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# Guiding development : an analysis of zoning and four alternatives

Caitlin Doyle Cottrill

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I am submitting herewith a thesis written by Caitlin Doyle Cottrill entitled "Guiding development : an analysis of zoning and four alternatives." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Planning.

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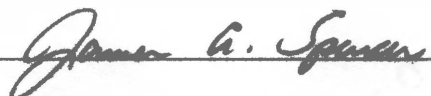
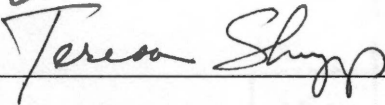
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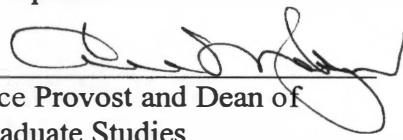
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Acceptance for the Council:

  
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Graduate Studies

**Guiding Development:  
An Analysis of Zoning and Four Alternatives**

A Thesis  
Presented for the  
Master of Science in Planning  
Degree  
The University of Tennessee, Knoxville

Caitlin Doyle Cottrill  
May 2003

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Lastly, I wish to thank my family, without whose support this thesis would not have been possible.

## **Abstract**

The purpose of this thesis was to examine the benefits and weaknesses of traditional zoning as they pertain to guiding urban development. This analysis was followed with an evaluation of the strengths and weaknesses of four alternatives to traditional zoning to determine in what ways they mitigated the negative effects of zoning while maintaining its beneficial aspects. Based upon these evaluations, a decision matrix was created to provide for a concurrent examination of the ways in which each technique was successful in serving the purposes of the criteria. Finally a set of recommendations was provided to improve the regulatory guidance of urban form.

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# CHAPTER 1

## INTRODUCTION AND BACKGROUND

### **Purpose of the Study**

The purpose of this thesis is threefold. First, it is intended to provide a general overview of both the benefits and consequences of zoning as currently practiced in the United States. Secondly, it will provide an effective tool for examining various alternatives to zoning. Finally, I hope to formulate a set of recommendations which will prove more effective in guiding urban development.

### **Introduction**

Comprehensive zoning first emerged in the United States in New York City in 1916. The issuance of the Standard Zoning Enabling Act in 1924, followed closely by the landmark Supreme Court case of *Village of Euclid v. Ambler Realty Co.*, validated zoning's place as an accepted use of the police power. In the years since its inception, zoning has been widely embraced by a myriad of municipalities, and proponents have argued that it serves the two primary functions of reducing land-use related nuisances and maintaining property values in addition to the functions it serves in terms of promoting the health, safety, and welfare of the population. However, critics of zoning maintain that the use of this police power is degrading our

cities by reducing the density and diversity of urban areas, victimizing racial minorities and lower socioeconomic classes due to its exclusionary tendencies, and contributing to sprawling automobile-oriented development due to its rigid segregation of land uses.

In this thesis, I hope to examine each of the above arguments to determine where zoning has succeeded and where it has failed. Additionally, I intend to analyze various suggested methods of addressing these issues through alternatives to traditional zoning (such as performance zoning, transit oriented development, and transect planning) to determine their effectiveness in achieving the claimed and intended benefits of zoning while minimizing its negative consequences. Finally, a set of recommendations will be made as to how planners may more effectively use regulatory means to guide urban development.

## **Background**

Since zoning's inception in New York City in 1916, it has spread to nearly every municipality in the United States. Nearly 9,000 American cities and municipalities have zoning ordinances in place, serving 90% of the US population. (Karkkainen, 1994) Rarely, if ever, has there been a regulatory land use mechanism embraced so wholeheartedly by such a wide variety of places; however, the sheer number of zoning ordinances in place belies the degree to which zoning is accepted as an efficacious use of the police power to successfully guide urban development. Zoning is intended to serve as a police power to promote the health, safety and

welfare of the population through the use of height and setback controls, land use controls and density controls. However, its efficacy in serving its stated purposes is often called into question. As early as 1964, John Reps stated that, “Zoning is seriously ill and its physicians—the planners—are mainly to blame...What is called for is legal euthanasia, a respectful requiem, and a search for a new legislative substitute sturdy enough to survive in the modern urban world.” (Reps, 1964) Rarely has such a widespread tool inspired such heated debate over whether it will save our cities or degrade them to ruin.

Supporters of zoning argue that, due to its effectiveness in separating incompatible uses, zoning has proven beneficial both in the reduction of land-use related “nuisances” and the enhancement or stabilization of the economic value of zoned property. According to William Wheaton, “Noise, pollution, and public health or safety are the most frequent justifications for separating uses and requiring minimum lot sizes, setbacks, or building standards.” (Wheaton, 1989) The arguments for the use of zoning as a tool to achieve these ends are quite pervasive, and they, in turn, add credence to the second argument for zoning—that of economic value.

It is in the area of property value that zoning has received some of its highest accolades. Bradley Karkkainen, in his article *Zoning: A Reply to the Critics*, states that one of the traditional arguments in favor of zoning hinges on this question of economic value. He states:

Zoning advocates suggest that zoning is necessary to protect or enhance property values, particularly the values of residential properties...On this analysis, zoning serves principally to protect property owners from the negative externalities of new developments. (Karkkainen, 1994)

Though Karkkainen himself disagrees with this argument, it is one of the most pervasive in the continued use of zoning ordinances. Shlay and Rossi argue that,

[Z]oning is designed to 'protect' property values on behalf of home owners. By segregating perceived deleterious land use, zoning acts as a brake upon market forces. As an economic policy, zoning distributes land use so that property will have maximum value on the market. (Shlay and Rossi, 1981)

These arguments speak to one of the foremost forces in contemporary urban policy—economic value of private property.

These two primary arguments do speak to qualities of zoning which should be maintained. However, the arguments against zoning are far more numerous, and attack the issue from a wide variety of angles. Perhaps the most pervasive argument against zoning is the effect it has on the ability of humans to interact with the built environment and each other. In his book Community Design and the Culture of Cities, Eduardo Lozano defines the concept of urbanity as “the potential capacity of the inhabitants of a town or city to interact with a sizable number of people and institutions concentrated in that town or city. This large potential for interaction is created by density and, in turn, encourages higher density.” (Lozano, 1990) The provision for *human interaction*, in terms of density and diversity, is precisely what is missing from our cities as they are designed today. Kenneth R. Schneider states that,

“...zoning *segregates* urban activities that need to be close to one another. Rather than integrating varied functions into rational proximities, zoning separates them, reduces their common (urban) efficiency and deprives individuals of rich cosmopolitan interaction.” (Schneider, 1979) This quality of interaction as promoted by density and diversity of activities and population is one of the most fundamental in creating a dynamic urban environment, and zoning has been fairly criticized for its inability to contribute to this need.

A second criticism against zoning has to do with its ability to be used for exclusionary purposes. Shlay and Rossi found that zoning “tends to increase neighborhood income segregation” in suburban areas, though they found no evidence of racial segregation. (Shlay and Rossi, 1981) However, the National Committee Against Discrimination in Housing has stated that,

[T]here can be no effective progress in halting the trend toward predominantly black cities surrounded by almost entirely white suburbs...[u]ntil local governments have been deprived of the power to exclude subsidized housing and to manipulate zoning and other controls to screen out families on the basis of income and, implicitly, of race.”  
(Quoted in Danielson, 1976)

This ability of zoning to be used to exclude marginalized groups is one of its most criticized characteristics.

The final overarching argument against zoning lies in its contribution to sprawl. Sprawl is defined by the Transit Cooperative Research Program as, “low-density, leapfrog development that is characterized by unlimited outward expansion.”

(TCRP, 2002) Zoning is perfectly suited to sprawling development due to its rigid separation of land uses and low permitted densities. Such development has the additional negative consequences of increased auto use and associated fuel consumption, air pollution, urban run-off, and carbon emissions.

It is critical at the outset to note the distinction between the framework of zoning and the policy content that emerges based on both the framework and local political considerations. The acknowledgement of this distinction is needed in any analysis of zoning, as many of the criticisms given of zoning are a factor not of the framework, but rather the way in which it is used. However, it is also important to note that the structure of the zoning framework does allow for decisions to be made which will have negative consequences on the development of urban areas.

The problems inherent in zoning have been addressed in a number of ways, ranging from performance zoning to transit oriented development to New Urbanism to transect planning. However, as Jay Wickersham states, “instead of reforming the underlying system, we have erected on top of it a ramshackle superstructure of projects.” (Wickersham, 2001) These approaches to zoning reform have resulted in varying degrees of success when evaluated on a project-by-project basis. However, an overhaul to the overall system of zoning remains necessary.

## **Research Questions**

### *Primary Question*

- How may planners use regulations to guide urban development in such a manner that we maintain the beneficial aspects of zoning while avoiding its negative consequences?

### *Secondary Questions*

- What are the primary arguments for and against zoning and what are their justifications?
- What approaches have been used to modify zoning and how effective have they been?
- What changes should be made to the overall system of zoning to guide and improve urban design?

## **Methodology**

Given the theoretical nature of the thesis topic, supporting evidence will primarily rely on an extensive literature review. For the purposes of evaluating the effects of both zoning and modified approaches to zoning, a decision matrix will be created to allow for a concurrent examination of land use regulatory devices in addressing a number of urban issues. Finally, based upon this matrix, a series of recommendations will be made to guide future development in place of zoning.

## **Organization of the Thesis**

The thesis is organized into seven chapters. The initial chapter is intended to introduce the topic and give some general background as to the purpose and content of the thesis. Chapter Two provides a brief background and case study as to the introduction of zoning in the United States. Chapters Three and Four evaluate the benefits and consequences, respectively, of zoning as practiced in American municipalities. Chapter Five examines some alternatives to traditional zoning that have been recommended or put into place. Chapter Six provides a decision matrix intended to compare the benefits and consequences of zoning as opposed to discussed alternatives. Finally, Chapter Seven provides recommendations, based on the examination of traditional and alternative zoning practices, on how to more effectively guide urban development through regulatory means.



## CHAPTER 2

### A BRIEF INTRODUCTION TO ZONING: THE NEW YORK EXPERIENCE

#### The German Origins of Zoning

The concept of zoning originated in Germany in the late 1800's. Rapid population growth and the expansion of cities had led to conditions deemed intolerable by German officials of the day, and the political system was such that the government was able to step in and provide for the districting of German cities into zones of use. These zones were designed to separate uses into compatible districts as well as to establish regulations to dictate the allowed coverage, height and setback of buildings. As stated by B. Antrim Haldeman at the Fourth National Conference on City Planning:

Thus we find that within the span of about a quarter of a century the industrial classes of Germany have been translated from hovels and dens reeking with disease, degeneracy, and vice, to pleasant homes, surrounded with all the comforts, conveniences, and privileges that make for health, happiness, and good citizenship; and this has been accomplished mainly by breaching the one-time sacred wall of vested rights and establishing the principle that the economic progress of the nation and the integrity of its social fabric transcend the prerogative of the individual. (Haldeman, 1912)

The success of zoning in directing the growth of German cities was not lost on American professionals and reformers interested in both the social and economic

guidance of the growth of American cities. According to Liebmann, “German zoning had its roots in the desire of residents of an increasingly crowded country to conserve unspoiled land and to protect residences against noxious industrial and commercial uses.” (Liebmann, 1995) These goals, and the German cities which successfully achieved them, profoundly influenced the introduction of zoning in the United States.

According to Seymour Toll in his book Zoned American, Frederic Law Olmstead was one of the earliest supporters of German-style zoning. At the 1909 Conference on City Planning, Olmstead stated that, “One of the most fundamentally important features of recent city planning in Europe has been the system of differentiated building regulations ...[intended] to give each district as nearly as possible just what it wants, to protect it from deterioration at the hands of a selfish minority, and to give stability to its real-estate values.” (Quoted in Toll, 1969) Toll goes on to say that, “He [Olmstead] reported that the real estate men of Hamburg found that their city’s zoning regulations were achieving those aims. In addition, the Germans had designed the controls to prevent the spread of congestion to the outlying areas of their cities.” (Toll, 1969) This interpretation of the success of the concept of zoning in Germany played a fundamental role in zoning’s introduction and acceptance in the American cities of the early 20<sup>th</sup> century.

### **The Introduction of Zoning**

The problems that led to zoning’s introduction in Germany were in some ways similar to problems being experienced in the United States. Social workers such as

Jane Addams and such works as Jacob Riis' How the Other Half Lives were bringing the conditions of immigrant and lower-class workers and overcrowded tenement houses to the eyes of many, giving zoning an appeal to many of the reform-minded activists of the day. The 1909 conference, in which the concept of zoning was introduced to the American planning scene, attracted attendees with a wide variety of urban-related concerns. According to Toll, "Two federal cabinet officers chaired sessions. Herbert Croly, then the editor of the *Architectural Record*...was there along with President Carey of Bryn Mawr College and municipal reformer Frederick Howe. Jane Addams and Mary Simkhovitch were on a committee which also included the president of the Baltimore Municipal Art Society. Professional organizations of architects, landscape architects, and civil engineers sent representatives." (Toll, 1969)

The overarching concern of the conference was to improve the living conditions of urban dwellers. In reference to a speech given by Henry Morgenthau in which he stated, "We can make city plans establishing factory zones and residence zones and have every building used for residential purposes so arranged that sunlight can reach some part of the building at some time of the day", Toll asserts that, "In suggesting the idea of planning for zones, Morgenthau struck a major chord of the American planning movement." (Toll, 1969)

The idea of planning for zones was made in reference to improving the living conditions of city dwellers, but it soon became obvious that this would not be the only, or indeed the main, purpose served. In his article "Professors, Reformers, Bureaucrats, and Cronies: The Players in *Euclid v. Ambler*", William Randle states

that “The original agenda of the planning conferences (to solve the problems of urban congestion and improve living conditions in cities) was ephemeral. ‘When the conference met the next year...it was obvious that the architects and engineers...had taken over.’” (Randle, 1989) The place of the municipal reformers was quickly overtaken by those more interested in how to use the potential power of zoning for their own gain.

### **The New York Experience**

New York’s Fifth Avenue Association had formed in 1907 to begin to deal with what was called the “loft problem.” According to Makielski in his book The Politics of Zoning: The New York Experience,

The majority of the members of the association were retail garment merchants. Reasonably enough, garment manufacturers located their factories (or rather their “lofts” where the clothing units were assembled) as near to their principal buyers as possible. This reduced the cost of transportation to the retail outlets for the manufacturers and also simplified dealing with the stores’ buying agents. During the noon lunch hour and at closing time, however, times when large numbers of shoppers were in the streets, the loft workers poured onto the already crowded sidewalks—and, in the opinion of the merchants, drove away customers. Further, the wagons and delivery trucks added to the congestion in the streets. (Makielski, 1966)

The Fifth Avenue Association was to become one of the major players in the establishment of zoning in New York City. In 1911, the Association, frustrated by its inability to establish a solution to the loft problem, approached Manhattan borough president George McAneny with their complaints of: “congestion, declining land

values, declining numbers of shoppers, and no stopping the process.” (Makielski, 1966) McAneny responded by creating the Fifth Avenue Commission. In 1912, the Fifth Avenue Commission (composed of seven members, all but one of which were members of the Fifth Avenue Association) made a recommendation, sponsored by McAneny, to the Board of Estimate and Apportionment that the height of buildings on Fifth Avenue be limited to 125 feet, and 300 feet to the east and west. (Makielski, 1966) Toll states that, “The point of the recommendation was quite clear, but its method was indirect. If building height were limited, further garment loft building would be discouraged and would presumably go elsewhere to areas without such restrictions.” (Toll, 1969) The report was largely ignored for the remainder of 1912, and it was not until McAneny went before the Board on February 27, 1913 with a resolution calling for action in regards to the merchant’s complaints that the matter was more fully addressed. McAneny proposed that the mayor of New York be authorized

...to appoint a committee...to ascertain...whether, in their judgment, it is desirable to regulate the height, size, and arrangement of buildings hereafter to be erected...and to consider and report upon the question of the legal right of the City of New York to regulate building construction in the manner proposed...Such Committee may also investigate...whether it would be lawful and desirable for the purposes of such regulation to divide the City into districts or into zones. (Makielski, 1966)

The proposal was unanimously accepted, and within a month the advisory Commission on the Height and Arrangement of Buildings, including McAneny and the borough presidents of the Bronx and Brooklyn, had been appointed with the

intention that they appoint the commission itself. Toll states of the composition of the final committee, "The nineteen commission members were on the whole prominent citizens several of whom were men of deserved distinction. There were more realtors than men from any other calling, but architects and lawyers were also well represented along with the Fifth Avenue Association." (Toll, 1969) This commission was charged with the task of determining whether or not it would be desirable to divide the city of New York into various zones of activity.

One important factor to note in the composition of the committee is its heavy emphasis on real estate and other economic interests. The second set of interests, that of the reformers, was represented by only three members. (Toll, 1969) Edward Bassett, commission chairman, is described by Makielski as being of the Reform movement. He states, "His interests were primarily in the physical development of the city and he felt more at home with architects and engineers than with his fellow-lawyers. Of an undramatic and economical turn of mind, he was archetypal of the planning ideal: pragmatic, persuasive before an audience, frugal, interested in physical planning, and, paradoxically, a dreamer." (Makielski, 1966) Of the two groups, however, it was obvious from the beginning that the true power rested with those concerned with property value. Toll notes that, "[T]he reformer-planner types like Bassett ... were essentially in sympathy with the objectives of the owners, however divergent their reasons. Despite genuine professions about making zoning the major instrument of American urban planning, their pioneering work turned out to

be an exercise in drafting the will of a handful of New York's property owners.”

(Toll, 1969)

The Commission's final report was not limited to Fifth Avenue, but rather asserted that the problems being experienced by Fifth Avenue were representative of problems within New York City as a whole. This was a politically expedient move, designed to add validity to the recommendations being made. The final report consisted of one chapter detailing the need for zoning, and one chapter focusing on the validity of relying on the police power as a means of establishing zoning's legality. Makielski states that, “[The] conclusion was inevitable: the city, if delegated the appropriate authority by the state, could regulate the heights and uses of buildings.” (Makielski, 1966) The final part of the report consisted of appendixes, including a draft bill which, if passed, would enable the Board of Estimate to regulate the heights and uses of buildings, as well as a draft resolution for a board to continue the work of the original commission. Both bills were passed by the state legislature in 1914.

The work of the second zoning commission was begun in June 1914 after a new board had been appointed. The overall nature of the representation on the board (primarily architecture, law, real estate, retail trade, manufacturing, and labor) was roughly similar, though borough representation was designed to be more inclusive beyond Manhattan. Bassett again served as chairman. According to Makielski, “The Second Commission faced an immense and dual task. Its first labor was almost

purely technical: gathering and digesting the data necessary to evolve a coherent districting plan...The second task was political: winning friends, convincing the dubious, generating interest, and quashing opposition.” (Makielski, 1966) It was the second task that was to prove most difficult, especially in terms of proving the constitutional legitimacy of zoning. According to Toll, “The 1914 enabling legislation did not calm the doubts of some gifted lawyers who believed that the whole effort was unconstitutional. They felt that only an amendment to the state constitution would cure the difficulty.” (Toll, 1969) This hesitancy to accept the validity of zoning would come into play in later years in such court cases as *Euclid v. Ambler*.

The second commission spent two years gathering information, talking with people, and preparing for their final report. In early 1916, the Fifth Avenue Association, displeased with the lack of action on the part of the second commission and anxious to see changes made which would serve the needs of their businesses, assisted in its own way with a tri-part strategy: “cut off loft building funds, get zoning enacted, and impose a drastic boycott.” (Toll, 1969) The success of the “Save New York” campaign and the support it received from business and political interests as well as New York’s citizens placed the possibility of enacting zoning legislation well on its way to success. In March and April of 1916, a series of hearings on the preliminary report of the second zoning commission were held, and in June of that year the final report was published.



The final report of the commission dealt with three areas of concern: use restrictions, bulk restrictions, and administrative provisions. The use restrictions divided the city into four types of districts, including residential, business, unrestricted, and undetermined. The bulk restrictions were designed to regulate the height and size of buildings within each district. Finally, the administrative provisions provided guidance for enforcing the code, including the creation of the Board of Standards and Appeals” which would hear all appeals from the restrictions zoning imposed.” (Makielski, 1966) These three subjects would form the basis upon which future zoning ordinances would be modeled.

Interestingly, given the intense pressure exerted by commercial interests in the process of establishing zoning, it was housing that ultimately benefited most from the proposed ordinance. “The New York Zoning Code...relied on a ‘pyramidal’ approach to permitted uses. That is, in the residence zone—considered the ‘highest’ zone classification—nothing but residences were permitted. In the commercial zone, the next lower zone on the pyramid, commercial uses and residences were allowed.” (Gerckens, 1994) According to Raphael Fischler, “The Commission’s Final Report, as a whole, presented the protection of the home as a primary goal of the proposed regulations. In an article entitled “A City of Homes’ Aim of Zoning Plan,” a journalist for the New York Times commented: “[I]t is this importance of proper home life that is the keynote of the report.” (Fischler, 1998) The importance given to residential districts is perhaps most clearly seen in the treatment of New York’s associated boroughs. Fischler states that, “[T]he makers of the 1916 resolution

deliberately sought to regulate development in the outer boroughs in order to prevent the spread of urban congestion to newly urbanized areas.” (Fischler, 1998) Because the zoning ordinance was intended to guide future development, it could not be used as the tool to reduce current congestion, but it could be used to ensure that the pattern of residential congestion did not continue.

### **Ramifications of the ordinance**

The New York City experience ultimately led to a proliferation of zoning ordinances around the United States. The creation of the Standard State Zoning Enabling Act in 1922 enabled individual states to allow their municipalities to create zoning ordinances, and many did so (a recent estimate puts the number at 9,000 (Karkkainen, 1994)). Zoning’s constitutional legitimacy was tested and validated by the Supreme Court in 1926 in *Euclid v. Ambler*. Though the specific guidelines mandated by each ordinance differ from municipality to municipality, the three primary elements of zoning (the regulation of height and setback, use, and density) remain the same. The problems that motivated New York to embark upon the movement towards zoning—the desires to segregate incompatible land uses, preserve property values, and protect areas from becoming overcrowded—still impact zoning decisions today. However, the goals and objectives which guided the creation of the initial ordinance have also led to numerous unintended and negative consequences. It is notable that the key foundations of zoning’s initiation—economics, density, and

segregation of uses—have contributed both to zoning’s greatest adulation and harshest criticisms.

## **Conclusion**

The New York City experience presents a microcosm of the experiences that many municipalities have encountered in their march towards zoning. By understanding those factors that led to the introduction of this manner of regulatory guidance of development in the United States, the problems which zoning is intended to solve become clearer. Though some of the initial issues today may be regarded as inconsequential or illegal (such as the attempt to exclude certain immigrant groups from higher-income areas), the desire to protect property values and guarantee that future development will not create nuisances for existing land uses remain at the forefront of the rationale for zoning. The next two chapters will examine the extent to which these issues have been successfully addressed through zoning ordinances.

## CHAPTER 3

### THE BENEFITS OF ZONING

#### **Introduction**

The multitude of zoning ordinances across the United States is proof of the ubiquitous nature of this form of development regulation in the minds of those charged with designing urban form. The original impetuses for zoning were elucidated in the previous chapter, and in this chapter we will revisit two of them, namely, economics and the segregation of land uses to avoid nuisances. Arguments resting on these two premises have been the ones most frequently cited by zoning's proponents, and it is true that in many ways they are substantiated by experience. In the context of this paper, it is important to flesh out the arguments in order to understand how the system of land use regulation required by zoning is beneficial in these two areas.

#### **The Economic Argument for Zoning**

As noted in the previous chapter, one of the strongest factors influencing the introduction of zoning in the United States was the preservation of property values. This factor continued to play an important role as the practice of zoning spread to municipalities across the country. Inherent in the concerns of many property owners

and developers was the presence of negative externalities which could adversely affect the value of private landholdings. Haar and Kayden explain the situation in the following way:

Negative externalities occur when one landowner pursues his or her own self-interest in a way that negatively affects neighbors and that landowner is not forced to pay for such negative effect. For example, a landowner may decide to build a factory that pollutes the air near a residential area. The pollution adversely affects the neighborhood, reducing property values, but the polluting landowner has no reason to consider costs imposed on others and thus has no incentive to reduce or eliminate pollution. Economists would say that the price system fails to reflect the true social cost to the landowner. (Haar and Kayden, 1989)

Zoning's proponents argue that by eliminating the possibility of such externalities, the imposed segregation of land uses provides a certain level of stability in land values and ensures that private landowners will not be forced to pay the price of unsuitably located land uses.

A second factor in the economic argument for zoning is concerned with the allocation of land across a municipality. As stated by Shlay and Rossi in "Keeping up the Neighborhood: Estimating Net Effects of Zoning", "[Z]oning is designed to 'protect' property values on behalf of home owners. By segregating perceived deleterious land use, zoning acts as a brake upon market forces. As an economic policy, zoning distributes land use so that property will have maximum value on the market." (Shlay and Rossi, 1981) The validity of this argument may be best understood by looking once again to externalities. Under pure market conditions, not

taking externalities into account, the higher price generally paid for commercial or industrial land over residential land would influence many landholders to sell their land only for commercial or industrial use. This, in turn, could lead to an oversupply of commercial and industrial land at the expense of residential development to the point where people are willing to pay more for residential land. Eventually, the two sides would balance themselves out at a point where the prices paid for commercial, industrial, and residential land are at an optimum level. In the presence of externalities, however, an area of inefficiency is created where certain land uses are inappropriate for a given location and the market cannot create the balance necessary. Zoning attempts to mitigate the consequences of that inefficiency triangle by determining, taking externalities into account, the best allocation of land uses to create an optimum economic situation.

Finally, a third economic argument for zoning lies in the use of “fiscal zoning,” or “The warping of land-use regulations to help solve some public financial problem.” (The American Society of Planning Officials, 1968) Zoning can be used, and often is used, as a tool of planning policy to attempt to slow or direct growth in such a way that the municipality is not overburdened with expenditures related to increasing development. According to Shlay and Rossi, “To preserve the taxable value of land while limiting the tax rate, a community may exclude potential negative externalities and simultaneously fence out land users who might not ‘pay their way’.” (Shlay and Rossi, 1981) The use of zoning to avoid increasing taxes or to help pay for services which need to be afforded to residents may follow a variety of paths,

including large-lot zoning, overzoning for commercial or industrial establishments, limiting the number of multiple-family residences (such as apartment buildings) allowed, or placing strict growth control measures into the zoning ordinance. This method of addressing the fiscal needs of municipalities may not be stated as the primary consideration for zoning, but it is a convenient way for many municipalities to guide development in a way that minimizes financial pressures. This use of zoning, though often considered questionable, has been validated by the courts in such cases as *Golden v. The Planning Board of the Town of Ramapo* (1972). In the *Ramapo* case, the New York town had used zoning and subdivision regulations in conjunction with the comprehensive plan to slow what had become untenable growth. The policy of using zoning to help control growth was argued before the court in terms of a taking issues based upon devaluation of property; however, it was found that:

The State of New York's zoning enabling legislation permits the Town of Ramapo to amend its Zoning Ordinance to insure phased growth. The legitimate zoning purposes of the amendments, which delay development of property in some areas for up to eighteen years depending on the availability of municipal facilities, are avoidance of undue concentration of population and facilitation of adequate provision of transportation, water, sewage schools, parks, and other public requirements. The regulation is not exclusionary; it seeks to control, not to prevent, growth. Although the amendments temporarily limit the use of, and may depreciate the value of, property in Ramapo, there is no unconstitutional taking of property because it has not been shown that the regulation is either unreasonable in terms of necessity or that the diminution in value is such as to be tantamount to a confiscation. (Environmental Law Reporter, 1972)

The decision that this use of zoning was not in violation of the Fifth Amendment has opened the power of zoning to be used as a way of regulating growth such that the needs of the municipality it serves, for such things as acceptable timing of infrastructure provision, are accounted for in the overall development of the municipality.

Karkkainen argues that, “Zoning in urban neighborhoods is not merely a system for protecting the market values of a individual properties, but rather is a device to protect neighborhood residents’ interests in their entirety, including consumer surpluses in their homes, as well as their interests in...the neighborhood commons.” In effect, he is arguing that zoning is not a tool used only for the protection of private property values, but rather spreads beyond to the overall value of the area in which the zoning ordinance is in place. If regarded in this manner, then zoning may be seen as benefiting not only residential property owners, but also the municipality as a whole. Theoretically, if a general plan of development and future growth of a city is known, then developers will be more likely to invest in that city given that they have some assurance that their development value will be protected, thus making people more likely to buy. In this way, the city and its residents will also benefit from this regulatory-controlled growth and the economic advantages it brings about.



## The Nuisance Argument for Zoning

Much of the economic argument for zoning, resting as it does on the presence of externalities, ties directly to the nuisance argument for zoning. Nuisance laws stretch back well before the time of zoning, with San Francisco playing the leading role. Laurence Gerckens states that, “The earliest modern application of the land-use zoning power in the United States was initiated in 1867 in San Francisco to isolate obnoxious land uses in such a way as to protect the environment, both physical and social, of existing residences.” (Gerckens, 1994) Indeed, nuisance law was well established in both municipalities and the courts as a valid use of the police power before the advent of comprehensive zoning. The 1915 Supreme Court case of *Hadacheck v. Sebastian*, in which Los Angeles’s nuisance zoning was contested, validated districting or zoning as a proper use of the police power, thus leaving the door open for comprehensive zoning, and acting as a precedent case for *Euclid v. Ambler*.

In *Euclid v. Ambler*, the first United States Supreme Court case to directly address the constitutionality of zoning, Justice Sutherland made the following analogy:

[T]he question whether the power exists to forbid the erection of a building of a particular kind or for a particular use, like the question whether a particular thing is a nuisance, is to be determined, not by an abstract consideration of the building or of the thing considered apart, but by considering it in connection with the circumstances and the locality. A nuisance

may be merely a right thing in the wrong place, like a pig in the parlor instead of the barnyard. (*Euclid v. Ambler*, 1926)

In considering “nuisances” to be defined by the context in which they were located, instead of simply by the function they served, it became possible to justify that zoning did not violate the 14<sup>th</sup> Amendment right of equal protection under the law. Because the uses themselves were not restricted, but rather divided as permissible in certain defined districts, they were in fact being treated equally in the district in which they were located. This ability of zoning to legally and consistently segregate incompatible land uses, or nuisances, was one of the strongest factors in its wide acceptance across the United States.

The separation of incompatible uses has continued to be one of the strongest factors guiding zoning practices in the US. The degree of separation depends in great part on whether hierarchical or mutually exclusive zoning is the mechanism used.

The difference in the two methods is clearly laid out by Asabere and Huffman:

Hierarchical zoning...is unidirectional in that it protects upper-level residential uses from incompatible, non-residential uses but not vice-versa. Lower uses such as industrial are prohibited from zones in the upper hierarchy. However, hierarchical zoning allows the highest uses to choose from land in any zone. The result is that the lower-level zones can be a mixture of several nonconforming, incompatible uses. (Asabere and Huffman, 1997)

Mutually exclusive zoning, on the other hand, is defined as a situation “where zones are completely separated such that an upper-level use like residential is not allowed to locate wherever it chooses...” (Asabre and Huffman, 1997)

Both hierarchical zoning and mutually exclusive zoning are primarily designed to protect the interests of the homeowner. According to Shlay and Rossi, “Zoning’s benign intent is to protect residential neighborhoods from the congestion, noise, traffic, pollution, and general ugliness associated with commerce and industry.” (Shlay and Rossi, 1981) However, mutually exclusive zoning forces the protection of the “highest use”(single family residential areas) by making it impossible for this use to exist in conjunction with lower uses, whereas hierarchical zoning leaves more choice to the housing consumer (given that one may choose under which zoning ordinances he is willing to live). In either case, the intent is to protect the higher use from the externalities associated with a lower use. For example, an industry located in a predominantly residential neighborhood may be expected to burden the surrounding area with an overabundance of traffic from employees and deliveries, noise from machinery, smoke from industrial processes, and an amount of waste products in excess of what may be reasonably handled by existing facilities. By segregating these uses, these by-products of an industrial location may be placed in an area where they will not harm the prevailing land uses and property values.

Besides the use restrictions, height and setback requirements may also be considered to prevent nuisances. Using the New York example, the growing number of skyscrapers being built at the time that New York was undergoing the initiation of zoning had led to numerous complaints regarding lack of natural light, to the extent that some property owners had won tax breaks due to the permanent shadows cast over their buildings by nearby skyscrapers. The Equitable building, erected in 1915,

was a prime example of this. It rose 40 stories and had no setbacks, thus placing permanent shade on the surrounding buildings and streets. As a result, according to Carter B. Horsley, “the city was forced to reduce tax assessments in the area by a million dollars as tenants relocated from nearby buildings, now shaded, to seek out better lit office space.” (Horsley, 1995) The ability of cities to regulate such nuisances by setting height and setback regulations could both protect the property values and character of existing buildings, as well as placing at least a nominal guarantee that any future buildings would be located in such a way and in such a bulk that they would not intrude on neighboring properties and their environments.

The ability of zoning to mitigate or preclude some of these nuisance characteristics has been one of the most often-cited benefits to its promulgation. By segregating incompatible uses, the effects of negative externalities on nearby land uses may be reduced or eliminated, while not incurring the charge of unequal protection. In this way, zoning serves the function of a nuisance law with more broad and comprehensive applications.

## **Conclusion**

Zoning codes have been implemented in the vast majority of cities across the United States in the years since 1916. The two primary reasons given for its inception in many of these areas tie back to the basic notions of protection of economic value and the reduction of nuisances. The two benefits are linked insofar as the reduction of nuisances may contribute to the maintenance or elevation of

property values. However, it is important not to observe these benefits only from the perspective of the individual landowner or developer. If properly used, zoning may be beneficial to a municipality as a whole, due to its ability to preserve the character of existing uses by maintaining basic height, setback, and density regulations.

Additionally, the economic benefits received by a single landowner may translate into economic benefits for the region served by the zoning ordinance as a whole, as it provides incentives for the location and development of projects that wish to share in and add to the overall quality of the economic base.

## CHAPTER 4

### THE CONSEQUENCES OF ZONING

#### **Introduction**

The arguments against zoning are many and diverse. However, they tend to fall into three main categories, namely, the reduction of urban density and diversity of activities, the possibility for exclusionary practices, and the way in which zoning practices contribute to the occurrence of sprawl. In this chapter, I will examine the ways in which zoning's critics have attacked this method of urban development.

#### **Reduction of Density and Diversity**

##### *Definitions of Density and Diversity as Related to the Urban Environment*

The concepts of density and diversity in terms of urban life are heavily entwined, with one hardly being possible without the other. The two feed upon each other, with each providing necessary elements to sustain the other. Neither, however, is easy to define. Density, according to the Brookings Institute study *Who Sprawls Most?*, is calculated as, “the population (estimated from the decennial census) divided by the urbanized land (derived from the National Resources Inventory’s national survey of land use, conducted every five years).” (Fulton et. al., 2001) This definition

is well suited for density as calculated in the zoning paradigm, where density is generally defined only within residential zones. For example, New York's Department of City Planning has this to say about density as it relates to their zoning ordinance: "Applying only to residential developments, density refers to the number of people living in a certain area, generally expressed in terms of the number of families, households or housing units per acre. Density controls...permit the city to plan in an orderly way for new schools, utilities, and transit." (New York City Department of Planning, 2003) This definition, besides merely describing how density measures are arrived at, also pinpoints the concepts of segregation of uses in its statement that density controls are used to plan for *schools, utilities, and transit*, all types of infrastructure which provide only for the direct necessities of the home life. In this definition by restriction, what is being set apart as "density" refers to the specific density of one type of development and the activities or infrastructure which serve that one aspect of life, denying provisions for the diversity of activities which function as enablers of a rich urban experience.

In terms of the experience of human life within an urban environment, density is rarely separated so clearly from provisions for diversity. Jane Jacobs, in *The Death and Life of Great American Cities*, gives four provisions necessary to create city diversity, including the need for districts to serve more than one purpose, the presence of short blocks, the mingling of buildings of different ages and conditions, and a sufficiently dense concentration of people, including residents and others. (Jacobs, 1961) Two of these provisions, those of multi-use districts and sufficient density,

play directly to each other and against zoning as they require both residents to maintain the diversity of uses and a diversity of uses to serve the needs of a dense population. However, although many zoning ordinances have provisions for establishing areas of mixed use and/or areas of high residential density, these are rarely incorporated into the fabric of the city as a whole. Rather, they exist as separate zones disconnected from the form of the city in its entirety. According to Samuel R. Staley, “The proliferation of mixed-uses in urban areas, however, is still incremental and ad hoc. In most cases, mixed uses have been restricted to specialized districts.” (Staley, 1997) These specialized zones are often classified under a particular floating zone or specialized zone (such as a “mixed-use village”). Generally, they are intended to function as a self-sufficient area, incorporating the needs of the resident population into the fabric of the district. Because they are not designed to serve the needs of a population outside of this district itself, many of these specialized zones become self-defeating. Either they fail due to lack of a sufficiently large population to make commercial or business establishments successful, or they become gentrified and function as a village within a city, turning their backs to the needs of the larger regional environment.

The zoning conception of density, then, fails in the arena of planning due to its overly limiting conception. Instead of determining density on a municipality-wide basis, or based on proximity to services, it is determined based only on the area classified as being within a particular residential zone. This definition falls short of the definition needed by planning, as it does not allow for consideration to be made of



the wider needs of the resident population and those businesses and other services which serve that population. Within the realm of planning, the multitude of factors which must be incorporated into a city include residential development, transportation infrastructure, retail and commercial development, parks and open spaces, and various other factors that cannot be adequately planned if each zone is treated as a separate, unconnected domain. The planning conceptions of density and diversity fall closer to Jacob's approximation, as they involve planning for overlapping and interconnected spheres of uses. A better definition of density within a planning paradigm, then, should incorporate calculations based upon proximity of activities needed to support a lively urban existence. An example is given in Jacobs' explanation of the need for concentration, in which she says, "The district must have a sufficiently dense concentration of people, for whatever purpose they may be there. This includes people there because of residence." (Jacobs, 1961) Inherent in this statement is that density must refer not only to persons who reside in a given district, but also to those people attracted by services offered in an area. Thus one may still have lo-density districts (whose density will be composed primarily of the residential population), but also high density districts which include not only the residential population, but also a concentration of activities which attract a larger population.

### *The Failure of Zoning as Regards Density and Diversity*

Linowes and Allensworth give one of the clearest arguments against zoning as it relates to diversity when they state: "Zoning, as presently practiced, does not

encourage diversity, variety, or experimentation...In fact, zoning seems to be especially well-designed to assure the misuse of land; it promotes sameness and a routine monotony, unequaled in the history of man.” (1973) This concept of monotony directly relates to the single-use designations that constitute the majority of most zoning ordinances. In his book Home From Nowhere, James Kunstler states:

This is the tragedy of single-use zoning, which has infected every quarter, every country mile, every cul-de-sac. The towns and cities across America were decanted of their middle-class residential populations, who were then scattered across the ‘cheap’ land of the countryside, connected only by cars. The civic life lost in the process could not be reconstituted in the suburbs, because proximity was made illegal. (Kunstler, 1996)

This judgment of the “illegality” of proximity is not as harsh as might first be assumed. Because of the vigorous restrictions placed by Euclidean zoning, the inclusion of uses which may be viewed as “nonconforming” within the bounds of the zoning ordinance are strictly regulated by boards of zoning appeals and planning commissions. The planning concept of density as overlapping activities and spheres of use must be qualified by attaching the term “urban”, as if it is only in cities where such thinking is appropriate or applicable.

The overarching difference between the definitions of density as contextualized in the worlds of zoning and planning is that in planning, density may be said to be defined as “spheres of activity,” whereas the designation carried in zoning is that of “realms of structures.” Zoning tends to disassociate itself from the human experience, and focus instead on the built environment. Planning, on the other

hand, when done correctly, is firmly entrenched in the world of human activity, and how the built environment relates to those activities.

In his book Community Design and the Culture of Cities, Eduardo Lozano defines the concept of urbanity as “the potential capacity of the inhabitants of a town or city to interact with a sizable number of people and institutions concentrated in that town or city. This large potential for interaction is created by density and, in turn, encourages higher density.” (Lozano, 1990) The provision for choices regarding *human interaction* is precisely what is missing from our cities as they are designed today. Kenneth R. Schneider states that, “...zoning *segregates* urban activities that need to be close to one another. Rather than integrating varied functions into rational proximities, zoning separates them, reduces their common (urban) efficiency and deprives individuals of rich cosmopolitan interaction.” (Schneider, 1979) This segregation of activities mandated by the practice of zoning has created an environment perfectly conducive to the use of the personal automobile, thus denying us the choice not only for interaction within various activity centers, but also the associated interaction experienced when traveling from activity to activity. As Jane Jacobs states in The Death and Life of Great American Cities, “In dense, diversified city areas, people still walk, an activity that is impractical in suburbs and in most gray areas. The more intensely various and close-grained the diversity in an area, the more walking. Even people who come into a lively, diverse area from outside, whether by car or by public transportation, walk when they get there.” (Jacobs, 1961) The presence of walkable, diverse districts of activity helps define urban communities.

Unfortunately, the segregation of activities as mandated by zoning provides the antithesis of the interaction necessary to create a lively urban area.

It may be argued that the American population prefers to be isolated from social interaction. However, this argument assumes a level of homogeneity of personal preference which is unsubstantiated. It is the possibility for the *choice* of density and diversity which is so often undermined by the traditional zoning ordinance. Given the limited number of diverse mixed-use areas provided by a large number of zoning ordinances, those persons who wish to reside or work in an active, lively district are often severely restricted in their options. Zoning's segregation of land uses into specified districts does not allow the market to reach an equilibrium of uses in which the desires of all members of the population are served.

### **The Possibility for Exclusionary Practices**

A second negative consequence of zoning which has been identified is the possibility of incorporating exclusionary practices into the zoning ordinance. According to a report entitled Problems of Zoning and Land Use Regulation, published by the American Society of Planning Officials in 1968, "Not all instances of zoning for something other than optimum land use, however, can be regarded as choices between legitimate objectives. It is quite certain that in some areas land-use regulation is used as one device for the shortsighted purpose of excluding a minority group." (1968) This possibility for zoning to be used to exclude certain unwanted groups, including racial minorities and low-income citizens, has been apparent since

the early days of the zoning movement, as evidenced by the New York experience. Unfortunately, this practice has continued under various guises. In 2002, Vivian Kahn of the California Planning Roundtable stated that, “Despite 75 years of case law reaffirming the illegality of exclusionary zoning, the widespread reliance of local jurisdictions on Euclidean districting as the primary means for implementing land use policies continues to promote social and economic segregation and confound efforts to achieve more equitable use of land resources.” (Kahn, 2002) This issue has been one of the most hotly debated in the subject of zoning.

Initial attempts at exclusionary zoning were very straightforward. The American Society of Planning Officials notes that, “True racial zoning—Negroes forbidden by ordinance to live in certain districts—was tried in some cities, but it did not last very long. It was universally thrown out in lower courts wherever it was tried and was given the final blow by the U.S. Supreme Court in *Buchanan v. Warley*... [1917].” (1968) Although the outright exclusion of locally unwanted populations was deemed illegal, numerous measures have been found of less obvious ways to exclude. Richard Babcock, in The Zoning Game, remarks that most zoning ordinances are not explicitly exclusionary, but further notes that,

The more general pattern involves the imposition of zoning and subdivision regulations so strict as to make development prohibitively expensive. These regulations are then varied downward only for those developers who the local leaders are confident will be properly selective in determining future residents. All of these techniques are justified by the superficially appealing slogan of protecting the local tax base. (Babcock, 1966)

Some of the mechanisms involved in these strict regulations include minimum lot sizes, disallowance of multi-family private rental units, and a rejection of public housing. (Wolman and Goldsmith, 1992) One Baltimore, Maryland case study, cited by Yale Rabin in his article *Expulsive Zoning*, wrote its regulations such that, “[T]he south and southeast Baltimore tenement districts which housed first-generation immigrants, and the alley districts which housed poor blacks, were placed in industrial districts so as to encourage their displacement by factories.” (Garrett Power, cited in Rabin, 1989) Rabin goes on to draw two inferences from this study: “First, the zoning-induced displacement increased levels of overcrowding among blacks because access to housing outside ghetto areas was denied them. Second, because whites who were displaced were not similarly restricted in seeking alternative housing, levels of racial segregation were increased.” (Rabin, 1989) In this instance, the regulations mandated by the zoning ordinance did not overtly exclude immigrants and racial minorities, but the purpose was served nonetheless.

Exclusionary practices are often used by municipalities that wish to retain the general character of their “traditional” community. Michael Danielson quotes Paul Davidoff as saying,

Suburban populations...have employed the power of the state to protect their own very selfish desire to create a community that is amenable to themselves, but to prohibit the large mass of the population from sharing in those amenities. They have not bought the land, but instead have done the cheap and nasty thing of employing the policed power to protect their own interest in the land and to exclude the largest part of the population. (Danielson, 1976)

This issue was directly addressed in the Supreme Court case of *Southern Burlington County NAACP v. Township of Mount Laurel* (1975). In this case, Mount Laurel, a rapidly growing New Jersey suburb, had instituted land use controls that prevented the construction of affordable housing. The Supreme Court of New Jersey found that this was unconstitutional under New Jersey law due to the “general welfare” requirements. The case led to the decision that, “[A]ll developing New Jersey municipalities had the legal obligation to provide their fair share of affordable housing opportunities...” (Common Interest, 2001) In effect, the court had ruled that exclusionary zoning practices were not permissible under state law. This case had wide ramifications as it has frequently been cited in exclusionary zoning cases. However, though exclusionary zoning practices have been ruled illegal, stopping the practices has proven difficult.

In their 1981 report, Shlay and Rossi found that, “Higher prices for housing accompanying more restrictive land-use zoning can bar residence to lower-income households. To the extent that race and socio-economic level are related positively, restrictive zoning also eliminates blacks and other low-income racial and ethnic groups.” (Shlay and Rossi, 1981) The question of whether or not this was an intended outcome of the regulations is not able to be answered, but the preponderance of these types of zoning ordinances suggests that it is not entirely outside of the issues being considered. The ability of zoning ordinances to place use and density requirements on land uses makes them amenable to the uses such as those described above.

## Zoning's Contribution to Patterns of Sprawl

The final widespread argument against zoning has to do with its contribution to patterns of sprawling development. Jay Wickersham states, "By fostering or requiring low density development with a high separation of uses, Euclidean zoning is one of the great generators of suburban sprawl, with all of its environmental, economic, and social costs." (Wickersham, 2001) Anthony Downs of the Brookings Institution has defined the following ten indicators as traits of sprawl:

1. Unlimited outward extension;
2. Low-density residential and commercial settlements;
3. Leapfrog development;
4. Fragmentation of powers over land use among many small localities;
5. Dominance of transportation by private automotive vehicles;
6. No centralized planning or control of land-uses;
7. Widespread strip commercial development;
8. Great fiscal disparities among localities;
9. Segregation of types of land uses in different zones; and
10. Reliance mainly on the trickle-down or filtering process to provide housing to low-income households. (Downs, 1998)

Of these indicators, only number nine (segregation of types of land uses in different zones) overtly relates to zoning. However, the patterns of development associated with zoning often lead to situations such as those described in the other nine indicators. The segregation of land uses is obvious, as this is one of the primary functions of zoning. However, the ability of zoning ordinances to mandate density requirements often allows for the presence of low density residential and commercial establishments. These low-density and segregated uses then require the introduction of transportation infrastructure sufficient to allow for mobility between these uses. This infrastructure, given the dominant mode of transportation within the United



States, tends to be concentrated on the personal automobile. Finally, as mentioned in the previous section, because zoning is often used for exclusionary practices, there are often fiscal disparities between localities and a lack of housing for low-income households. These are some of the basic arguments for the contribution of zoning to sprawling development, but the arguments themselves go much deeper.

The primary argument for the linking of zoning and sprawl goes as follows: “[Z]oning and subdivision regulations are used to lower the density of residential development, create excessive separation between complementary uses, and create an urban fabric dominated by large parking lots, wide streets, and unsightly suburban monotony.” (Knaap et. al., Undated) Again, this statement highlights the predominant factor of zoning that contributes to sprawl—namely, the segregation of uses (principally residential and business or retail). Arrol Gellner has stated that, “Draconian zoning regulations mandating the careful separation of commercial and residential usages are one reason our suburbs are bereft of basic neighborhood amenities such as shops and eateries, compelling us to drive miles to a shopping center to buy a quart of milk.” (Gellner, 1999) This is an oft-cited argument against zoning, as we continue to require massive amounts of transportation infrastructure to shuttle us from home to work or places that provide the basic necessities needed to survive.

Douglas Kelbaugh, in his book Repairing the American Metropolis, takes the link between zoning and sprawl one step further when he states: “The biggest

perpetuator of sprawl is zoning that segregates different land uses into large, single-use zones that are monocultures...Large arterials separate these areas like rivers, impassable to pedestrians and often gridlocked for automobiles.” (2002) A large amount of transportation infrastructure, including roadways and parking lots, is one of the dominant characteristics of sprawl-type development, and this infrastructure is necessary when uses are segregated and development is not sufficiently dense to support public transit. Though some multi-use zones are often included in zoning ordinances, they are frequently small areas that do little to detract from the prevailing pattern of single-use zones connected by roadways. Thus has the basic structure of zoning and the zoning ordinance contributed to a pattern of urban development that regulates the outward expansion of development without making allowances for complementary and convenient land uses to serve that development without the use of automotive transportation.

The dominance of sprawl as impacted by zoning has also had a negative effect on the social structure of cities. In his book Great Good Places, Ray Oldenburg states, “ If we valued fraternity as much as independence, and democracy as much as free enterprise, our zoning codes would not enforce the social isolation that plagues our modern neighborhoods, but would require some form of public gathering place every block or two.” (Oldenburg, 1997) Because of the segregation of uses, it is often impossible to have social interaction outside of the home without reliance on the car to bring participants to and from the gathering place. The lack of space for informal and convenient meetings has led to a decline in unstructured social interaction, as

concern about driving safety has increased. Zoning's contribution to this state of affairs is widespread, as residential developments sprawl outward while social interaction turns inward to formal and infrequent gatherings in the home. Oldenburg goes on to state that, "Beginning with a resolve 'to promote the health, safety, morals, and general welfare of the inhabitants of \_\_\_\_\_,' zoning ordinances do as much to promote loneliness, alienation, and the atomization of society." (Oldenburg, 1997) This is particularly true of both the elderly and very young population, who have little access to a mode of transportation that will bring them beyond the pedestrian accessible range.

## **Conclusion**

Though begun with the best of intentions, the practice of zoning has produced some unintended consequences. Much of the literature on zoning has concentrated on these negative aspects, as it is these that have been the primary contributors to the form of contemporary American municipalities. The ability of zoning to prevent density and diversity of developments, be practiced in such a way that portions of the general population are excluded, and act as a contributor to sprawl are all widely documented, and form much of the basis for the conclusion that alternative forms of land regulation need to be explored.

## CHAPTER 5

### ALTERNATIVES TO TRADITIONAL ZONING: OVERVIEWS, ADVANTAGES, AND DISADVANTAGES

#### **Introduction**

The various negative consequences of zoning have spawned a variety of recommended alternatives to this method of regulatory guidance for urban development. Though it is not claimed that the alternatives presented constitute an exhaustive overview of all of proposed alternatives, they are intended to constitute a representative sample of the alternatives currently experiencing high degrees of interest. Among the alternatives which will be explored in this chapter are performance zoning, transect planning, transit-oriented development, and New Urbanism. The general structure of each of these alternatives will be outlined, and an examination of their benefits and consequences will be explored. One point which should be noted is that as an overarching movement, New Urbanism contains basic precepts that may be translated into transit-oriented developments or transect planning; however, as New Urbanism presents a wider variety of guiding factors and planning possibilities, the three will be treated separately for purposes of this thesis.

## **Performance Zoning**

### *General Overview*

In 1952, industrial performance zoning was introduced in an article by Douglas O'Harrow published by the American Society of Planning Officials. In the article, O'Harrow argued that, "[I]ndustrial nuisance (noise, odor, and smoke) could be measured scientifically and, once measured, could be expressed as a desirable or acceptable level of performance which would form a rational base for industrial zoning." (Exner and Sawchuck, 1996) The idea of performance took hold in a number of areas, and came to fruition as a workable alternative to traditional zoning in Lane Kendig's 1980 work Performance Zoning. Kendig's book argued that there are three main problems with traditional zoning, namely, "[F]irst is the proliferation of zoning districts...[S]econd...is that conventional zoning has been administered as an ad hoc reaction to proposals initiated by the private sector rather than as an implementation tool of public policy...Finally, the legal requirement that all land within a jurisdiction be zoned...presents a problem." (Kendig, 1980) Kendig proposed the concept of performance zoning as an alternative that would alleviate these problems. Norm Tyler, Director of the Urban and Regional Planning Program at Eastern Michigan University, argues that performance zoning is, in many ways, successful in meeting its objectives. He states, "In some ways it requires less administrative involvement, since variances, appeals and re-zonings are not necessary. It also gives more flexibility both to the municipality and to the developer, allowing more of a range of land uses, as long as their impact is not negative." (Tyler,

1999) This reduction of administrative duties and inclusion of the capacity for creativity opens up the arena of zoning to more interaction between the public and private sector.

Performance zoning, according to Kendig, "...does not organize uses into a hierarchy which is then used to protect 'higher' uses from 'lower' ones. Rather, it imposes minimum levels of performance by setting standards that must be met by each land use." (Kendig, quoted in Freiden and Winters, 1997) Unlike traditional zoning, performance zoning determines acceptable uses of land based upon the impacts that specific developments will have on the surrounding land uses. John Ottensmann describes the mechanism of implementing performance standards as follows:

Performance standards can, for example, limit the intensity of development, control the impacts of development on nearby land uses, limit the effects of development on public infrastructure, and protect the natural environment. Performance standards can be negative or positive. They can set a maximum level for the noise impacts on adjacent property or they can require specified types of buffers to be established between certain types of land uses. (Ottensmann, 2000)

In Performance Zoning, Kendig outlines the four variables that will be used to determine the standards that will regulate development. These variables include, "open space ratio, impervious surface ratio, density, and floor area ratio." (Kendig, 1980) These standards are used to determine the development performance in terms of how much will be built and how much it will impact surrounding uses. The

Environmental Protection Agency (EPA) defines it as follows: “Performance zoning is a type of zoning that permits uses based on a particular set of standards (e.g. environmental impacts) rather than on particular type of use. The requirements may target a single type of impact, or a range of impacts, such as stormwater runoff, emissions, and open space preservation.” (EPA, 2003) By evaluating development siting based on impacts rather than a rigid set of allowed uses, the purposes of environmental protection, nuisance reduction, and mixed-use developments are better served.

The implementation and enforcement of performance zoning is often a cause for questioning among planning practitioners. However, once instituted, the process of enforcement is fairly clear. A developer proposing a new development would present a preliminary site plan for review, and the preliminary plan would be evaluated for potential impacts based upon predetermined formulas or handbooks which define the impacts that may be expected based upon the standards that must be met. According to Ottensmann, “The ultimate enforcement would depend upon the inspection of the development after completion to determine that it was consistent with the approved plan.” (Ottensmann, 2000) Because the primary review would take place beforehand, enforcement would be very similar to that required by traditional subdivision reviews. If an impact such as noise should be considered, post-development review may take place to ensure that standards are being met.

## *Advantages and Disadvantages of Performance Zoning*

Performance zoning as an alternative to traditional zoning has been identified as having a number of advantages and disadvantages. Many of these were acknowledged in a report produced by Marlene Exner and Russell Sawchuk for the town of Morinville, Canada. Identified advantages of performance zoning included:

1. Encouraging the development of a vision and goals for a community;
2. Encouraging greater dialogue and communication between various stakeholders;
3. Providing the community with a competitive edge in attracting builders and buyers;
4. Contributing to a higher quality of life through better protection of the environment, health and safety;
5. Providing a greater range and choice of homes;
6. Providing advantages to builders by allowing them to incorporate new technologies and designs more easily;
7. Greater fairness for all, but especially for smaller businesses and developers;
8. More people from the community, home owners, associations, builders and the town would be more involved in the decision-making;
9. Less need to change and update bylaws, and less need for rezoning; and
10. Less paperwork and “red tape” in gaining approvals. (Exner and Sawchuk, 1996)

Disadvantages identified included:

1. Would apply only to new subdivisions;
2. Substantial learning curve would be required before the model could be implemented;
3. Concerns about defending decisions in court;
4. Requirement for more, not less, public involvement;
5. Need for more site inspections; and
6. Significant investment in resources to develop and manage the new systems. (Exner and Sawchuk, 1996)

The advantages listed are, in many ways, direct responses to the negative effects of traditional zoning. However, the disadvantages are substantial enough that the cumulative effects must be assessed in any decision-making process.



Many of the perceived advantages of performance zoning stem from the ability for there to be more interaction between the community, local government, and developers. Part of the process by which performance zoning is enacted involves the setting of minimum standards, which may be determined by a process of public involvement and input. This brings the determination of a community's growth back into the realm of the public, an arena which is often overlooked in the practice of traditional zoning. Additionally, the greater amount of flexibility afforded to developers in the practice of performance zoning opens the door to a number of mixed-use developments which may be disallowed under rigid single-use zoning. Finally, the removal of substantial amounts of "red tape" required for meeting traditional zoning ordinances (such as obtaining re-zoning for new developments, or the need to obtain land in a specific zone for a new development) may be regarded as a competitive advantage for many municipalities as they attempt to attract new investment.

The disadvantages cited, however, do need to be taken into consideration. The reduction of red tape encountered in obtaining zoning compliance may be offset by the amount of administrative review needed to ensure that a given development will meet the performance standards. Additionally, the wide range of public involvement will depend in large part upon the public's willingness to participate. One advantage of traditional zoning is that, in large part because of the wide range of court precedents, the mechanisms by which it may be legally practiced are fairly well understood. Performance zoning cases would need to be reviewed on a case-by-case

basis, due to difficulties in accurately and precisely measuring potential impacts. Perhaps the greatest disadvantage to performance zoning is its unpredictability. Because of the limited number of pure performance zoning ordinances, compared to traditional zoning ordinances, which have been put into place, it is difficult to ascertain the overall and long-term effects of this type of land use regulation.

Finally, it is important to review performance zoning in terms of the advantages and disadvantages of traditional zoning as described in the previous two chapters. The question of protection of property values is the first which must be addressed, given that unlike traditional zoning, property owners are not guaranteed that a certain *type* of development will not be put in place near their property, though they are guaranteed that any new development will have to meet the community's performance standards. Ottensmann suggests that,

By not restricting land use in any area to a narrowly-specified set of uses as does traditional zoning, performance zoning allows landowners much greater flexibility. Various commentators...have suggested that this allows performance zoning to operate with less intrusion on the land market. The result would be greater economic efficiency in land development and use than under a system of traditional zoning. (Ottensmann, 2000)

The flexibility given to developers and landowners would allow for the "highest and best" use of land to be made, thus possibly increasing property values of a municipality in general. The question of whether performance zoning would protect the values of individual properties may still come into question, however. If zoning protects property values by dictating precisely what uses may be made of adjacent

land, then the ability of performance zoning to act in the same manner will depend in large part on the adequacy of the performance standards set by a given community.

The ability of performance zoning to preclude the nuisances that formed much of the initial favor of zoning is fundamental to its basic concept. Mark Hinshaw has stated that, “[W]e still use a tool developed at the turn of the last century to prevent steel mills and offal from encroaching on our homes.” (Hinshaw, 2000) Implicit in this statement is that many of the nuisances that traditional zoning was designed to eliminate are no longer problems, or at least not to the extent assumed by zoning. Carl Pucci is quite blunt about the need to replace traditional zoning with performance zoning:

Throw out the zoning codes, and replace them with simple performance criteria. Essentially, citizens should be able to do as they please as long as they don't subject others to obnoxious noise, odors, or inconvenience. Buildings... may take any style or shape as long as they respect a few urban civilities, like the primacy of the street grid, the neighborhood context, and the need to share air and daylight. (Pucci, 1999)

The rational reduction of nuisances is at the very heart of performance zoning.

In terms of density, diversity, and the preponderance of sprawl, performance zoning, by not mandating rigid segregation of uses, may escape some of the traps set by traditional zoning. Though certain heavy industries would still need, based on performance criteria, to be located at some distance from the majority of a town's developments, more retail and commercial services would be able to be located

within a reasonable proximity of residential developments. Much of performance zoning's ability to address these issues would be contingent upon community desires, and the preferences of developers wanting to invest in a community. However, these subjective issues aside, the possibility for a more inclusive system of integrated uses would be available. Performance zoning is also designed to provide for cluster development that takes into account the natural features of an area, thereby mitigating some environmental harm. Though not reducing sprawl, per se, it is likely that through this mechanism some of the environmental consequences often associated with sprawl (such as habitat fragmentation and an excess of urban run-off) will be addressed.

Finally, the possibility for exclusionary practices is difficult to determine. As with traditional zoning, much would depend on the criteria that the community mandates for development. Performance zoning may fall into the same trap of traditional zoning in regards to this issue, as the possibility would still be open for communities to set performance criteria at such levels that low-income or multi-family developments would be strictly regulated. However, if the regulations are not set at such a strict level, it would be difficult to argue for performance regulations which would restrict such developments.

## Transect Planning

### *General Overview*

Transect planning is one of the newest and least developed alternatives to traditional zoning. Drawing upon the works of such planners as Patrick Geddes, Ian McHarg, and Christopher Alexander, transect planning is an attempt to avoid the pitfalls of traditional zoning by focusing on an ecological model that incorporates a hierarchy of uses ranging from rural preserve to the urban core. At heart, the theory, expounded by Andres Duany, is closely aligned with New Urbanism; however, it attempts to take a more integrated and regional-design oriented approach to the guidance of urban development.

Duany frequently cites Christopher Alexander as being a key figure leading to the inspiration for transect planning. Specifically, he states that,

A subsequent Transect proposition was made about two decades after *Design With Nature* by Christopher Alexander in *A Pattern Language*. This is by no means as explicit as the prior ones. It is rather a sideshow of that great work, only implied by the series of Patterns, principally Numbers 2, 13, 29, and 36. These taken together formulate a Transect... (Duany, 2002)

The patterns to which he refers are entitled “The Distribution of Towns,” “Subculture Boundary,” “Density Rings,” and “Degrees of Publicness.” (Alexander, 1977) The naming of these patterns as a model transect gives some indication as to how Duany believes a transect should be ordered. In an article published in the Summer 2002

issue of the *Journal of the American Planning Association*, Duany and Emily Talen state that,

*[T]ransect planning...is based on the creation of a set of human habitats that vary by their level and intensity of urban character. In transect planning, this range of environments, from rural to urban, is the basis for organizing the components of the built world: building, lot, land-use, street, and all of the other physical elements of the human habitat. (Duany and Talen, 2002)*

By concentrating not only on land use, but also on the built elements of urban form, they hope to create a model by which built forms become immersive, or consistent with what is expected from a given environment. This concept of immersion is closely related to the model of *ecozones*, which are central to the transect planning theory. Ecozones, as defined by Duany and Talen, are regions delineated along the transect continuum which are linked to the existing natural ecologies. The six ecozones identified are:

1. Rural Preserve
2. Rural Reserve
3. Sub-Urban
4. General Urban
5. Urban Center
6. Urban Core

These six ecozones are organized in such a manner that the rural preserve zone is that least amenable to intense development and deserving of the most protection, while the urban core is most suitable for a high density mix of uses. As with traditional zoning, some specific standards as related to building disposition, building configuration, building function, and standards (as for parking and landscaping)

should be set out in a transect planning ordinance to ensure that appropriate development takes place within each ecozone.

Transect planning is intended to be conceptually antithetical to traditional zoning. Duany has a low opinion of the urban forms that have resulted from the practice of traditional zoning. He states, “The dominant historiography of modern planning presents a sequence of empirically evolved, quasi-inevitable practices that have converged and been rationalized into plans based on the segregated categorization of zoning and its reconnection by a dendritic thoroughfare system.” (Duany, 2002) Utmost in his criticisms of traditional zoning are the segregation of uses and the lack of consideration of scale in developments. In terms of scale, he refers not only to the scale of individual buildings, but also to the scale of development intensity across a region. He and Talens assert that, “The transect makes use of ecological principles having to do with scale, first by paying attention to the fact that different elements have a different range of effect and second by integrating design across scales.” (Duany and Talens, 2002) In regard to the first, transect planning is intended to guarantee that design elements will be located in such a way that they are suited to the environment in which they are located (for example, a multi-story office complex would be inappropriate in a sub-urban ecozone, but suited to an urban core). In terms of regional scale, transect planning makes allowances for a variety of ecozones to be represented in an appropriate balance, with combinations that may result in environments ranging from villages, to cities, to regions. The result of this is that, “Different types of immersive environments thus

form the building blocks of other normative proposals that operate on a more regional scale.” (Duany and Talens, 2002) In other words, each individual element of an area combines with other members of the transect to form a cohesive regional setting.

In terms of the segregation of activities, Duany and Talens are highly critical of current zoning practices. They state:

[U]nder our current system of land regulation, areas tend to develop into monocultures—large areas of single-use zones. Within this type of urban pattern, the elements that make up a complete, immersive environment become disaggregated. Most importantly, separation of uses into functional zones digresses significantly from natural systems in which interdependencies create and maintain a healthy diversity. (Duany and Talens, 2002)

The monoculture, they maintain, is disconnected from the natural world of which we are a part, therefore they take pains to include provisions for interconnection within the realm of transect planning. In the ecozones from sub-urban to urban core, different types of land uses (from residential to office and retail) are allowed, though on a scale and at a density appropriate to the ecozone. The rural preserve and rural reserve zones are set aside as land that is either protected or in need of protection, and thus development is not permitted. Their reason for allowing for mixed uses is as follows: “Single-use zoning...is incompatible with the transect approach, since each of the transect ecozones is intended to be immersive, resulting in an environment where the elements of the human habitat reinforce each other to produce something greater than the sum of their individual parts.” (Duany and Talens, 2002) Essentially, in order to provide the immersive environment so critical to transect planning, the



functions of the built environment must be as interactive as the natural environment upon which it is built. Furthering the argument that transect zoning is incompatible with traditional zoning, they argue that, “Zoning ordinances are usually organized as a series of rules for discrete zoning categories that do not interrelate. In the SmartCode [the model code for transect planning], rules are prescribed for different types of Communities, relevant to different scales. These Communities...provide a structure for transect zones.” (Duany and Talen, 2002) The interrelationship provided for in transect planning provides for a divergence from the traditional disaggregation of land uses.

Though Duany and Talens seek to differentiate transect zoning from traditional zoning, in terms of implementation they strive to make it understandable from within the zoning paradigm. They state,

What makes this system particularly palatable is that it does not eliminate the language of current zoning. Rather, it seeks to apply it in ways that are appropriate to transect principles. It assigns established standards and zoning “rules” to their proper location, that is, to the section of the transect in which a particular standard appropriately belongs. (Duany and Talens, 2002)

Under transect planning, codes are rewritten so that the concept of the ecozone is the guiding principle by which development is ordered, but does not completely remove the zoning principles by which these zones are developed.

### *Advantages and Disadvantages to Transect Planning*

Because of its status as a relative newcomer in the world of planning, the advantages and disadvantages of transect planning must mainly be judged from a theoretical scale. That being said, there is one obvious disadvantage which must be quickly addressed if transect planning is to hold any credence, namely, its ability to replace an existing zoning ordinance in a municipality. Given that Duany and Talen have presented transect planning as diametrically opposed to traditional zoning, it is unlikely that it would be possible to slowly replace an existing ordinance with a transect planning code. However, Duany and Talen argue, it would be possible to implement the code first as an “extension of consumer choice.” (Duany and Talens, 2002) In other words, it would be presented as an addition to the traditional zoning code and gradually extended until it covered the municipality. Another recommended way of introducing a transect planning code would be to use it for infill development in various neighborhoods or districts. In this way it may gradually replace the existing code on an area-by-area basis. This, however, would require that planning and zoning officials be willing to juggle two sets of ordinances for a time, a difficult situation to predict.

It is also difficult to evaluate the economic impacts that such a mode of regulatory guidance of development would have. As with performance zoning, it is possible that some developers would be hesitant to invest in a project where there may be unknown land uses placed adjacent to their development. Additionally, until

transect planning has been implemented on a larger and more visible scale, it is likely that many residents would be concerned that adequate measures would not be taken to ensure that the effects of development would not encroach upon their property values. However, the allowance of ecozones which include a strictly regulated minimum of non-residential development should do much to assuage those fears. Furthermore, Duany and Talens take pains to point out that such developments as airports and landfills will be treated separately, as they do not fit into any ecozone. (Duany and Talens, 2002)

In terms of the avoidance of nuisances, the recommendations that are made in terms of the siting and development of different land uses should prove adequate to serve this need. Again, much will depend upon the performance criteria and standards set for each ecozone, but with appropriate consideration of the relevant externalities such issues as noise, traffic, and odor should be able to be overcome. Moreover, because of transect planning's close alignment with ecosystems, any environmental nuisance will most likely be mitigated based on the ecozone in which it is located.

The impacts of transect planning on density, diversity, and contribution to sprawl are somewhat harder to predict. Though interrelationship of various ecozones and the uses within them will do much to alleviate the sterility that has been identified within traditional zoning practices, density, especially in the sub-urban ecozone, may be of concern. As with performance zoning, much will depend on the will of the

developer and the prevailing taste of community residents. If market studies indicate that residents prefer to live in predominantly rural areas, it is possible that the sub-urban ecozone will dominate the transect, especially in regions where there are few natural barriers to development. Though the SmartCode outlines characteristics for this zone that include some mix of uses, it is doubtful that they would be sufficient to serve the number of residents in the area. Careful watch would need to be made of the allocation of land within each ecozone to ensure that they are appropriately distributed to remove the tendency of developers and citizens to encourage sprawling patterns of disconnected development.

Finally, it seems quite possible that transect planning may encounter the same pitfalls of traditional zoning in terms of the possibility for exclusionary practices. Because single-family residential areas (presumably the most expensive) are located only in the general urban and sub-urban ecozones, it is probable that many of these areas would restrict development to the point that low-income and minority residents are precluded. This would be a most likely occurrence in an area which is traditionally based on large-lot zoning, in which case the prevailing development patterns could be justified with reference to the characteristics outlined for the ecozone. With reference to the guidelines set forth in the model transect code, it appears that apartment homes would be permissible only in the urban center and urban core, which would perhaps exacerbate the prevailing patterns of the urban ghetto.

## Transit-Oriented Development

### *General Overview*

Unlike performance zoning or transect planning, transit-oriented development (or TOD) is not designed to completely replace existing zoning codes. Rather, it is intended to act as a supplemental district designed to address some of the negative impacts of traditional zoning. According to Peter Calthorpe in his book The Next American Metropolis: Ecology, Community and the American Dream, “The Transit-Oriented Development (TOD) concept is simple: moderate and high-density housing, along with complementary public uses, jobs, retail, and services, are concentrated in mixed-use developments at strategic points along the regional transit system.”

(Calthorpe, 1993) Calthorpe places the emphasis on TODs abilities to provide a regional perspective to the planning process by setting a point of integration between urban cores and the surrounding suburban developments. He also emphasizes the need for TODs to provide walkable environments in order to further remove the need for private automobile use. He summarizes the basic principles of transit-oriented development as follows:

- Organize growth on a regional level to be compact and transit-supportive;
- Place commercial, housing, jobs, parks, and civic uses within walking distance of transit stops;
- Create pedestrian-friendly street networks which directly connect local destinations;
- Provide a mix of housing types, densities, and costs;
- Preserve sensitive habitat, riparian zones, and high quality open space;

- Make public spaces the focus of building orientation and neighborhood activity; and
- Encourage infill and redevelopment along transit corridors within existing neighborhoods. (Calthorpe, 1993)

By incorporating these factors, it is hoped that these developments will encourage a pattern of development which mitigates the detrimental effects of standard zoning.

According to a report published by the Transit Cooperative Research Program (TCRP) entitled *The Zoning and Real Estate Implications of Transit-Oriented Development*, TODs are primarily designed to serve three specific purposes, including encouraging citizens to utilize transit as the primary means of transportation, minimizing congestion on neighboring roadways, and increasing the use of pedestrian facilities, including streets and sidewalks. (TCRP, 1999) These three objectives speak directly to some of the costs identified with traditional zoning.

The TCRP also provides an overview of the ways in which TOD regulations differ from traditional zoning regulations, including maximum (as opposed to minimum) setback requirements, reduced frontage and lot size requirements, and the requirement for certain “urban design amenities,” which may include such features as front porches and rear parking. (TCRP, 1999) These measures are put into place to discourage the dispersed development patterns and inhospitable pedestrian surroundings of traditionally zoned communities. It is hoped that by bringing development closer to the street or sidewalk, providing a dense built environment, and maximizing the aesthetic appeal of these developments, pedestrian use will be maximized.

Unlike performance zoning or transect planning, transit-oriented development has several physical requirements for implementation. In opposition to its title, however, public transit is not necessarily at the forefront of these requirements. Calthorpe argues that, “Transit-Oriented Developments can, and ironically should, develop without transit—with a justifiable focus on the pedestrian and a healthier community structure...The growth of such pedestrian-friendly developments, if coordinated at a regional scale, can form the armature for future transit growth.” (Calthorpe, 1993) Implicit in this statement is that the residential density and mix of services should come before the investment in transit. By accumulating these factors on the front end, it is more likely that a transit system will follow as a natural outgrowth of the needs of the community. Intuitively, this makes sense, as it is rational that a municipality will be hesitant to invest the funds needed to finance a large-scale transit system without a sufficient population to utilize that system. John Niles and Dick Nelson, in their paper entitled *Measuring the Success of Transit-Oriented Development*, suggest that if a municipality is to make major transit investments on the front end, “[W]hat is needed from TOD to succeed is a ‘transit metropolis,’ meaning a sufficient number of TODs having balanced or special uses that are connected and allow for efficient rail travel with bi-directional travel flows.” (Niles and Nelson, 1999) This proposal highlights the need for there to be regional integration of a large-scale transit network for TOD to function as intended.

## *Advantages and Disadvantages of Transit-Oriented Development*

Perhaps the greatest criticism levied against TOD is that it has not yet been accomplished. Many critics have settled on the term “transit-oriented development” to describe the various so-called TODs which have been implemented across the country. In these developments, some of the characteristics of TODs (such as access to a regional transit system and a variety of uses surrounding transit stations) have been implemented, but the broader goals of TOD have been undermined by such actions as catering only to specific socio-economic groups, not providing an adequate mix of housing and services, or the provision of overly large amounts of parking, turning the station into more of a regional destination point or a park-and-ride facility. As Dena Belzer and Gerald Autler state in their article *Countering Sprawl With Transit-Oriented Development*,

TOD is neither as prevalent as it might be nor as effective as it could be. Many transit stations, both new and old, are still surrounded by parking, cut off from the adjacent neighborhoods, or lacking a mix of land uses. Moreover, many projects that are billed as TOD fall short of yielding the full range of potential benefits. They constitute transit-adjacent or transit-related development rather than a true integration of land use and transit. (Belzer and Autler, 2002)

These developments, though they are moving in the direction of transit-oriented development, do not provide a fully adequate measure against which to evaluate the overall success of this method of regulatory guidance of development. However, a basic understanding of the advantages and disadvantages of TOD may be gained from



the experiences of various municipalities who have participated in similar development projects.

Perhaps the most frequently cited advantages of transit-oriented development have to do with environmental benefits, especially those stemming from the reduction of automobile transportation. By concentrating on transit ridership and pedestrian access, many of the environmental effects of the dominant use of the private automobile, such as air pollution, overuse of fuel sources, and increased urban run-off from necessary transportation infrastructure, should be mitigated. Additionally, by concentrating development in dense clusters around transit stations, more open space will be preserved than under traditional zoning ordinances.

Belzer and Autler, in *Transit Oriented Development: Moving from Rhetoric to Reality*, have identified a second advantage of TODs, namely, benefits stemming from the financial return which may be expected from investment in these developments. Speaking in regards to the concept that TODs should contain a mix of uses, they state,

Assuming that each use within the program yields an acceptable rate of return, a mixed-use strategy can be more advantageous for the developer than a single-use project because it allows for greater flexibility in responding to the various market cycles, protects against market volatility, and holds value over time. In addition, it may be easier to finance smaller increments of different development products than one large single use because the project risk is spread among a wider variety of lenders and equity investors. (Belzer and Autler, 2002)

TODs thus may prove beneficial to the developer in terms both of financing available for a project as well as the returns which may be expected if the project is successful. This advantage, however, may be offset by a possible disadvantage noted by Niles and Nelson. In terms of siting of commercial developments, they note that, “The commercial market’s apparent reluctance to choose station areas reflects the criteria for preferred store sites that are determined by the needs of developers and owners to succeed financially.” (Niles and Nelson, 1999) Many of these criteria, such as large, independent lots with adequate amounts of convenient parking, are not amenable to the TOD design standards. Additionally, consumer preference plays a large part in what developments the community will allow. As Niles and Nelson point out, “Residents of neighborhoods where government has proposed TOD development tend to resist increased density and its impacts, whether real or perceived. Even commercial development that brings new stores and services is not always welcome.” (Niles and Nelson, 1999) These factors will play a large part in the willingness of investors to develop within a TOD, given that a negative consumer reaction is not a great indicator of success. Further barriers to the success of TODs may include fears that TODs may reduce property values or disturb existing neighborhood character; perceptions that TOD development carries higher risks and costs than traditional developments; financing difficulties; and a regulatory framework which does not support TOD design, among others. (Belzer and Autler, 2002)

The topic of alleviation of nuisances is not one that has been widely addressed by proponents of transit-oriented development. Given that it is intended as a

supplement to traditional zoning laws, it may be assumed that many of the same benefits that zoning creates in terms of this issue may be achieved by TOD. If mixed-use developments are appropriately sited and measures such as vegetation buffers are instituted to mitigate the noise of transit vehicles, nuisance issues should be no more prevalent than under existing zoning codes.

The inclusion of provisions for mixed-use developments within TODs should do much to provide for density and diversity of activities. As they are planned on a pedestrian scale, resultant density should be sufficient to serve the needs of residents and commercial establishments. Again, much of the success of this form of development depends on the willingness of developers to utilize these provisions. The reduction of sprawl should also be served, as more compact and transit-oriented methods of development are encouraged. As Belzer and Autler state, “Effective TOD can foster more efficient land use patterns and create a more balanced set of transportation choices in which automobiles coexist alongside other options.” (Belzer and Autler, 2002) By providing for the interconnection of regional areas of development along transit lines and encouraging clustering of mixed-use development, some of the more pervasive negative aspects of sprawl should be eliminated.

Finally, it is in the realm of exclusionary practices that transit-oriented development may perhaps be most beneficial. Given their central location to transit stops, TODs may provide more residential options for lower-income residents, or

those (such as the elderly) who are limited in their personal transportation options. Additionally, if the inclusion of a mix of housing types and costs is followed, a greater diversity of residents will have access to the transit clusters. As Belzer and Autler note, “TOD is about expanding rather than circumscribing options. Lower-income people with less money to spend on transportation, first-time homebuyers, and others inadequately served by most currently available housing options may particularly value the location efficiency offered by TOD.” (Belzer and Autler, 2002) Finally, such incentives as location efficient mortgages (LEMs), which allow qualified borrowers to obtain a larger mortgage than would otherwise be possible based on their reduced spending on transportation, have been becoming more prevalent. (Belzer and Autler, 2002) These incentives may make TODs more attractive to underserved groups than traditional developments.

## **New Urbanism**

### *General Overview*

According to the staff of New Urban News, “Conventional zoning, with its strict separation of residential, commercial and industrial uses, has left us with fragmented cities and sprawling suburban development. The New Urbanism calls for integration of residential and retail zones and for a mix of housing types, and therefore represents a fundamental challenge to existing ordinances.” (New Urban News, staff, 2001) The concept of New Urbanism largely emerged as a planning movement in the late 1980s and early 1990s as a reaction to what its proponents

viewed as the negative development trends that were shaping urban form. The *Charter of the New Urbanism*, published in 1998 by the Congress for the New Urbanism (CNU), states that New Urbanists,

[A]dvocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology, and building practice. (CNU, 1998)

These basic goals are further elucidated in the New Urbanists' principles for guiding urban policy, development practices, city planning, and design. Steve Garman, city manager of Decatur, Illinois, perhaps puts the central tenets of New Urbanism most succinctly when he states, "New Urbanism takes the conventional neighborhood designs of pre-World War II America and goes a step further; an entire neighborhood area is designed as a complete environment aimed at enhancing the quality of life of its inhabitants." (Garman, 2002) This focus on the human aspect of city planning is one of the most fundamental aspects of New Urbanism that separates it from traditional zoning.

One key divergence from traditional zoning is that New Urbanism places great importance on designing for the region, as opposed to merely the municipality. The Charter states, "The metropolitan region is a fundamental economic unit of the contemporary world. Governmental cooperation, public policy, physical planning,

and economic strategies must reflect this new reality.” (CMU, 1998) New Urbanism recognizes that planning must be conducted over a multitude of spatial regions, and therefore incorporates principles to guide three separate scales of development, namely, the region (metropolis, city, and town); the neighborhood, the district, and the corridor; and the block, the street, and the building. By proposing recommendations for development at each of these scales, proponents hope to emerge with a more harmonious and welcoming urban form.

New Urbanism endorses mixed-use developments and appropriate density to serve those developments. As with transit-oriented development, non-automobile transportation, such as transit or walking, are heavily promoted, especially as a means to manage sprawl. Brown and Cropper state that, “Higher densities...enable other goals, such as providing the critical mass needed for viable commercial facilities and transit options, and reducing housing’s share of land consumption.” (Brown and Cropper, 2001) Key to the success of these modes of development is planning on a larger scale than is traditionally afforded zoning ordinances so that an adequate population such as that needed to support such developments may be reached. Duany, Elizabeth Plater-Zyberk, and Jeff Beck, in their book Suburban Nation, highlight this point of needing to plan regionally so as to maximize the anti-sprawl benefits that may be accrued from public transit options. (Duany, et. al., 2000) Additionally, New Urbanist codes call for interconnections between districts, such as those found in a traditional street grid, to minimize the multiple arterial connectors associated with sprawling forms of development.

Another area in which New Urbanism differs from traditional zoning is in the way in which developments are placed and designed in relation to neighboring developments and the surrounding environment (a tenet which is expanded in transect planning). The *Charter* states that, "Individual architectural projects should be seamlessly linked to their surroundings. This issue transcends style...Architecture and landscape design should grow from local climate, topography, history, and building practice." (CNU, 1998) These mandates go beyond the zoning regulations for height, bulk, and setback requirements. Rather, they attempt to create an environment in which built structures function harmoniously with their natural surrounds, and in which there is a sense of interrelationship between individual developments.

#### *Advantages and Disadvantages of New Urbanism*

Perhaps the greatest advantage noted in New Urbanism is the broad range of applications it has for application in various municipalities. Examples are given of both greenfield areas (such as Seaside, Florida) and infill developments (such as a project currently underway in Baton Rouge, Louisiana). Because of the multitude of principles and guidelines outlined for New Urbanism, it may be applied in terms of a village concept for an area of development, or a New Urbanism code may replace an existing zoning ordinance. Though proponents would prefer the latter alternative, New Urbanism's possibilities at a smaller-scale should not be denied.

Evaluations of the economic impacts of New Urbanism developments have been mixed. Advocates have argued that municipalities which develop New Urbanism projects see financial returns from an increased amount and diversity of development and higher land values. This benefit is seen to extend to both developers and homeowners. A 1999 study of Kentlands, Maryland (a New Urbanist development outside of Washington, D.C.) conducted by Charles C. Tu and Mark J. Eppli found that consumers were willing to pay a substantially higher price for housing in Kentlands than in surrounding areas. They further state that, "Two surveys on TNDs (Market Perspectives 1993; Constantine 1994) indicate that consumers regard new urbanist features as desirable and may be willing to pay more for residing in a TND." (Tu and Eppli, 1999) However, critics have argued that the trend toward decreasing density is an indication of more general market preferences. Randall G. Holcombe, of Florida State University, states that, "If the new urbanism is to accomplish its goals, it will have to force people into accepting alternatives that they would not choose if resource allocation decisions were left entirely to the market." (Holcombe, 2001) Such conflicting points of view make it difficult to ascertain the actual benefits or disadvantages of New Urbanism from an economic perspective. However, the benefits of mixed-use developments may accrue not only from residential households, but also from the perspective of such developments becoming drawing forces for spending from outside the immediate community.

As with transit-oriented development, the issue of nuisances is not directly addressed in the literature surrounding New Urbanism. However, it may be assumed



that the regulations related to appropriate sitings of development to complement neighboring developments and the natural environment will do much to alleviate any potential nuisance issues. Again, this benefit will depend in large part upon appropriate measures being taken to mitigate noise from adjacent traffic or commercial developments. However, if the goal of increasing pedestrian accessibility is attained, environmental benefits will ensue in terms of reduction of air pollutants and decreased transportation infrastructure.

The issues of density and diversity similarly depend upon the willingness of developers and code-writers to incorporate adequate measures to ensure their occurrence. However, their inclusion is a central facet of the philosophy of New Urbanism, and so it would be difficult to argue that a development was in actuality of “New Urbanist” principles if it did not include adequate provisions for a reasonably high density mix of uses. The question of sprawl, however, is a harder one to argue. Although New Urbanism espouses principles which are decidedly anti-sprawl, the reality of the outcomes of the decisions may be quite different. Janet Ward points out that when used as a method of in-fill or “greyfield” development, New Urbanism planning may do much to curb sprawl. However, she points out that, “[G]reenspace development, even when it results in the creation of nouveau small towns, is regarded by New Urbanism’s critics as just another manifestation of sprawl.” (Ward, 2002) Though designed to be amenable to transit and pedestrians, New Urbanism developments often don’t have the critical mass of employment opportunities needed to support the residential population. Accordingly, if there is not adequate public

transit, employees will continue to drive to work, thus removing many of the beneficial aspects of the mixed-use developments in which they reside.

Finally, the issue of potential to be used in an exclusionary way is one that, again, faces some debate. Though New Urbanist developments are often intended to serve a mix of socio-economic and racial classes, the cost incurred by developers, as well as the gentrification that may arise from consumer preference patterns, often makes what was a moderate-income area suffer steep rises in rents. Ward cites Peter Gordon and Harry Richardson of the University of Southern California as saying, “New Urbanist rhetoric gives substantial attention to promoting equity, fostering residential mixing, providing affordable housing and reducing central city/suburb income differentials.” (Ward, 2002) “Yet,” she continues, “according to the professors, New Urbanist communities command a price premium of up to 25 percent, making them elite enclaves that are little different from suburban gated communities.” (Ward, 2002) This tendency of New Urbanist developments to become gentrified must not be overlooked when considering how inclusive New Urbanist communities are of a differing groups within a population.

## **Conclusion**

This chapter is intended to provide a broad overview of some of the advantages and disadvantages of differing alternatives to traditional zoning as compared to zoning’s identified benefits and consequences. It is clear from this discussion that no one method has been proposed that will completely alleviate

zoning's negative consequences while fully embracing its' benefits. However, what is also apparent is that other forms of regulations designed to guide urban development exist, and should be evaluated as to how they may interact with traditional zoning to improve the tools available to the planner. In the next chapter, a decision matrix will be created in order to evaluate which elements of each method of regulation should be included in development guidance to maximize benefits to communities.

## CHAPTER 6

### EVALUATING THE ALTERNATIVES—THE DECISION MATRIX

#### **Introduction**

The preceding chapters have provided an evaluation of traditional zoning, as well as some recent alternatives to this method of development regulation. However, it still remains to evaluate their benefits and consequences in relation to each other. In this chapter, a decision matrix will be created which will allow for the comparison of the overall effectiveness of each method in order to ascertain those factors which best serve the needs of various communities. It is hoped that by applying this method of evaluation, it will be possible to provide recommendations as to effective means of altering zoning in order to mitigate its negative consequences, while not completely removing its benefits.

#### **An Introduction to the Decision Matrix**

Decision matrices are an effective tool for guiding informed decision making. As described by Christopher Barlow of the Co-Creativity Institute, “The decision matrix was developed to handle the kinds of decisions which have many dimensions which can not be translated into each other. It lets you think about choices one criteria at a time, then combine those judgments.” (Barlow, 2001) The development

of the criteria is, in and of itself, a useful way of determining those factors which are seen as most important to the decision-making process. As described by employees of the University of California, the formulation of a decision matrix requires six steps.

These steps include:

1. Identify the alternatives;
2. Identify the decision criteria;
3. Assign weights;
4. Design a scoring system;
5. Rate the alternatives; and
6. Total the scores. (The Regents of the University of California, 1997)

The decision matrix is a fairly simple tool, but care must be taken in the formulation of alternatives, criteria, and weights. The alternatives should be clearly demarcated, and each should be able to be evaluated in its own right. The criteria should be clearly defined and relatively simple, so as to avoid the pitfall of evaluating multiple criteria under one heading. Finally the weights should be based upon rational measures that are able to be justified on the merits of the decision-making process. By following the six steps outlined above, and assuring that the parameters for each step are followed, an accurate decision as to the best alternative to follow should be determined.

### **The Decision Matrix in Context**

In the context of the thesis, the decision matrix will not be used as a method of determining the optimal choice among the alternatives presented. Rather, it will be used as a way of evaluating the strengths and weaknesses of each method presented so that recommendations on how to best guide development through regulatory

means may be made. In order to do this, the benefits and consequences of zoning, along with ease of implementation and the mitigation of environmental harm, will be used as criteria, while the five methods of regulatory guidance for development (traditional zoning, performance zoning, transect planning, transit-oriented development, and New Urbanism) will be used as alternatives. The eight criteria that will be considered are the following:

1. *Protects Property Values*: Provides an assurance to property owners that the value of their property will not be adversely affected by new development. May also assure landowners that they will be able to make “highest and best use” of their property.
2. *Reduces Nuisances*: Ensures that incompatible uses will not be sited in such a way that the activities conducted at one impinge upon the activities conducted at another.
3. *Provides for Density*: Allows for adequate space to be designated for dense residential, commercial, mixed, or other uses.
4. *Provides for Diversity*: Allows for adequate land within an urban area to be designated for mixed uses, including residential, to serve for the needs of a dense population.
5. *Removes Potential for Exclusion*: Ensures an equitable and fair distribution of land, with activities and infrastructure (especially transportation-related) located in such a way that all parties may benefit.
6. *Mitigates Sprawl*: Limits the outward expansion of dispersed development.
7. *Mitigates Environmental Harms*: Guides development in such a way that negative environmental consequences associated with vehicular travel, an excess of impervious surfaces, and other by-products of development are lessened.
8. *Provides for Ease of Implementation*: Is easily understood and implemented by planning officials and others responsible for urban development. Is feasible in terms of cost and time required for implementation.

Weights have been assigned on a scale from zero to one, based upon the impact that each criterion has on developing urban form. For example, the criterion “Provides for Diversity” has been given a greater weight than “Mitigates Environmental Harms” due to the fact that urban development is more impacted by the diversity of activities provided within a given area. The criterion relating to environmental harms does

warrant inclusion, however, given that consideration must be made of environmental factors in determining to what extent a municipality may develop (due to such requirements as environmental impact statements). The assignment of weights is also a highly subjective operation, as it is difficult to determine any scoring mechanism without involving some measure of value judgments. Though it was attempted to base the weights on logical criteria, the subjective nature of the weights should be taken into consideration. The combined weights total one. Scores have been assigned established upon the discussion of the relative merits and disadvantages of each alternative, and range from one to ten. The total possible score for any given alternative is 10.

The total score will be examined in terms of the relative success of each method in relation to the other alternatives described. However, it will be the scores of each alternative for each criterion that will provide the basis for recommendations on improving regulatory guidance for development. Because the process of development guidance does not rely on mutually exclusive tools, it will be possible to combine elements of each method into a new technique of regulation. Table 1 (Evaluation of Alternatives by Criteria) provides an overview of the different weights and scores assigned to each variable. By evaluating the relative strengths and weaknesses of each method of guidance, it will be possible to provide a more effective examination of how urban planners may use regulatory means to guide development

**Table 1: Evaluation of Alternatives by Criteria**

| ALTERNATIVES                        | CRITERIA                 |                   |                      |                        |                                 |                  |                               |                        |                      |     | TOTAL WEIGHTED SCORE |       |   |       |   |     |      |
|-------------------------------------|--------------------------|-------------------|----------------------|------------------------|---------------------------------|------------------|-------------------------------|------------------------|----------------------|-----|----------------------|-------|---|-------|---|-----|------|
|                                     | Protects Property Values | Reduces Nuisances | Provides for Density | Provides for Diversity | Removes Potential for Exclusion | Mitigates Sprawl | Mitigates Environmental Harms | Ease of Implementation | TOTAL WEIGHTED SCORE |     |                      |       |   |       |   |     |      |
|                                     | 0.15                     | 0.15              | 0.175                | 0.175                  | 0.1                             | 0.075            | 0.075                         | 0.1                    |                      |     |                      |       |   |       |   |     |      |
| SCORES (Base Score, Weighted Score) |                          |                   |                      |                        |                                 |                  |                               |                        |                      |     |                      |       |   |       |   |     |      |
| Traditional Zoning                  | 9                        | 1.8               | 9                    | 1.35                   | 5                               | 0.875            | 2                             | 0.35                   | 3                    | 0.3 | 3                    | 0.225 | 4 | 0.3   | 9 | 0.9 | 5.80 |
| Performance Zoning                  | 7                        | 1.05              | 9                    | 1.35                   | 6                               | 1.05             | 5                             | 0.875                  | 4                    | 0.4 | 5                    | 0.375 | 8 | 0.6   | 4 | 0.4 | 5.50 |
| Transect Planning                   | 6                        | 0.9               | 8                    | 1.2                    | 6                               | 1.05             | 5                             | 0.875                  | 3                    | 0.3 | 5                    | 0.375 | 8 | 0.6   | 3 | 0.3 | 5.00 |
| Transit-Oriented Development        | 6                        | 0.9               | 8                    | 1.2                    | 8                               | 1.4              | 8                             | 1.4                    | 7                    | 0.7 | 6                    | 0.45  | 7 | 0.525 | 3 | 0.3 | 6.35 |
| New Urbanism                        | 7                        | 1.05              | 8                    | 1.2                    | 7                               | 1.225            | 8                             | 1.4                    | 5                    | 0.5 | 5                    | 0.375 | 7 | 0.525 | 8 | 0.8 | 6.55 |



## **Explanation of Scoring Mechanism**

The scores recorded in Table 1 are determined based upon the overviews and evaluations of the different alternatives provided in Chapters Three, Four, and Five. Each score was assigned based upon the individual alternative's ability to serve the criterion in relation to the other alternatives. For example, it was determined that traditional zoning will provide a higher protection of property values when compared to performance zoning and New Urbanism, but that performance zoning and New Urbanism will provide for more protection than transect planning or transit-oriented development. Therefore, traditional zoning was ranked highest in this scale, while transect planning and transit-oriented development received the lowest scores.

An examination of the scores given to each alternative may result in questions regarding the assignment of those scores. For example, the scores for almost all alternatives were quite low in the area of removal of the possibility for exclusion. As was mentioned in the introduction, many of the impacts of the frameworks of development regulations are largely contingent upon the substance with which they are filled. Though the alternatives to traditional zoning do make some attempts to alleviate the possibility of being used for exclusionary purposes, the substance of the resulting codes may still include such things as large-lot "zones," which tend to be exclusionary. This question of how each type of code would be used is perhaps the greatest uncertainty impacting the assigned scores. In addressing this, it was attempted to distribute scores based upon the possibilities that the ordinance

framework would leave open to decision-makers as opposed to merely the intent of the framework.

### **Evaluation of the Total Weighted Scores**

Total scores for the alternatives ranged from a low of 5.0 to a high of 6.55. Traditional zoning fell in the center at 5.8, which is interesting given that all four other alternatives were in many ways created as a reaction to the perceived negative aspects of traditional zoning. One factor in this outcome is the inclusion of “Ease of Implementation” in the criteria. Because traditional zoning is the most widely practiced and accepted form of regulatory guidance for development, it is easily understood and has a set mechanism for implementation. The other alternatives would, in large part, require a general shift in the policies and practices of any given municipality, and would require considerable time and financial expenditure for implementation.

The low score achieved by transect planning is in large part reflective of its relative immaturity as a planning tool. If it begins to be more widely implemented, some of the initial questions surrounding its efficacy may be answered in a positive way, in which case the scores would need to be re-evaluated. At this point, however, enough questions remain to warrant hesitation in many of the identified criteria. Strangely enough, transit-oriented development, which many feel has not yet been fully implemented, scored high despite the low score given to its ease of implementation. Much of this may be accounted for by the fact that the essence of

transit-oriented development is the requirement for concentrated areas of mixed use and a relationship to transit that is expressly designed to mitigate sprawl.

Performance zoning, though scored highly in terms of its' ability to mitigate environmental harms, did not score highly in comparison to traditional zoning. Much of this is due to the fact that performance zoning's key benefit of mitigating environmental harm does little to outweigh the difficulty of implementation identified in Chapter Five, or the fact that it does little more than zoning to prevent exclusionary practices. Performance zoning, though it does include the possibility for more provisions for mixed-use developments and a higher density of activities, is not judged to be as effective a tool in these areas as some of the other alternatives.

New Urbanism scored most highly, a situation not unexpected when one considers the number of regulatory methods that it encapsulates. One of the primary benefits that it provides is ease of implementation, as it may be done in stages or steps under existing controls. Though it scored relatively low in mitigating sprawl and removing the possibility for exclusion, these were offset by high scores for reducing nuisances and providing for density and diversity.

## **Conclusion**

Though traditional zoning has been widely criticized for its perceived shortcomings, the results of the decision matrix show that traditional zoning fares reasonably well when compared to the evaluated alternatives. New Urbanism, largely

due to its ability to be tailored to the existing regulations of a municipality, stands well in relation to the other alternatives. One key to note is that each alternative scores well in relation to the other alternatives in at least one area. This indicates that perhaps the best approach to guiding development through regulatory means is not to rest solely on one proposal, but rather to try to provide regulations which will gain the benefits of each.

## CHAPTER 7

### RECOMMENDATIONS AND CONCLUSION

#### **Introduction**

The preceding chapter presented a decision matrix intended to provide a comprehensive overview of the strengths and weaknesses of zoning and the various alternatives presented in Chapter Five. The final chapter will attempt to use the strengths and weaknesses identified in the decision matrix to provide a recommendation as to how planners may more effectively use regulatory means to guide urban development. These recommendations will be drawn partly from the methods contained in the various systems evaluated, but will not be limited to one particular method.

#### **Recommendations**

Proposing a method for regulatory guidance of urban development is a difficult task. As outlined in the text of the thesis, any method recommended is prone to encountering a variety of pitfalls even as it attempts to solve for other problems. Traditional zoning, enmeshed as it is in the minds of government officials and planners, has been widely used as the primary method for guiding urban form, with proponents arguing that the various benefits it accords outweigh any negative

impacts. However, the wide variety of proposed alternatives speak to the feelings of many others that traditional zoning should be modified, if not replaced, in order to provide a more inclusive and dynamic character for our cities and municipalities. Many of the problems encountered by traditional zoning, such as its penchant for being used for exclusionary purposes and the reduction of density and diversity that its very framework entails, are thus addressed by these alternatives. However, the benefits of zoning are so entrenched in the minds of those charged with the development of municipalities that to step outside of the zoning paradigm is viewed as risky at best. Nevertheless, it is apparent from the discussion of zoning's negative consequences that there are problems inherent in its framework and application that must be addressed if we are to bring our cities and towns successfully into the future.

The eight factors outlined in the previous chapter are those that have been identified as necessary for any framework to provide the best possible means to guide development. These factors are in no way exhaustive of the range of issues which impact urban form, but they do provide cities with a starting point for developing effective methods of regulatory guidance. These requirements are all served to some degree by the methods of regulatory guidance evaluated in the context of this thesis. However, in no case is one alternative clearly superior to all others in all criteria. Therefore, it seems apparent that a new framework, incorporating elements of each plan, should be created.

Perhaps the greatest need identified over the course of the paper is that of reconnecting zoning and planning on both a local and regional scale. By zoning in accordance with a comprehensive plan, it is possible to better determine the needs of the population and then assign land use regulations in accordance with those needs. When zoning is divorced from this tool, as so often happens, the regulations that result may become overly political, or too based on expedience instead of promoting sustainable and good growth. The need to conduct this process regionally will present hurdles, yet overlapping and mutually dependent economies and populations should be considered when determining how to allocate land uses. In this context, regional planning, involving input from stakeholders in a number of jurisdictions, will be critical if such elements as transit and environmental quality are to be attained.

In conjunction with this, zoning needs to be brought out of the realm of the political. It is oftentimes too easy for zoning decisions to be granted as a matter of favor, with little thought to the wider recourse of those decisions. By incorporating a quasi-judicial review, such factors as exclusionary zoning may be pushed further out of the realm of possible actions. Such a review would be intended to ensure that legal needs, as well as the intent of the zoning structure in accordance with the comprehensive plan, are met.

Finally, it is critical that we rethink how zones are designated and distributed. If land use regulations are intended to promote the greater good of the city and its' residents as a whole, then it must be kept in mind that factors other than the desires of

the immediately impacted population must be considered. By incorporating factors such as environmental concerns, the needs of differing socio-economic classes, and the future sustainability of a municipality, “good” development may be promoted, thus allowing the city to thrive as a unity instead of as pods of segregated uses and classes.

The following is a list of examples of elements that may be incorporated into the above changes in the regulation of urban development. Though these recommendations will not completely mitigate any harms resulting from the different regulatory mechanisms evaluated here, they do attempt to achieve the beneficial aspects of each of the alternatives to a degree that outweighs the negative aspects.

The recommendations are as follows:

- Density defined in terms of relative attraction figures of commercial, retail, and residential uses, and in terms of proportions of those uses. May be based upon general demographic figures and trip generation models.
- Higher density and mixed-use districts promoted in core urban areas and areas central to transit stops and regional retail and commercial attractions. These should include mandatory provisions for affordable housing.
- Proximity of uses dependant upon projected impacts of development on adjacent properties as well as mitigation factors included in development proposals.
- Cumulative Impact Analyses (defined by the Council on Environmental Quality (CEQ) as “The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40CFR~1508.7).” (CEQ, 1997)) conducted in conjunction with development planning so as to better ascertain the impacts that any given development will have on the environmental quality of the site. May be used to mitigate potential harms.
- Mixed-use infill development encouraged by tax abatements and location efficient mortgages.



- Administrative review of development proposals and ordinance substance coordinated with current zoning administration so as to alleviate implementation difficulties.
- Parking and street requirements adjusted for mixed-use and high-density developments to encourage pedestrian activities and use of transit.
- Districts arranged in a hierarchical manner such that uses permitted in “higher” districts will automatically be permitted in “lower” districts.
- Provisions for shared open space should be made in each district.
- Varying degrees of retail and commercial services should be permitted in all but the most restricted residential zone, so as to provide convenient access for residents.

The incorporation of these recommendations should do much to begin to address the problems inherent in methods of regulatory guidance of development currently in practice. Though not intended to completely replace existing zoning codes, their integration should effectuate positive change in the way that American cities currently grow. The provision for cumulative impact assessments should ensure that greater care is taken in evaluating the overall environmental impacts of city growth. Recommendations in alignment with transit-oriented development for affordable housing in relation to transit stops should enhance the options available for lower-income residents and help to address the problem of exclusionary practices. Performance zoning-style techniques should ensure that nuisance issues remain at a minimum. Finally, the encouragement of high-density, mixed-use, and infill developments should begin to assuage fears associated with sprawl, and allow cities to once again provide a dynamic environment for active human interaction.

## **Recommendations for Further Research**

This research has been conducted as a literature-based study. In order to further examine the needs of cities with respect to zoning, it is recommended that a study be conducted that incorporates a review of how each of the methods of land-use regulation have been conducted and how it has affected city development. Such a study would involve the identification of municipalities that have implemented differing methods of zoning, followed by an in-depth examination of how it has affected economic development, residential patterns, density, environmental considerations, and patterns of sprawl. From this, it would be possible to develop a more conclusive recommendation as to what elements are necessary to gain zoning's maximum benefits while mitigating its' most negative consequences. Further research would also need to be conducted to evaluate the legal and constitutional ramifications of alterations to traditional zoning codes.

## **Conclusion**

Traditional zoning has a degree of impact on American cities unmatched by any other mode of regulatory guidance of development. Since its inception in New York, however, it has suffered from a variety of unintended consequences which have severely impacted the degree of positive growth experienced in many municipalities. A variety of alternative methods have been developed to alleviate these problems, but none have completely gained the benefits associated with traditional zoning. The amount of literature criticizing zoning, however, is a clear indication that current

zoning practices should be evaluated to determine in what ways they may be amended to prevent such problems as sprawl, exclusionary practices, and a reduction of density and diversity in urban form.

One clear conclusion drawn from the thesis is that zoning and the various alternatives examined need not be considered mutually exclusive. Zoning has been beneficial in many ways, yet it should not be considered as an unalterable tool. Rather, by considering zoning to be one of a number of pieces necessary to guide effective development, other pieces may be added to better promote good city growth.

The recommendations made here do not claim to completely alleviate the problems associated with zoning. Rather, they are general steps that may be taken to begin to mitigate concerns while not completely losing zoning's beneficial aspects. The issue of zoning's future in the arena of planning is one which will continue to be debated, and no easy answers emerge. However, it is hoped that by changing some basic negative aspects of the zoning process, cities may begin to evolve towards more unified, lively, and livable places.

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