictable approval process. If developers follow the code, then their projects should get approved quickly. There should be no more public debate on details; that public debate was front-loaded into the overall process of code development. Any outstanding technical issues should be resolved at staff level, and there, planning staff *cannot* vary the code provisions to suit themselves, nor add on extra requirements on an ad hoc basis. To do so undermines the central contractual basis of form-based codes.

Section 5: Impediments to Effective Operation

There are two basic impediments to the effective operation of form-based codes, and they both come down to the human element. The first relates to poorly written and constructed codes, while the second stems from poor code administration. This section of the paper focuses extensively on poor administration of form-based codes by planning staff and elected officials, as best practices in code drafting have already been covered in detail.

Administrative failures that compromise the underlying principles of form-based codes, thereby limiting their effectiveness, can be divided into three main categories:

1. Political interference by elected officials in previously agreed upon "by-right" provisions of development codes;

2. Protests against code provisions by neighborhood groups, many of whom may have previously agreed to the code provisions; and

3. Misunderstanding or errant application of code provisions by planning staff as a result of limited urban design experience or a desire to "improve" the project in terms of personal preferences or design agendas.

Interference by Elected Officials: It is a fact of life that many politicians loathe to give up their ability to micro-manage development proposals in their community. In particular, some elected officials balk at delegating powers of approval to planning staff. This may result in reluctance on the part of elected officials to accept inherently lower profile and less "hands-on" processes of approving development proposals, such as the by-right approvals granted to projects in conformance with the requirements of a form-based code. The conventional rezoning process, on the other hand, offers plentiful opportunities for high profile interventions or statements that can be politically advantageous; in this way elected officials can be seen to be "responsive to community interests," or seek to gain advantage over political opponents. Form-based zoning, with its extensive "by-right" provisions undercuts this opportunity for political posturing.

Neighborhood Opposition: Nothing slows down the process of project approval as effectively as multiple public interventions. This can be particularly infuriating in the context of "by-right" protocols inherent in form-based codes. Neighborhood activists tend to see form-based codes and their by-right provisions as favoring developers at the expense of neighborhoods, partly by eliminating opportunities to protest once the project is announced. This kind of NIMBYism can stifle the progressive policies and objectives of form-based codes. Residents often do not understand the three-dimensionality of form-based coding provisions even as community groups give their assent to such codes in the public processes leading to adoption. Accordingly, reactions often stem from seeing new development actualized in ways they did not fully understand or anticipate. Opposition to new development therefore tends to focus on changing agreed upon codes, thus frustrating the development process and making developers wary of such legal instruments.[7]

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7 This frustrating condition pertains in Charlotte regarding the city's PED Overlay Zoning, which is a progressive, form-based overlay zone for key corridors. Local residents in the Dilworth neighborhood, for example, participated fully in the development of the overlay code provisions, but in the face of new development planned within the "by-right" provisions of the code, neighborhood groups are complaining about "over development" and all the normal objections to infill development. In short, neighborhoods now want to change the code they previously agreed to, thus invalidating the whole premise of the system.

Inappropriate Implementation by Planning Staff: Urban design education has been effectively absent from planning education for several decades.[8] Planners are hurrying to re-equip themselves with urban design skills, but this process is patchy and with wide variability. On the other end of the spectrum, planning directors who are architects or urban designers in their own right often cannot resist the temptation to "improve" submitted projects by adding on extra requirements or detailed provisions that are not contained in the code. Whether such "amendments" improve the submitted project or not is irrelevant; the integrity of a form-based code can only be maintained if conforming projects are approved without further regulatory interference.

There are several ways in which the issues noted above can translate into poorly written, managed and enforced form-based codes:

1.   Municipalities often include conditional language in form-based codes that provide them with some ability to respond to "design sensibilities" and evolving stakeholder demands throughout the entitlement process.[9] This approach undercuts the predictability of the regulatory environment and in turn the value of a form-based code to real estate developers. Ambiguous and "squishy" language, full of generalities and subjective terms, must be avoided. Examples of this type of language include phrases such as: "to ensure development will be designed, arranged, and constructed in a visually harmonious manner" and "developments shall be arranged as to be visually harmonious both within the development site and in relation to adjacent developments."

2.   It is not uncommon for form-based codes to include use restrictions similar to those found in conventional zoning ordinances.[10] This limits the developer's flexibility and ability to respond to changing market conditions. Regulations of this type should be avoided when possible.[11]

3.   Poorly drafted form-based codes can promote aesthetic uniformity in the built environment, as opposed to good urban design.[12] This must be avoided by leaving matters of architectural design up to the developer's architect and only including provisions in a form-based code that address the relationship between buildings and the public realm.

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8 Arendt, R. Planning Education: Striking a Better Balance, Planitizen, Oct. 31, 2012. http://www.planetizen.com/node/59072 (accessed Dec. 10, 2013).

9 Talen, E. (2009). Design by the rules: The historical underpinnings of form-based codes. *Journal of the American Planning Association*, 75(2), 144-160.

10 Kayden, J. S. (2004). Reconsidering zoning: Expanding an American land-use frontier. *Zoning Practice,* 1(4), 1-15.

11 Staley, S. R. & Claeys, E. R. (2005). Is the future of development regulation based in the past? Toward a market-oriented, innovation friendly framework. *Journal of Urban Planning and Development*, 131, 202-213.

12 Talen, E. (2013). Zoning for and against sprawl: The case for form-based codes. *Journal of Urban Design*, 18(2), 175-200; Carmona, M., Marshall, S., & Stevens, Q. (2006). Design codes: Their use and potential. *Progress in Planning,* 65(4), 209-289.

4.	Some form-based codes seek to recreate urban environments from the past without considering modern economic constraints or market realities.[13] This can be avoided by providing real estate developers with a seat at the table when master plans and codes are being developed. Active participation in this manner helps ensure the legitimate concerns of private property development can be fully aired and consensus reached.

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13 Inniss, L. B. (2007). Back to the future: Is form-based code an efficacious tool for shaping modern civic life? *University of Pennsylvania Journal of Law and Social Change*, 11, 75-103.

Section 6: Encouraging Development with Form-Based Codes

Despite the challenges, appropriately structured and implemented form-based codes can be a useful tool to encourage real estate development within a jurisdiction, as well as a stimulant of economic growth. These benefits are best illustrated by examining recent case studies where form-based codes have allowed real estate developers to complete desirable projects more quickly and at a lower cost. Crescent Dilworth and 1505 Demonbreun represent two such cases.

Circle Morehead Apartments: Crescent Communities and Southern Apartment Group partnered to develop a 296-unit luxury apartment community in the Midtown submarket of Charlotte, North Carolina. The project included five stories of wood framed apartments over a two-story parking podium on a 2.3 acre site. Seven parcels with different zoning classifications were acquired to complete the land assemblage. Fortunately, the site was located within the Midtown-Morehead-Cherry Area Plan, which included an overlay zone intended to preserve the historic character of the neighborhood, while promoting pedestrian-oriented development of moderate intensity. The overlay zone, commonly referred to as the PED, allowed the development of the apartment community by-right and superseded the requirements of the underlying zoning districts to standardize design requirements across the parcels comprising the development site.

Since the requirements of the PED had already been thoroughly vetted with the City, neighborhood groups, and other stakeholders before the adoption of the area plan, the overlay zone expedited the development of the project by limiting negotiations over design elements throughout the entitlement process. Key benefits reported by the developer included tens of thousands of dollars in cost savings on architectural and engineering services, as well as project delivery six to eight months more quickly than a nearby project developed through a conditional zoning process. A lower required rate of return on investment was additionally used when evaluating the financial feasibility of the project in the pre-development phase as a result of limited entitlement risk. These factors encouraged the developer to move forward with the project, thereby increasing the housing supply in a submarket with a growing employment base.

Fig. 7. Circle Morehead Apartments

This 296-unit multifamily project located near Charlotte, N.C.'s central business district is illustrative of the type of development that can be expedited with a form-based code.

Picture courtesy of the Southern Apartment Group

1505 Demonbreun Apartments: On behalf of Demonbreun-FCA, LLC, Faison Enterprises, Llewellyn Development and Pearl Street Partners collaborated in the development of a six-story apartment complex in the heart of Nashville, Tennessee's famous Music Row. The primary entertainment district of the city is either right across the street or easily within walking distance.

The Class A+ project, which included 209 units on a 1.47 acre site, was completed without the need for a rezoning due to its conformance with the requirements of the Music Row Urban Design Overlay. Since the project did not require a rezoning, a building permit was issued after the Nashville Department of Codes and Building Safety reviewed the completed construction package and determined it met all safety, zoning and code requirements. The entire review process was completed within three months of submission of the construction package.

Both the interests of the City and various stakeholder groups were taken into account by ensuring the development encouraged pedestrian mobility, included attractive public spaces and activated the streetscape, as required by the guidelines of the form-based overlay. The city of Nashville and the citizens of Nashville also benefited as a result of the project being approved relatively quickly, because the job creation, taxation base, and general synergistic benefits were accelerated. The developer expressed a high degree of satisfaction with the entitlement process and praised the municipality for establishing clear design standards and enforcing them in a consistent manner.

Fig. 8. 1505 Demonbreun

The Music Row Urban Design Urban Design Overlay (UDO) in Nashville, TN allowed the developer of 1505 Demonbreaun to obtain all necessary regulatory requirements within a six month period.   Picture courtesy of Llewellyn Development.

Both case studies demonstrate the value of form-based codes to real estate developers when they provide regulatory predictability. Conforming projects can be developed by-right, so long as the design guidelines set forth in the code are satisfied. The end result is lower entitlement costs and an accelerated development timeline. These factors not only contribute to developer profitability, but also have the potential to promote housing affordability and economic growth in a submarket by increasing the supply of residential units. Stable regulatory environments have been shown to drive development activity and reduce required rates of return on investment in the private sector by limiting risk. Both of these factors are essential in a competitive market.

Private sector benefits derived from a form-based code can translate into municipal benefits in a number of different ways:

1. Real estate development can be encouraged in targeted areas or submarkets by providing a regulatory environment that is both predictable and reflective of tenant demands. These outcomes can be achieved without compromising long-range planning objectives by ensuring private development creates an attractive and functional public realm.

2. Municipalities interested in attracting increasingly mobile real estate investment capital to their jurisdictions can use form-based codes to differentiate themselves from competitors. This has proven to be the case in Nashville, TN and Charlotte, NC where real estate developers are actively acquiring land in areas with form-based overlays to take advantage of the regulatory predictability and expedited entitlement process.

3. Form-based codes have the potential to increase the supply of housing in an area as a result of the aforementioned benefits provided to the private sector. This may serve to stabilize rental rates in an area and increase the housing options available to tenants with different income levels and household compositions.

4. By encouraging real estate projects with features supporting pedestrian mobility, form-based codes can create an environment that is more conducive to future economic growth. This may come in the form of new retail establishments or other employment centers taking advantage of appropriately-scaled residential development located nearby.

5. Fiscal benefits may include increased property tax revenues and a reduction in the cost of providing public services if a form-based code takes into account the appropriate amount of density for an area and the resultant infrastructure requirements.

Section 7: Conclusions and Best Practices

The analysis presented in this white paper indicates form-based zoning can be a powerful tool for municipalities interested in encouraging economically viable and socially beneficial real estate development projects. Nonetheless, the efficacy of this type of land use regulation is tempered to a significant degree by the manner in which it is implemented at the local level. Policymakers and public officials must therefore be aware of the potential pitfalls and take steps to ensure form-based codes make it very easy for the private sector to deliver the type of development a community has expressly stated it wants to see in the future. This can be accomplished by following several best practices.

Form-based codes should provide developers with by-right flexibility in allowable land uses within their projects in exchange for complying with heightened design standards. It is this regulatory predictability that creates value for the private sector, while concurrently ensuring real estate development occurs in a manner consistent with a community's articulated vision. Public hearings and other opportunities for stakeholder input should occur before a form-based code is

adopted so design standards can be thoroughly vetted by all interested parties. Once adopted, codes should be implemented as drafted without ad hoc policymaking or "tinkering" in response to political pressures or personal agendas.

Design standards imposed by form-based codes should focus on external features of buildings that create the public realm, as opposed to aesthetic features of buildings such as color palettes, construction materials or architectural style. This is essential to promote the legitimacy of the code and to avoid unnecessary interference with private property rights. Pedestrian mobility, public safety, market responsiveness and efficiency in public service provision should be the key objectives of form-based codes, as opposed to creating an urban environment that satisfies the aesthetic tastes of specific policymakers or influential groups.

The structure and implementation of a form-based code should also correspond with broader efforts to promote economic development and housing affordability within a municipality. This can be accomplished by creating a regulatory environment that reduces the entitlement risk faced by real estate developers, while simultaneously providing them with the ability to delivery product that satisfies the evolving demands of different segments of the market. These benefits, along with the creation of an attractive and functional public realm, may help a municipality differentiate itself from competitors when seeking to attract mobile real estate investment capital. The resultant increase in housing supply may additionally serve to stabilize rents and create more options for local residents interested in living and working in the area.

Finally, policymakers must realize form-based codes are not a "one-size-fits-all" solution. They must be tailored to fit local circumstances and seek to advance clearly defined goals. Municipalities should familiarize themselves with the SmartCode as a basic framework for coding practice, but be prepared to engage consultants who are well versed in drafting and implementing such ordinances. It is unadvisable for planning staff to "start from scratch" to develop their own form-based code and many may find it advantages to explore the potential of this regulatory tool at the small area plan level before engaging in a major rewrite of a full municipal code. These recommendations, as well as the other aforementioned best practices, are anticipated to help a municipality derive the greatest amount of benefit from a form-based code.

About the Authors

David Walters is a Professor Emeritus of architecture and urban design at the University of North Carolina – Charlotte, where he recently retired as director of the Master of Urban Design program. Born in Plymouth, England, David has more than four decades of experience as an architect and town planner, and has practiced and taught extensively in both the United Kingdom and the U.S. For 15 years, he was a senior urban designer at the Lawrence Group, where he won numerous state and national awards for urban master plans, form-based codes and community planning projects. He is also the author or co-author of three books on urban design, as well as dozens of articles in professional journals.

Dustin Read is an assistant professor of Real Estate and Property Management at Virginia Tech's College of Liberal Arts and Human Sciences, where he teaches classes on commercial leasing and residential property management. Prior to joining the Virginia Tech faculty in 2014, he spent seven years as the Director of the Center for Real Estate at the University of North Carolina – Charlotte. Dr. Read has been published in several journals, including American Review of Public Administration, Journal of Real Estate Finance and Economics, and Urban Affairs Review. He received his bachelor's degree from Truman State University, a master's degree from the University of Florida, a Juris Doctor degree the University of Missouri, and a Ph.D. from UNC Charlotte.