BUILDING BETTER CITIES THROUGH DESIGN REGULATIONS:
FORM-BASED ZONING AND ACCOMMODATING DESIGN CONCERNS WITH LAND USE

by

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Planners, developers, and laypeople alike recognize that, for all its good intentions, conventional Euclidean zoning in the United States has not been without its shortcomings. Even as it has regulated land use to protect public health and welfare, zoning has had a cumulatively negative impact on the American built environment. The strict segregation of land uses prescribed by zoning, combined with rigid controls on development in the zones themselves has created “balkanized” patterns of development that prohibits the adjacency and mixtures of uses even when such diversity would be more desirable (Reps 1964). Rather than yield a cohesive urban environment, zoning has too often produced a fragmented city fabric (American Society of Planning Officials 1968; Reps 1964).

It has become clear that an alternative to this type of zoning is needed. But how can planning for growth address the consequences of development management systems while also regulating the appearance and impact of development on the physical environment? How can these concerns be accommodated within the technical, rational, and legal mandate of Euclidean zoning? The following discussion examines the concept of form-based zoning, or regulating how land is to be developed based on the form of the built environment and the individual structures that constitute ‘development.’ Form-based zoning emphasizes urban design and physical planning over a simplistic segregation of use alone. It is based on the idea that the development of standards for urban design is vital to achieve such planning ideals as establishing identity, creating a sense of place, and developing efficient infrastructure and facilities with multiple uses. It
is important to recognize that design-oriented zoning is a nascent and still conceptual
alternative to traditional zoning that segregates solely by land use. While the concerns
for public health, welfare and safety have adequately justified traditional zoning, the
ability of this system to address aesthetics, appearance, and the visual aspects of the built
environment is severely limited. Any concerted efforts to address these visual aspects—
whether on the part of government or private development—must obey the same zoning
regulations that pay no attention to design. In other words, well-designed development is
proposed and regulated through the same zoning systems as development that is proposed
without respect to aesthetic and design issues, and it is the latter form of development that
traditional zoning has been designed to accommodate with its technical specifications.

Advantages for density

Density is the pivotal dimension of any Euclidean zoning; allocations of land based on
use almost always specify how much of that use can be developed in a given area.
Chronologically and historically, ever since Euclidean zoning’s inception in the early
twentieth century, new development in American cities has occurred at lower densities
with increasing amounts of space being reserved for functions that are ancillary to the use
(most often transportation functions). Zoning that does not address urban form is an
inherently simpler process to administer for lower densities, as emphasis in development
is on horizontal arrangement of uses and less so their vertical arrangement. In other
words, lower densities are developed more easily than higher densities under a zoning
paradigm that does not stipulate specific design requirements. If this kind of zoning
authorizes higher densities, however, development that utilizes this permission of high
density is not subject to any review of urban form. Consequently, when the uses
developed at higher densities involve the incorporation of infrastructure, pedestrian and
vehicular traffic, and public services, they pose the risk of generating more intensely
negative consequences because of their greater intensity. This demands that they be
designed in a manner that integrates these peripheral functions smoothly.

Needless to say, zoning that addresses urban design is also important for situations in
which higher densities are not simply optional or desired but required by overarching
rules or regulations. High densities are easier to accommodate with a design-oriented
development review, and the arrangement of land use is easier if design is emphasized
rather than left to a secondary and site-specific concern of individual development
deavors.

History and Precedents

Zoning based on urban form is hardly new as a response to twentieth century Euclidean
zoning. Development guidelines that emphasized how to shape the built environment
existed before the 1926 Euclid v. Ambler Realty Supreme Court decision that upheld the
use of police power to restrict the adjacency of different land uses that posed problems
for public welfare and health. Cities in America have recognized a need to plan since the
mid-nineteenth century, when growing cultural emphasis on the separation of living and
working spaces demanded that homes be located in separate residential districts from the
often crowded, noisy, unpleasant industrial and commercial districts of cities and towns
(Holleran 1998; Jackson 1985). Planning in this sense, though, was not the same as the
legacy of American colonial town plans that were based largely on cadastral
organization, or the division of land for purposes of designating legal property boundaries and property ownership; it was a means of separating uses that were seen as incompatible or whose spatial collocation was undesirable.

That should not imply, though, that entire town plans were unimportant in the development of American cities. Indeed, it is important to consider the contribution of the large-scale urban design efforts that predated modern zoning as it is recognized today as these endeavors justified the development of planning as a discipline and ultimately as a profession distinct from other levels of public administration. Although examples of these physically-based master plans have not necessarily attempted to accommodate both spatial separation of uses and guidelines or regulations of urban form, they have nonetheless established precedents for how urban development should accommodate the different functions of a city; how the spatial relationships of these functions should be permitted and organized; and how new buildings should respect a sense of identity and city character established through architecture and design.

Haussmann’s redevelopment of Paris is perhaps the greatest and most temporally concentrated example of a plan that sought to reconfigure the physical layout of a city while establishing guidelines that development of individual buildings would be required to follow. The Haussmann plan specified design rules in relation to three primary elements of streetscape design: street width, building face height (that is, the height of a building up to the cornice line of its roof), and roof height. It granted exceptions for monuments and buildings of public character, which often occupied more commanding sites that terminated vistas or rose beyond the lines of sight established by buildings subject to the height-street width relationship rule. The goal of Haussmann’s plan as it
involved building codes was to establish a uniform style of boulevards that kept a
consistent scale of building frontage so that areas of primary passage and activity could
exist in an urban space of different psychological and aesthetic implications than that of
quieter, less active areas (New York Heights of Buildings Commission 1913; Willis
1991). To this end, the redevelopment of Paris under Haussmann in the middle of the
nineteenth century specified an uncomplicated architectural code that new development
in the city continued to follow for decades.

Perhaps the most important single contribution to urbanism and planning in America
was the Chicago World Columbian Exposition of 1893 (Cronon 1991; Hegemann and
Peets 1922; Wilson 1989). This exposition was planned to celebrate the 400th
anniversary of Columbus’s voyage to America and, as one of its primary motives, sought
to showcase America’s progress and development and the special role that the city of
Chicago had played in it. This involved a series of exhibition buildings constructed on a
drained swamp on the Lake Michigan shore on the city’s south side. It was nicknamed
the ‘White City’ for the white neo-classical buildings that constituted it, although the
name also alluded to the purity and order of the urban landscape they created as progress
and a departure from the often dark, unsanitary state of industrial cities (Wilson 1989).
The legacy of the White City was not in its architecture, but rather in the implications that
it made for urbanism and city planning. In fact, the exposition buildings were temporary
structures that were constructed at relatively low cost; but their design and arrangement
on their site impressed upon visitors the potential urban design and civilized social order.
As William Cronon states, “it became almost overnight a much praised vision of urban
life at its noblest and most civilized” (1991: 342). The influence of the exposition on city
planning led to the City Beautiful movement, a period of activity in town planning and urbanism based on the ideals of aesthetically orderly and disciplined urban environments.

New York City was the first city in America to adopt a formal zoning ordinance that divided the city (or in this case, one borough of it) into districts specifying allowed development opportunities. It is true that the basic aims of the 1916 zoning ordinance were to separate incompatible uses (Barnett 1974: 31), but the real impetus for the development of a zoning ordinance came about from public reports concerned with building height and scale (New York Heights of Buildings Commission 1913).

Essentially, the ordinance, which affected high-rise building construction and zoning in Manhattan, required buildings to ‘step back’ a given amount after their height reached certain levels. The purpose of this requirement was to keep buildings of excessive bulk from blocking their environs from sunlight and air circulation. Buildings being constructed to their lot line were allowed to reach a certain height, after which any additional height was required to be set back a distance from the lot line that was determined by an angle from the street. Since the angle stipulation presented a constant vector from the street, the pattern of setbacks would have to continue until reaching an area equal to one-fourth the size of the lot: additional increases in height required additional setbacks from the street. The effect of New York’s zoning ordinance is still visible in Manhattan today, as the entire generation of high-rise development between its adoption in 1916 and its revision in 1961 was subject to its regulations. Manhattan skyscraper architecture from the 1920s through the 1950s was characterized by the setback requirements of the zoning ordinance, and subsequent restructuring of how high-
rise buildings must allow ventilation and light and how they address the street allowed the development of an entirely different architectural vocabulary.

As Jonathan Barnett notes, though, New York’s zoning ordinance was not devised as an appendage of its master plan. In fact, the reverse was true; the New York City Planning Commission and the city’s first comprehensive plan were both created long after the passage of the zoning resolution, reflecting a similar pattern in many other American cities: zoning happens first, and planning follows it (Barnett 1974: 31). In its two-pronged approach, the New York zoning ordinance set a precedent for the form of the city’s built environment, and, ironically enough, did so with no particular attention to urban design. The zoning ordinance’s definition of and emphasis on the building envelope that building space could fill was more a product of lawyers, engineers, and surveyors than of architects and planners (Barnett 1974: 31-32), even though it inspired some of New York’s most characteristic and memorable architecture.

Barnett’s point is important because it underscores that master plans as they had been evolving until the inception of use-oriented zoning paid little to no attention to urban design. And it is arguable that, even if they had, they would not have circumvented the same problem faced by any town plan: how to ensure consistency in design and development patterns when cities and towns are inevitably developed by many different parties and usually over a long span of time. Paradoxically, the same precedents of zoning that influenced the basic development of the typical American city in the twentieth century were those that shaped urban design in New York City and led to poor, design-insensitive development patterns almost everywhere else.
Review of Existing Policies

Although development management has evolved into a rich set of methods and techniques that deal with the complex nature of urban growth, zoning has continued to function as the most common and perhaps the most easily enforced. One reason for this is that zoning is comprehensive: land within a jurisdiction is exhaustively divided, usually by legal obligation, into different categories within a zoning ordinance, even if there are categories that do not allow at least some types of development. Essentially, zoning came into existence to protect public health, safety, and welfare by separating incompatible uses and the adverse impacts they would have on one another and to minimize the overcrowding of land (Kendig 1980: 5). However, as planners have codified zoning as an increasingly technical policy-oriented planning instrument, it has become subject to political pressures. These pressures are often the result of individual proposals for private sector development activity, and as a result zoning becomes a collection of how each private developer has modified the code for land that he or she wishes to develop.

Zoning is also employed in different capacities to attempt different planning functions. For example, large lot zoning is often used for environmental protection, and out-parcels with different uses will be employed to offer site-level mixed use. The problem with solutions such as these, though, is that land development remains regulated under the same zoning ordinance and the same categories. Furthermore, the application of zoning with increased specificity (such as with the out-parcel example) only limits the way that uses can be balanced spatially. Little to no flexibility exists for how development could occur differently for different sites or contexts.
Even though the repertory of development management techniques has grown to address more particular problems than simply growth and separation of incompatible uses, few techniques exist to deal with the rigidity of zoning and its effects on how urbanism and design, or physical planning of the built environment, can factor into development. Planned unit developments have arisen as perhaps the most immediate method of avoiding the limitations of zoning on density and urban design because they allow greater creativity and flexibility at the level of the site. Moore and Siskin (1985) define four issues as central to the goals of the planned unit development: flexibility in development standards, the encouragement of innovation in housing, increased amenities, and better government negotiation and public development regulation (13). A planned unit development also encompasses its entire site and its proposal in the planning process is therefore 'responsible' for whatever different uses it may accommodate. Euclidean zoning, by contrast, balances uses less easily (Kendig 1980: 9).

PUDs have not fully alleviated the problems of zoning, though, largely because they occur under corollaries to conventional zoning ordinances. In other words, PUDs are authorized under different regulations and, due to the often individualized nature of PUD projects, require a more detailed review and approval process. Increased staff time and expertise require increased staff resources, which most jurisdictions find to be difficult if not impossible given budgetary constraints of modern local governments (Moore and Siskin 1985: 26).

Another of the development management tools that is used to get around the density limitations of zoning is transferable development rights (TDR). TDR functions as a way to increase the allowable density within a given zoning category through the purchase or
acquisition of development rights from another property (usually property that has been targeted for preservation or property on which there is no development pressure).

TDR has failed to adequately address the problems of zoning in that it has been used too rarely. As Haar, Horowitz, and Katz note, up until the early 1980s very few transfers of development rights had taken place, and often the transfers that did take place did so without any formal, legally binding TDR ordinance (1980: 19). TDR is not a universal solution, either. One of the primary criticisms made against it is that it requires a general consensus within a community allowing higher densities. TDR programs, even if implemented by a local government, are usually also rich with legal technicalities and contentiousness, thus requiring a greater amount of resources in the way of planning staff expertise and legal representation. Unless a community shares an approach to planning and growth that supports increased densities, which assumes a general consensus on the definition of public welfare and public use of land rights, it is difficult to imagine that TDR could be used as more than an occasional means of increasing densities.

The third and probably most versatile of these techniques is performance zoning. Performance zoning addresses the inflexibility of conventional zoning by treating different uses as performance standards that are organized broadly under use districts. Kendig defines the concept of performance zoning as being based on a set of criteria against which all proposals for development must be evaluated: special purpose criteria such as access and road capacity, criteria related to the function and intensity of uses, and criteria relating these functions and intensities to design (1980: 10).

Again, the applicability of performance zoning depends on community attitudes. Kendig notes that techniques such as performance zoning that were intended to achieve
better quality control on development and to offer alternatives to the rigid regulations of zoning have been subject to different interpretations (1980: 281). In other words, a single ordinance or set of principles has been read and explained differently—both among different jurisdictions and within the same jurisdiction as its officials and planning professionals change over time. Although two jurisdictions may have a similar set of principles and standards, they may interpret them differently. And although the language of a zoning ordinance for one jurisdiction may not technically change over a given time frame, different officials and staff may approach it with different sets of values and consider qualitative elements of the plan to mean different things than their predecessors or successors. This is significant because it weakens the case for a development ordinance that is as technically oriented as performance zoning (at least from being the primary policy instrument in a community’s development management strategy). If it is to be interpreted differently, then it is all the less consistent with respect to what development it will allow.

The weakening or debasing of performance zoning’s principles—that is, by using methods that Kendig refers to as “‘arm-twisting’ or the imposition of ‘primitive’ standards” (1980: 282)—may also undermine its effectiveness. He claims that it is not designed to force developers to perform, but rather to establish minimum standards that the developer must meet. The idea of “arm-twisting” is not only legally questionable, it also establishes a hostile climate for development, in which the community misuses regulations and developers have less incentive to propose projects.

In theory, none of the three development management techniques described here is ineffective: each has yielded successful cases of working around zoning's inherent
inflexibility. The reason that they have not ultimately succeeded in changing the land use regulation practice of zoning, though, is that they are all too case-oriented to administer. The dominant attitude toward urban growth in the United States seems to be that growth is the default, and should only be prohibited in exceptional circumstances. Essentially, with the possible exception of performance zoning, it is not practicable for any of the aforementioned techniques to be expanded to the level of basic development policy. The nature of planned unit developments and transfers of development rights, both as reliant on case-specific review as they are, is simply not appropriate to function in a context of what a jurisdiction uses as the basis of its growth planning.

Although the three development management techniques are case-oriented and have not yet been applied on a larger scale, each has elements that could be assembled into a larger design-oriented system of regulations that allows flexibility with regards to arranging uses. The strength of performance zoning is its feasibility in being applied to an entire jurisdiction. Performance zoning also offers a relative simplicity that once characterized Euclidean zoning when it was first implemented in the early 20th century (but eroded as the increasing complexity of development demanded more specific definitions of land use categories). Performance zoning separates parts of a jurisdiction into general use categories based on their performance—that is, the way that they have developed—and not on the particular use that they will accommodate. Thus, for example, areas including the central business district and adjacent high-density residential neighborhoods could be classified as ‘city center’ or ‘urban core’ zones, where lower-density residential areas on the edge of the urban area could be classified as ‘urban transition’ or ‘suburban residential’ areas. Performance zoning obviates traditional Euclidean zoning’s specific
definitions of use, use type, allowable density or intensity, and accessory or auxiliary uses. Instead, it is applied with the assumption that areas of a certain general use or character—such as downtowns or suburban residential neighborhoods—have a more or less consistent density within each zone and accommodate their own auxiliary uses—such as restaurants or grocery stores (Kendig 1980).

Planned-unit development zoning is useful in that it allows development freedom from the constraints of a zoning ordinance, whether it is traditional, Euclidean zoning or a more innovative, generalized performance zoning. The most useful element of the PUD-oriented zoning is that it can accommodate the entire site plan of a given development without having to parse its different uses into different zones (Moore and Siskin 1985: 13). And even though a more generalized zoning may accommodate different uses, proposals for development will inevitably envision uses that would not necessarily be allowed for a performance zone but that may nonetheless complement the uses in that area—for example, a large-scale sports complex in a city center zone. Additionally, as Moore and Siskin note, planned-unit development zoning often occurs in phases. Development proposals may be reviewed at once. Development is not necessarily constructed at once or in a manner that interrupts the. This allows it to be integrated into existing zoning, especially if phasing of larger projects effectively reduces their scale into smaller increments for the sake of their implementation and construction.

At the same time, though, review of development remains essential. If a development plan defines the permitted combinations of uses as ‘normal’ or ‘acceptable,’ it would need to address requirements for other combinations or uses. The lack of a review process could become problematic if different developers with different interests in style
and design of development are allowed to develop, even within the limitations of a more
design-oriented system of regulations. Issues of urban design and, in particular,
architecture tend to be politically contentious.

In spite of the additional flexibility it may afford in terms of density, the issue of
transferable development rights raises a question of legality and liability. Haar,
Horowitz, and Katz (1980) note particular problems with respect to valuation of
development rights, especially as it concerns the difference of land uses. They note that
some programs were initially limited to residential transfers only (1980: 15), and that
setting exchange rates between uses (such as purchase of development rights from
residential land to increase commercial densities) becomes problematic when value
trends in different sectors of the land market do not move in the same directions—the
rates must continuously be changed. When the urban area is smaller, though, TDRs do
allow an effective way to preserve open space outside of cities and effectively limit
development to the urban area.

_new Approaches_

Beyond these recognized development management techniques, architects and planners
have been developing new approaches to codifying design practices. These approaches
are usually the domain of an ideology of planning that is more related to urbanism and
city design than to regulatory growth management tools rooted in policy. The fact that
architects have been the preeminent force in asserting new ideas of how to codify and
implement planning principles can be attributed to the fact that the evolution of planning
policy has made the integration of planning and architecture increasingly difficult (cf. Barnett 1974; Kendig 1980, ch. 1).

One example of a movement from architects and design-oriented planners to reassert the role of town planning and design in the development of the built environment is New Urbanism, or traditional neighborhood design (TND). This movement, first recognized in the early 1980s with the design and development of the Seaside new town in northern Florida by architects Andres Duany and Elizabeth Plater-Zyberk and developer Robert Davis, seeks to change the increasingly automobile-oriented nature of the American built environment by designing towns and neighborhoods based on traditional patterns of development—namely those that had currency before World War II.

In some cases, New Urbanism has been responsible for the development of zoning and land use regulations that deal explicitly with the built form that results from development activity. Many examples of this codification of principles come from New Urbanist developments themselves: after Seaside’s initial development in 1982, Duany and Plater Zyberk’s firm, Duany Plater-Zyberk (DPZ) drafted the town’s first master plan and development code to ensure that future growth and development in the town would reflect its initial commitment to traditional urbanism and regional architectural vernacular. As the movement has evolved, though, it has enhanced and broadened its approach to codes, selecting and articulating a transect-based concept to demonstrate a typology of different ‘ranges’ of the built environment—namely, from most rural to most urban.

The more recent Transect developed by Duany is based on a metaphor of biological classification from the Scottish scientist Patrick Geddes, who argued that planning must
be based on a survey of the resources of a region, the human responses to it, and the complex situations that result in the cultural landscape (Hall 2002: 147). Geddes claimed that this obviated the maps that planners ordinarily used: instead, planners must rely on cross-sectional diagrams “of that general slope from mountains to sea which we find everywhere in the world” and which “we can readily adapt to any scale, and to any proportions, of our particular and characteristic range” (qtd. In Hall 2002: 148). New Urbanism has focused its approach to regional taxonomies of the built environment on the principles that Geddes has articulated, emphasizing the need to consider examples of the built environment as it occurs in all landscapes—from the most rural to the most urban. Accordingly, the movement (and especially DPZ) has promoted the Transect as a means of explaining appropriate forms of urbanism for their practice of town building with respect to the environments in which this building is to occur (see Appendix A for Transect examples).

DPZ’s approach to implementation of these principles has been through a policy instrument template they have named the SmartCode (Duany PlaterZyberk 2002a). It is designed to reflect the basic tenets of Smart Growth and New Urbanism, and, more fundamentally, to facilitate the development of urban environments that reflect good design principles. Developed during the planning and construction of several New Urban communities in the United States, the SmartCode incorporates the varied and complex elements of human settlement patterns within the logical structure of the Transect. It recognizes the same failure of conventional zoning and land use-oriented planning as Reps and Kendig: that its overly technical specification of allowed uses and densities precludes patterns of development that would allow the building of cities that support a
greater diversity of uses and transportation means within the built environment. Indeed, as Duany and Emily Talen write, “current codes are based on a theory of urbanism that is decidedly anti-urban” to the extent that “through separation, districting and rigid statistical procedure, zoning has forced us to think in terms of separating the human habitat from the natural one when they are really codependent” (2002: 1445).

Figure 1  Examples of building types and general use descriptions from Davidson, N.C. Planning Ordinance. (Town of Davidson 2002).
Davidson, North Carolina is an example of a community that has developed a new land planning approach based on the principles of New Urbanism and the SmartCode. Faced with increasing development pressure from the growth of nearby Charlotte, Davidson revised its planning and zoning ordinance to reflect and maintain the nature of the town’s built environment. Instead of the traditional zoning that classified by use and density (or intensity), Davidson’s new planning ordinance has simplified zoning by defining seven ‘Planning Areas:’ Lakeshore, Village Center, College Campus, Village Infill, Rural, Special Use, and Conditional (Town of Davidson 2002). Rather than focusing on uses and densities that are permitted in each planning area, the Davidson Planning Ordinance specifies a series of building types that may be allowed (see Figure 1), stipulating that not all building types are allowed in all planning areas and emphasizing a fit between the character of development in a given planning area and the general building typologies that are compatible with it.

It is important to note that the SmartCode is not a pure concept that can be applied unconditionally. Indeed, Duany himself has maintained the importance of regional context and respect for local conditions, and DPZ’s work in developing SmartCodes for municipal governments requires an assessment of their built environments and existing patterns of development (cf. Geddes and his emphasis on surveying [Hall 2002: 146-7]).

While New Urbanism may not have formally affected land use regulations in all cities, zoning reform in some places that do not has certainly shown an interest in ‘deciphering’ or simplifying zoning so that it is more applicable to and effective in the development of a usable built environment. Chicago is one example of a city that has recently initiated reform to its zoning code. The city’s 1957 zoning ordinance has faced increasing
criticism in the past 15 years, especially as the political organizations representing Chicago’s neighborhoods have gained efficacy since the 1983 election of mayor Harold Washington and his administration’s subsequent political reform. The highly technical, specialized zoning ordinance has failed to meet the needs of neighborhood interests (City of Chicago 2002), often resulting in a disconnection between the needs of communities and the uses that are permitted to satisfy them. In its extensive reform process, Chicago’s zoning department has developed an agenda of flexibility for neighborhood needs from public input and suggestion, reducing the vast number of zoning categories and introducing a variety of mixed-use and neighborhood center categories to allow greater flexibility in the creation and enhancement of urban environments for the city’s many neighborhoods. The primary focus of Chicago’s zoning reform is to allow neighborhoods to remain the primary unit of development (City of Chicago 2002; Ossewaarde 2003).

It is arguable whether or not these examples represent the full range options truly available for American cities to develop more design-sensitive land use and development regulations. Communities such as Davidson are small, less heterogeneous, and have less diversified economies. That is not to say that they do not have problems, but it is possible for the to approach a common vision more easily with smaller, less diverse populations. On the other hand, large communities such as New York and Chicago are innately complex and often have difficulty in achieving consensus on how to direct growth and development. They may not be able to plan with the same emphasis on a coherent and attractive built environment as the exemplary small communities, but they
are places with enough endemic conditions and challenges that they must engineer their own approach to development planning.

The two case studies presented here, Olympia, Washington, and Orlando, Florida, are examples of cities that have adopted a new way of reviewing the design quality of development through the traditional zoning that they employ. These communities are notable, though, because they are neither the Davidsons nor the New Yorks of the United States. They are not small and specialized, and therefore have more diverse, divergent community interests to accommodate in shaping how their communities will develop. Yet at the same time, they are not cities so large that development pressure justifies the creation of unique standards that merit their own controlling legislation. In one sense, they are typical medium-sized American cities. Each is atypical, though, for its own reason. Olympia is a case of a smaller community that has articulated its vision through a robust, active public realm and altered its planning and zoning strategies to reflect this vision. Orlando, on the other hand, has taken advantage of strong state- and local-level planning policy mechanisms and high pressure for growth and development to shape its expansion and growth in a manner that reflects the qualities and character of its traditional built environment.

Case Studies

Olympia, Washington

Olympia, Washington is one example of a community that has amended its land use regulations to address issues of built environment and how development decisions based on use can also accommodate architectural design standards. In the Olympia
Comprehensive Plan, the city defines its strategies for land use and urban design planning, acknowledging that “how the city grows is the key to whether or not it remains attractive and livable” (City of Olympia 2002a: 1). After the state legislature’s passage of the Washington Growth Management Act in 1990, Olympia citizens took advantage of a series of new requirements and obligations imposed by the state and organized public meetings to consider Olympia’s future and articulate a vision for it. In forming the basic principles of what constitutes proper development, the Comprehensive Plan cites what its community defined through this participatory process as characteristics of desirable urban form: consistent street fronts, pedestrian-friendly urban environments, and concealed parking. Citizens named low-density suburban sprawl and its typical automobile-oriented appearance as an urban environment that they did not want to see expand in Olympia. Thus, local planners have adopted these ideas in conjunction with the state-imposed requirement through the 1990 Growth Management Act to delineate an urban growth boundary as their strategy for growth: Olympia will grow in its current urban area at greater densities and will accommodate them by regulating good design that make the higher densities palatable to the public (City of Olympia 2002a; Mukerjee 2002).

In some senses, Olympia is an ideal community for the development of a more form-and design-based zoning system. It has a population of approximately 42,000, and is the capital of Washington (and, as a result, receives special attention with regard to public works and investment). Its population includes employees of the state government and the roughly 3,000 students of Evergreen State College, who contribute to an active and healthy public realm. Additionally, as a city in the Pacific Northwest, it exists in a culture of planning that is more highly evolved and sophisticated relative to the rest of the
United States. Washington and Oregon are nationally recognized as progressive states with respect to growth management, and their cities and towns are known for a strong sense of civic responsibility and community participation.

It is important to remember furthermore that Olympia is constrained by state-level growth management requirements—namely, an urban growth boundary—that restrict the extent to which it can spatially expand in its growth. This requires that new approaches be taken either to increase density of development or to limit development altogether, and, in spite of a strong growth management mentality, the latter is not an approach that local officials see as feasible.

Title 36, Chapter 70A of the Revised Code of Washington (RCW) outlines the procedures for growth management in counties and specifies additional requirements for counties with populations of 50,000 or greater or counties that have grown rapidly in the ten years before passage of the state’s Growth Management Act in 1990. The Act requires that these counties—as well as all incorporated cities within them—adopt policies establishing planning agencies, designate areas of critical conservation, and adopt comprehensive plans guiding growth over a period of twenty years. In addition, though, these counties and the cities within them must designate urban growth areas outside of which growth may occur only if it is not urban in nature (RCW 36.70A.040). Urban growth areas may include more than a single city, but they may not include non-city areas unless the county has received state approval that the area in question is a planned new community for which urban growth has already occurred.

This law has obvious ramifications for urban areas. First, as in the case of Oregon’s growth management boundaries, it prohibits urbanization beyond the boundaries of the
urban growth area. Although the law specifies that the urban growth area must accommodate an adequate amount of land for population growth that is projected by the state’s Office of Financial Management (RCW 36.70A.110), it does not mention how these areas are to be (or whether or not they may be) expanded. Olympia has interpreted this requirement strictly and has taken advantage of the state-imposed requirement to restrict urban growth to the area that it has designated to encourage density. Accordingly, it has revised its zoning and land use practices to guide growth and development under a paradigm of inevitably higher densities and limited spatial expansion. At the same time, though, Olympia has recognized that higher densities do not necessarily equate with improvement in the quality of the built environment. A simple revision of zoning categories to increase allowable densities could feasibly have negative consequences if the development is not designed well.

Olympia’s revised land use and development regulations take existing zoning and its technical specifications—such as allowable residential dwelling units per acre, floor-area ratio, and setbacks—as a base and superimpose design principles on them. In some circumstances, this requires the modification of existing technical specifications to include the design principles on which the new planning is based. This includes defining *maximum* setbacks and parking spaces in city areas, where most zones specify a different *minimum* quantity for each (Mukerjee 2002).

Another technique that it has used is TDR for achieving *minimum* allowed density within a zoning category as well as for maximum. For example, an R4-8 zone allows between five and seven dwelling units per acre by right. If a developer wishes to develop at greater density, namely eight dwelling units per acre, he or she must purchase
development rights from land that lies outside of the city’s designated growth area boundary to apply them to the site(s) in question in order to achieve this maximum density. However, if the developer wishes to develop at a lower density, in this case four dwelling units per acre, he or she must purchase the same ‘quantity’ of development rights so that the by-right density rule can be waived, even if it is to be decreased. This ‘penalty’ use of TDRs takes advantage of an open interpretation of the state’s TDR legislation to equate the amount of development rights being transferred to non-urban land to the absolute value of the change in density of development rights in an area targeted for development. The end result is that the city, reflecting the principles of the state Growth Management Act, reiterates the policy of land conservation outside of the urban area while discouraging developers to build at lower densities inside the finite area of the urban growth boundary.

The other major development management technique that Olympia has used is a strong utility extension policy. This is based on the principles of an urban services area designation that is coterminous with the urban growth boundary. Essentially, Olympia will not extend the urban services area during the life of its comprehensive plan, and, according to its plan, should not need to after the life of the plan if its policies for higher-density development are effective (City of Olympia 2002a).

However, the encouragement and cultivation of higher densities are only part of Olympia’s growth management problem. Olympia has recognized an important point in forming its strategy: higher densities can be logistically problematic if they are not well designed, and they are especially difficult to justify politically to a public that has been increasingly locating itself in lower-density development. In its case, higher densities are
inevitable, and, according to Mukerjee, “are not as easily planned for and developed under normal [Euclidean] zoning” (2002). Thus, the approach of the city has been to move away from traditional Euclidean zoning as the determinant of how the city grows and is built and to move toward regulating the quality of a built environment constructed at higher densities.

Aside from the techniques that it employs to guide growth and development within the urban area, Olympia’s plan is a strong example of utilizing a clear visual orientation to demonstrate the vision that its community has adopted. This is especially important as the vision, which emphasized compact development at higher densities, selected this pattern of development over the conventional patterns that had been in place since World War II. The plan’s use of visual preference depicting images of each development type to reiterate the community vision upheld in the plan helps to make the plan an accessible instrument of implementing this vision (see Appendix B). Each of the concepts in urban design is explained and depicted so that development patterns can retain grounding in policy that is easily understood.

In this regard, the Olympia case is important as an example of using growth management tools in concert with one another to achieve a desired goal. Of course, its state legislative environment is one that not only allows it to practice the growth management options that it does, but also requires that it adopt the basic premises of limiting the spatial spread of urban growth and developing a comprehensive plan that upholds this principle. The subtext of such a plan, though, is that presentation is important. If a plan is to reflect community decisions, it is necessary that it communicate the principles of these visions in a manner that is accessible and legible to the lay public.
If Olympia aspires to ultimately move away from a use-based zoning system and encourage design-based zoning within its jurisdiction, the presentation of the design ideals in a manner that translates to clearly articulated policy is critical.

*Orlando, Florida*

At nearly opposite ends of America from Olympia, literally and figuratively, Orlando, Florida is another city that has adopted urban design guidelines to create a zoning and land use regulation process that is amenable to higher density development and a truly mixed-use environment. Its vision is based on the principles similar to those of Olympia: the encouragement of mixed use, the conservation of the character of the older parts of Orlando, and aesthetic quality.

Although larger than Olympia, Orlando proper is still not what most planners and politicians would consider to be a large city. It has a population of approximately 190,000 and is the principal municipality of a rapidly growing urban area of around 1.5 million. Because of its inland location, though, greater Orlando is the only major urban area in Florida that is physically unrestrained by coastline and has consequently expanded in all directions. At present, the continuously urbanized area extends approximately 20 miles east to west and 25 to 30 miles north to south, at least 10 miles in all directions from downtown Orlando. As with most American urban areas, the city proper is largely landlocked by its suburbs and has jurisdiction over a relatively small part of the entire conurbation.

The difference in the nature of the urban area is not the only one that exists between Orlando and Olympia, though. The two cities represent entirely different interpretations
of the concept of planning as a regulator for development. Planning in Olympia is seen as a way to articulate a shared vision for how cities should appear and function. Planning in Florida—and especially in high-growth areas such as Orlando—is often considered more of a detriment to development and an additional bureaucratic layer. It is necessary to understand the importance of growth in Orlando, not only as important in its history, but also as quintessential to its character. Orlando is a city that embraces development and has since before its accelerated growth resulting from the 1971 opening of nearby Walt Disney World (Foglesong 2001; Wild 2003; see Appendices C1-C5 for the expansion of the geographic expansion of the city’s jurisdiction since 1950). The 1950 population of 450,000 in the Orlando metropolitan area grew to over 1.6 million in 2000 (Foglesong 2001), and two of the counties that the United States Bureau of the Census recognizes as a part of the area are among the fastest growing in Florida (Florida Department of Community Affairs 2002).

Fifty years ago, the two cities were probably similar. Neither had a strong industry that propelled growth. Neither faced any great development pressure, and perhaps more importantly, neither had any immediate prospects of economic expansion that would generate such development pressure. Olympia was quiet and provincial, a state capital sixty miles from a major metropolitan area. Orlando was quiet and provincial, a regional center for agrarian Central Florida making its living from citrus and cattle. In the absence of such inherent resources, Orlando has developed in the last thirty years through its accommodation of the tourism industry, particularly since the opening Disney World (Foglesong 2001). Although Florida is heavily dependent on tourism and has attractions and facilities throughout the entire state, the Orlando area is nonetheless the state tourism
capital, with a concentration of several major theme parks (including Walt Disney World), a major airport, and a location proximate to beaches.

Partly because of the problems associated with Disney-driven growth, Orlando and Orange County began to consider their future more carefully in the 1980s and 1990s (Foglesong 2001, ch. 6). Orlando in particular had an interest in preserving the quality of its in-town neighborhoods, yet at the same time recognized that it needed to accommodate the imminent development of the metropolitan area in order to remain economically and fiscally healthy. Around the same time, Florida began to implement statewide growth management programs that had been enabled by state legislation in the 1970s. The Growth Management Act of 1985 was the first legislation that addressed all jurisdictions throughout the state in establishing necessary standards for planning. As enabled in Chapter 163, Part II of the Florida Statutes (F.S.), it requires Florida’s 67 counties and 476 municipalities to adopt comprehensive plans guiding future growth and development (Florida Department of Community Affairs 2002; F.S. §163-II).

The different ways that vision for future growth and development of the city have been shaped reflect the difference between the concept of community and political organization in Orlando and Olympia. Although Olympia is not usually regarded as an epicenter of liberal politics, it is nonetheless a small community that respects and employs citizen participation in local government with an active, left-leaning student population that is large relative to its overall population. Orlando, on the other hand, arguably owes its present existence to a legacy of aggressive economic development and civic boosterism. It is not a place where the social and political mentalities of those living in the city proper can easily be separated from those living in its suburbs. The
current interest in developing the city into a denser, more mature urban environment is at least as much a product of economic development promoting an improved quality of life as it is a conscious attempt to focus development in the city in an attempt to mitigate urban sprawl.

Partially as a result of this, Orlando’s approach to urban design regulations has not been the same as Olympia’s. The city’s comprehensive plan establishes the urban design guidelines as a criterion on which development proposals are to be evaluated, but they remain a separate entity from zoning. Furthermore, they are not based on the same coherent community vision and restrictive legal devices as those that have influenced the course of Olympia’s plan. It is true that Florida’s state growth management program requires the designation of areas of different ‘grades’ of urban growth and allows for the establishment of a rural land area surrounding urban areas, but it does not pose the same concrete requirement for designation of growth boundaries as the Washington Growth Management Act.

Florida’s state growth management program, while known for being comprehensive, is also regarded as among the most prescriptive, least flexible in the United States. While the state’s counties and municipalities are required to prepare comprehensive plans under Section 163 of the Florida Statutes, they are also required to comply with guidelines established by the Florida Department of Community Affairs under Rule 9J-5 of the Florida Administrative Code. It is perhaps not a failure of Orlando to develop a more design-oriented system of planning than its current zoning, but rather the result of a restrictive condition that it faces.
Orlando’s focus has been to designate a Traditional City area within its city limits where standards for design are higher and reflect those of the form-based zoning concepts that have been developed by Duany and other architects and planners of New Urbanism. Planners and civic leaders first identified this area in drafting the city’s first comprehensive Growth Management Plan in the early 1980s, defining it as the intact core of the city’s pre-World War II development patterns (Wild 2003; see Appendices C1-C5, Appendix D). The area covered in the Traditional City designation is essentially the urban core of the Orlando city limits; that is, the urbanized, relatively dense area of the city’s jurisdiction and not the annexations of the airport and the commercial districts around the tourist attractions. This area incorporates roughly 10 square miles and a population of approximately 90,000 (City of Orlando 2002; US Bureau of the Census 2003). The Traditional City is defined as a distinct area from the rest of Orlando for purposes of implementing higher urban design standards based on the principles of traditional town and neighborhood design.

The Traditional City features heavily in the Growth Management Plan as the foundation of Orlando’s urbanism and the pattern and character of urban form on which future development in Orlando proper is to be based. Within this area, development is subject not only to the additional Traditional City requirements of the Growth Management Plan but also to the recommendations and advisory of the Appearance Commission and Urban Design Division of the city’s planning office. The Urban Design Division oversees any development proposals that are not permitted by right (that is, those proposals that require review of the Municipal Planning Board or the Board of Zoning Adjustment) and, as needed, consults with developers to communicate and
reinforce the goals of the Urban Design Element of the Growth Management Plan (Wild 2003). Additionally, Orlando has focused on the development of strategies that affect small areas and corridors instead of the entire city. The city and, by extension, the Growth Management Plan recognize the unique character of Orlando’s traditional patterns of urban development and wish to preserve them in any new building within the City.

Logistically, the Orlando Growth Management Plan addresses urban design in a separate chapter from land use, although the design portion sets provisions that the land use chapter must address. This organization of its ordinance is necessary under the requirements of Florida’s Growth Management Act (F.S. 163) and Chapter 9J-5 of the Florida Administrative Code, which specify that comprehensive plans must have a land use element. In keeping the two elements separate, the Orlando Growth Management Plan avoids conflict with the requirement of the state legislation. The city’s planning staff are organized similarly, with one division responsible for review of development proposals for plan and regulation compliance and another division responsible for aesthetic review and consultation on how development proposals could be altered, if necessary, to reflect the principles upheld in the Urban Design Element of the comprehensive plan.

In addition, the City has developed a pattern handbook for residential development (City of Orlando 2003; see Appendix E). This is a collection of blueprints for single-family, detached residential structures that demonstrates the architectural design standards that are permitted and consistent with the fundamentals of urbanism in the Traditional City. The city’s justification for this set of guidelines and its lack of
commercial, industrial, or other use types is that the scale and volume of residential development—that is, at the level of single structures at a time from many different developers—precludes individual staff attention to each problematic proposal. Commercial development, by contrast, happens less frequently and involves greater impact on infrastructure and public services. Proposing a set of design scenarios that developers may use for this type of development is seen as discouraging and limiting to the development that the city wants to encourage (Wild 2003).

Essentially, Orlando’s approach to integrating urban design is by a careful adaptation of an existing policy framework rather than through a radical change to its zoning system. This is perhaps a more typical approach in the context of American planning than a move to replace zoning with design regulations. However, it represents a balance between policy planning and physical planning, as civic leaders and planners recognized a need for attention to the city’s built environment and how the effects of the policies shaping development would actually appear. Orlando is too large a city to operate solely on the basis of planning by reviewing individual projects as they are proposed, so it requires policy planning to create a general regulatory framework in which development can occur. However, through the use of policies that delineate the aesthetic qualities of Orlando’s vision for urban development, and even further through the employment of a special urban design staff and appearance review, Orlando has retained an ability to incorporate urbanism into its planning program and to preserve the character of the city that existed before the area’s rapid growth and development began to occur.
Conclusions

The Use Question

This discussion inevitably begs a question about use: how can use be reconciled in form-based zoning? As we have seen, form-based zoning regulates land use through a focus on the form of buildings and how they constitute the physical environment of cities. The restrictions on use that it imposes are far more flexible and even permissive, and the function or use a particular building will be assigned is a secondary concern to the overall effect that development will have on urban form. Use is certainly still an important concern, however. To suggest the complete elimination of traditional, use-oriented zoning regulations would be both controversial and unproductive: a form of ‘zoning’ based on regulation of the aesthetics of building development is much more legally intangible than one based on land use.

First of all, form and design do not have to supersede traditional concerns about use. The two can coexist, especially since they are often complimentary (cf. Duany and Talen 2002). More often than not, a particular use tends to operate best in a particular type of building or pattern of development. By the very nature of the functions that are carried out within them, residential, commercial, and industrial uses each tend to encourage development of a limited palette of building types. This observation was expressed as early as the 1916 Zoning Ordinance for Manhattan, as crowding of previously residential areas by increasingly massive commercial buildings led to public concerns of health and welfare from the consequences of unrestrained building bulk (Barnett 1974: 30; Willis 1993). By regulating through a combination of general uses and building types (and especially how these building types interact with streets and other neighboring buildings),
zoning can limit the location of uses to a large degree by distinguishing form types. The aforementioned Planning Ordinance of Davidson, North Carolina (Town of Davidson 2002) is an example of this: its definition of building types is the primary classification of development patterns, followed by permitted-by-right uses and permitted-by-request uses. Not only can this separate out undesirable uses, it can also allow flexibility in use decisions, producing an urban environment that is inherently more usable than one in which land use alone governs location decisions.

Form-based zoning can also be applied selectively, as the example of Arlington County, Virginia illustrates. Arlington County adopted a Form Based Code ordinance in early 2003 initially intended for redevelopment of its Columbia Pike corridor. While the ordinance states clear specifications for architectural design standards, building bulk and massing, and relationship to the street (and is considerably more flexible with respect to use than Arlington County’s existing zoning system), the areas for which the Code applies are of equal status to other zoning categories. In other words, the form-based code areas have been integrated into the zoning ordinance as separate zones, and by reconfiguring the County’s zoning map, planners have applied them to the areas for which they were designed (Arlington County 2003). By using a specific zoning category that enables the provisions of a form-based system, planners can integrate design concerns with spatial distribution of use. The Arlington case demonstrates an example of applying form-based regulations in commercial areas and surrounding residential neighborhoods. Rather than applying form-based zoning to an entire area, the use of the ordinance through discretely zoned areas allows planners to focus the strengths of the form-based code on areas in which it is most effective.
However, zoning—whether it regulates solely use or use in conjunction with urban design and building form—is not the only policy instrument that determines the outcome of the spatial form of cities. Building codes, health codes, municipal incorporations and annexations, and even permitting and licensing also affect what uses operate in what locations. One implication of this argument is that zoning is often charged with responsibilities to which it is not suited. Certainly it is feasible for zoning to regulate the spatial proximity of different uses, even if the primary purpose of such a regulation is to mitigate the market effects of an ‘undesirable’ use on others for which land values are a concern. And as the 1916 ordinance of New York demonstrates, health, safety, and welfare of the public constitute ample justification for a comprehensive regulation on land use and development. Is it the intrinsic function of zoning, though, to determine the particular uses that can occur within a general area? Once a zone has specified the broad nature of the use, such as commercial establishments, private residences, or institutional facilities, must it then specify which types of uses, the parameters under which they may function, and how they are to be developed?

One commonly cited (and consistently controversial) example of this type of micro-management is the use of zoning to regulate adult business uses. For many reasons, some obvious, adult uses are controversial and raise concerns about land values, crime, and the adjacency of what is seen as anti-social behavior. Momentarily overlooking the philosophical concerns with the regulation of adult-oriented businesses, zoning has been ‘assigned’ the responsibility of addressing these uses. Under a use-specific zoning policy framework, it is often easiest to create new categories that deal exclusively with one of these controversial uses: the addition of a new category and subsequent re-mapping of the
distribution of zones allow planners to circumvent constitutional issues of due process and equal protection that may arise when these uses are proposed through mechanisms such as variances or conditional uses. Furthermore, the designation of separate zones for particularly problematic uses is a codified means of obeying overarching state legislation that places requirements or restrictions on their location. If zoning is to allow greater flexibility with regard to use so that it may focus more on building and development design, though, it seems necessary that a technical practice such as the creation and allocation of particular zones for controversial or undesirable uses only creates legal and administrative complications.

One possibility for the accommodation of both use and a more form-oriented context in how zoning guides development is the refinement—or creation—of peripheral policy frameworks that regulate use. One example is the use of licensing. The nature of licensing legislation requires that approval of licenses for uses be made on a case-by-case basis and not systematically, even if the criteria for which establishments. With respect to the spatial adjacency of uses deemed incompatible for health reasons, such as pollution-generating industrial uses locating near or next to uses that may expose their users to harmful effects, negative consequences are usually mitigated in health ordinances. Such ordinances can restrict location decisions for uses that are harmful or threatening, even following such simple mechanisms as specifying minimum distances from other existing uses and specifying quantities of pollution or waste that may be generated over a given amount of time.
Aside from this distinction, though, it is clear that enabling legislation is important. The Tenth Amendment of the United States Constitution delegates broad police power to states, and this power has been interpreted by courts to include the regulation of land use and development. In turn, the powers of regulating land use and development are delegated to the municipal level in most states, under the assumption that the local authorities have the best knowledge of the issues affecting their communities, but the state may still allow only certain policy instruments.

Regulating form and design relies on a method of distinguishing between urban and non-urban development, or at least, as with the various applications of the Transect, classifying different levels of urbanization and the patterns of development that they will accompany. Transfers of development rights are the most commonly used (and cited) method of accomplishing a separation from rural and urban landscapes, as they are often used to remove the legal option for development from land outside of urban areas in exchange for increased development opportunities in specified places inside the urban area. If statewide legislation does not authorize TDRs, though, as in North Carolina (cf. the aforementioned Davidson example), any restrictions on development outside of a designated area must occur on a quasi-informal basis.

More fundamentally, though, the legislative separation of rural and urban lands must be clear and strong for cities to justify the development of a form-based zoning system made necessarily by higher densities. The increase in density is legally difficult to defend and preserve if the restrictions on spatial expansion of the urban area are not well defined and well enforced. Washington’s growth management legislation states explicitly that all
counties and included cities that are subject to its requirements must designate growth areas “outside of which growth may occur only if it is urban in nature” (RCW 36.70A.040). While Florida does have legislation for the restriction of urban development, it exists in an entirely different context. Chapter 193.461 of the Florida Statutes, informally referred to as the ‘Greenbelt’ law, establishes language differentiating “agricultural” and “nonagricultural” lands for tax purposes and requires property assessment to classify land as agricultural or nonagricultural so that assessment and taxation are not based on speculative or potential value under development pressure (F.S. 193.461). To be sure, the intent of this law is to discourage urban sprawl and the development of urban uses on non-urban land outside of cities, but the extent to which it poses hard, strict requirements for the limitation of urban growth is weak at best. The Washington requirement for the establishment of growth areas and boundaries has allowed local governments to designate where their communities will expand and has guaranteed state backing through the state’s review of these local designations. The Florida designation, on the other hand, merely leaves the decision to convert rural land—which must be classified as such strictly through agricultural activity—to the landowners, who, regardless of the controlled valuation from the use that they have maintained, may find the profit to be earned from selling land for development of non-agricultural uses to be sufficiently encouraging.

Aside from vital elements of an urbanism-oriented approach to zoning that they may not authorize, state-level regulations that are overly restrictive pose problems for how local governments can determine a method of regulating land use that considers urban development differently than it is conceived from the state’s perspective. This is
particularly true in the case of Orlando, where Chapters 9J-5 and 9J-11 of the Florida Administrative Code specify minimum standards that local comprehensive plans must meet and outline the procedures by which they must be submitted and reviewed by the state Department of Community Affairs (FAC 9J-5, 9J-11). These laws preclude the ‘localization’ of state comprehensive planning legislation, as they subject all local governments to the same standard of review. The state requires that its specifications be met as a condition of plan approval, yet all local governments are required to have approved plans in effect. It is important, then, that states provide enough flexibility in their growth management programs to allow local governments latitude in shaping zoning and land use as they see fit. It is inevitable that cities of different sizes, economic compositions, and development pressures will have to accommodate different densities and patterns of building; therefore it is plausible that these cities may address how these patterns will be incorporated into regulatory ordinances for land use and development.

Currently, Florida is introducing such a mechanism of flexibility: the Local Government Comprehensive Planning Certification Program. This is a means of granting partial ‘exemption’ from the requirements of the Florida Administrative Code to local governments that demonstrate consistency in compliance with these requirements, exemplary comprehensive planning principles, and effective implementation of their comprehensive plans (FAC 9J-35; F.S. 163-3246). The end result is that these governments may operate with less state oversight of their comprehensive plan process for a certification area that they designate. Orlando and Sarasota are among of the five cities that have presented applications for certification in 2003 (Florida Department of Community Affairs 2003). The implication of the development of such a program is not
only that local governments that establish credibility with state organizations for their planning practices benefit from less stringent state control, but also that state authorities such as the Department of Community Affairs benefit from not having to review additional plans of communities that invariably each have their own idiosyncratic conditions.

Conclusion

Form-based zoning and the regulation of buildings and urban design, thus, have not yet been developed into an active instrument of planning policy. Indeed, as Duany and Talen state, it is still “legally difficult to build good urban places in the United States” (2002: 1445), largely due to what they note as a failure of planning to integrate the different concerns into which it has separated itself (such as economic development, transportation, and environmental planning) and its division of plan creation and implementation.

Indeed, the broad topic of zoning based on, or at least accommodating, urban form and design is still gaining currency in American planning. Local initiatives such as those in Davidson, Olympia, and Orlando represent only a small portion of planning policy throughout the United States, and even these examples have approached their general concerns through different contexts of state legislation. While concerns for the appearance of the built environment that results from planning policies have led, in some cases, to adapting the way development is regulated to express these concerns, zoning and land use regulations remain primarily tools of managing growth based on the spatial location of a city’s functions.
However, as planning as a general field returns to consideration of design as an important element of how to guide the growth and development of cities, perhaps the technical and often contested way of regulating development decisions based on land use will incorporate concerns on how these decisions affect the quality of the built environment. Visionaries such as Duany, as well as progressive local governments such as those in Orlando and Olympia, have helped to publicize an increasing focus on urbanism as a central element to planning. They demonstrate how legal instruments of development management can be innovatively integrated with strong ideals and principles to create planning codes for cities that consider the quality of the built environment as much as the physical location of uses and functions, and the precedents that they have established provide a foundation for other American communities to adapt their approaches to planning accordingly.
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Florida Administrative Code. 2001. Section 9J.


————. 2003. Personal communication.


————. 2003. Personal communication.


Appendix A. Examples of DPZ Transect

designer Leon Krier
Traditional European

James Wassell
Traditional American Town

Source: Duany Plater-Zyberk 2002b.
Dhiru Thadani
Washington, D.C.

Duany Plater-Zyberk
Model Transect

THE SPRAWL TRANSECT

Dan Zack
Conventional Suburban Transect
Appendix B. Samples of Visual Preference Cases and Design Illustrations from Olympia Plan

(1) Require that the architecture, window style and spacing, exterior materials, roof form and other design features of accessory units are similar to the primary structure on the lot and compatible with other adjoining structures.

(2) Allow only one accessory unit per lot.

(3) Establish parking requirements for accessory units to ensure that off-site parking problems are not created.

(4) Site and orient accessory units, to the extent practical, to maintain the privacy of residents in adjoining dwellings.

(5) Consider limiting the size of accessory units to a proportion of the size of the primary residence on the lot (e.g., 40 to 50 percent of the square footage of the primary residence) and limiting them to one bedroom. Also consider requiring that the height of the accessory structure not exceed the height of the primary residence on the lot. [NOTE: The accessory unit must be contained within the allowable building coverage and setbacks for the lot as established in the zoning ordinance.]

LU 8.3 Locate and design multifamily structures so they are compatible with adjoining lower density residences.

Source: City of Olympia 2002.
commercial areas in the trade area; and to make them more pleasant and appealing places for people to shop, live, and work.

REBUILD THE STREET EDGE

BEFORE

AFTER

LU 13.2 As funding permits, prepare and implement a comprehensive streetscape plan for each commercial area. This should include, as appropriate, installation of street trees, distinctive crosswalks, ornamental street lights, wide sidewalks, benches, pedestrian shelters, trash receptacles, drinking fountains, public art, and bike racks. These amenities should be installed all at once to achieve the greatest impact.

LU 13.3 Encourage development of town squares, plazas and "pocket parks", framed by commercial or civic buildings, to allow pedestrians to rest and interact, and to improve the city's appearance.

LU 13.4 Encourage the infilling of buildings along vacant sections of the street edge to improve the environment for pedestrians.

LU 13.5 Require building and site designs that are complementary to existing development and maintain or improve the overall appearance of the district. (See LU 8.4.)

a. Require new commercial and public buildings over three stories in height to have a clearly defined bottom, middle, and top.

b. Require commercial buildings to incorporate elements and architectural details that appeal to pedestrians (e.g., awnings and recessed entries). Civic buildings should have "classic" architecture and building materials.

(1) Concrete, masonry, tile, stone, and wood are preferred for exterior building surfaces.

(2) Discourage use of glass curtain walls and reflective glass. Prohibit such materials as the primary facade treatment. (See LU 8.4.)
COMMUNITY PREFERENCE FOR COMMERCIAL AREAS

c. Screen parking areas from the street and residential areas through landscaping, berms, walls, or combinations thereof. The landscaping design should take into account the security of parking lot users.

LU 13.7 Require landscaping to screen unattractive site features (e.g., large waste receptacles and mechanical equipment) and help provide continuity in the district.

LU 13.8 Ensure that new business signs are sufficient to identify the business, but not so garish, large, or numerous that they create visual clutter or dominate the character of the district. Low monument signs and signs mounted on building facades should be used where possible.

LU 13.9 Create visual continuity in arterial commercial areas that can be appreciated by motorists and pedestrians by coordinating site planning, landscaping, building design, signage, and streetscape amenities along the corridor.

GOAL LU14*. To make commercial areas easily accessible and inviting for transit riders, pedestrians and bicyclists, as well as motorists.

POLICIES:

LU 14.1 Require direct, convenient pedestrian access to commercial and public buildings. Direct pedestrian access should be provided from sidewalks and parking lots to
Appendix C1. Orlando City Limits in 1950

Legend and Symbols

Primary Roads
- Primary
- Secondary

Orlando City Limits in 1950
Lakes and Water Bodies
Traditional City Boundaries
Orlando International Airport (opened 1974)

1. Interstate Highway 4, opened 1959-1960
2. Florida's Turnpike, opened 1965
3. Bee Line Expressway (Fla. State Road 528), opened 1967
4. Holland East-West Expressway (Fla. SR 408), opened 1974
5. Orlando International Airport, converted to civilian use from decommissioned McCoy Air Force Base, opened 1974
6. Central Florida Greeneway (Fla. SR 417), first section opened 1988, completed 2002
Appendix C2. Orlando City Annexations, 1950 - 1965

Legend and Symbols

Primary Roads
- Primary
- Secondary

Orlando City Limits in 1950
Annexations through 1965
Traditional City Boundaries
Lakes and Water Bodies
Orlando International Airport (opened 1974)

1. Interstate Highway 4, opened 1959-1960
2. Florida's Turnpike, opened 1965
3. Bee Line Expressway (Fla. State Road 528), opened 1967
4. Holland East-West Expressway (Fla. SR 408), opened 1974
5. Orlando International Airport, converted to civilian use from decommissioned McCoy Air Force Base, opened 1974
6. Central Florida Greeneway (Fla. SR 417), first section opened 1988, completed 2002

Source: City of Orlando 2002; Foglesong 2001
Appendix C3. Orlando City Annexations, 1965 - 1975

Legend and Symbols

Primary Roads
- Orlando City Limits in 1965
- Primary
- Secondary
- Annexations through 1975
- Traditional City Boundaries
- Lakes and Water Bodies
- Orlando International Airport (opened 1974)

1. Interstate Highway 4, opened 1959-1960
2. Florida's Turnpike, opened 1965
3. Bee Line Expressway (Fla. State Road 528), opened 1967
4. Holland East-West Expressway (Fla. SR 408), opened 1974
5. Orlando International Airport, converted to civilian use from decommissioned McCoy Air Force Base, opened 1974
6. Central Florida Greeneway (Fla. SR 417), first section opened 1988, completed 2002

Source: City of Orlando 2002; Foglesong 2001
Appendix C4. Orlando City Annexations, 1975 - 1985

Legend and Symbols

1. Interstate Highway 4, opened 1959-1960
2. Florida's Turnpike, opened 1965
3. Bee Line Expressway (Fla. State Road 528), opened 1967
4. Holland East-West Expressway (Fla. SR 408), opened 1974
5. Orlando International Airport, converted to civilian use from decommissioned McCoy Air Force Base, opened 1974
6. Central Florida Greeneway (Fla. SR 417), first section opened 1988, completed 2002

Source: City of Orlando 2002; Foglesong 2001
Appendix C5. Orlando City Annexations since 1985

Legend and Symbols

Primary Roads
- Orlando City Limits in 1985
- Primary
- Secondary
- Traditional City Boundaries

Lakes and Water Bodies

Orlando International Airport (opened 1974)

1. Interstate Highway 4, opened 1959-1960
2. Florida's Turnpike, opened 1965
3. Bee Line Expressway (Fla. State Road 528), opened 1967
4. Holland East-West Expressway (Fla. SR 408), opened 1974
5. Orlando International Airport, converted to civilian use from decommissioned McCoy Air Force Base, opened 1974
6. Central Florida Greeneway (Fla. SR 417), first section opened 1988, completed 2002

Source: City of Orlando 2002; Foglesong 2001
Appendix D. Orlando Traditional City Designation

Legend

City-Designated Road Category
- Primary
- Secondary
- Tertiary

- Lakes and Water Bodies
- Orlando City Limits
- Traditional City Boundaries

Source: City of Orlando 2002; Foglesong 2001
Appendix E. Sample Pages from Orlando Pattern Book

The Orlando Pattern Book is a collection of house plans suited for the neighborhoods of Orlando.

These are not house “types” or artists’ visions, but real house designs with full construction drawings available. They work in Central Florida’s sultry climate, incorporating the time-honored techniques of prominent porches and overhanging eaves. A wide variety of houses are shown, ranging from “shotgun” style cottages of 1000 square feet, through one-and-a-half story bungalows, to gracious two story homes over 2000 square feet. All are appropriate in Orlando’s neighborhoods.

One of the most important features of many of Orlando’s neighborhoods is the public streetscape. Houses are lined up parallel to the street to create a varied and open “outdoor room” and the houses in the Pattern Book are envisioned to work in the same way. Garages are treated with restraint to let the houses take center stage. Each house in the Pattern Book is intended to add to the fabric of its neighborhood, which ends up being greater than the sum of the houses which make it up.

Outbuildings
Detached garages can be easily constructed as outbuildings, with extra space located above the garage. This space can be used as a home office, guest bedroom, or even a full studio apartment - three examples of which are provided at the back of the Pattern Book. As apartments, outbuildings elegantly add to the affordability of the neighborhood in two ways: first, the apartment itself is ideal for a student or single, and second, the rent it provides can be put against the mortgage of the main house.

Source: City of Orlando 2003.
Fifty foot lots provide for a number of parking options that preserve the streetscape. Plans in the Pattern Book show garages either moved back from the front of the house, or detached from the house and placed in the rear of the lot. Several houses feature a less expensive port-cochere as an alternative to a garage. Finally, corner lots present an opportunity to enter the garage from the side street.

Sideyard plans, such as LRK 95034 (page 29), are laid out with the yard to the side of the house, on narrower lots. Replatting two 50’ lots into two 30’ and one 40’ lot, as illustrated below, allows sideyard houses to be built with garages at the rear of the homes, served by a common driveway.

This collection is intended to capture the feel of Orlando’s neighborhoods, and ensure that they are able to continue to thrive.