A Better Way to Zone

Ten Principles to Create More Liveable Cities

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INTRODUCTION

ZONING IS NOT A SEXY TOPIC. No one—except people like me—reads zoning ordinances, because they are boring. It's not that the books don't have enough pictures—some modern zoning laws have lots of them. It's because the topic itself is so detailed. To understand zoning, you have to delve through long lists of permitted and prohibited uses, tables (or, worse yet, lists) of maximum building heights and minimum setbacks, landscaping requirements, maximum sign heights and sizes, and myriad other topics. By itself, each topic is a bit of a mental challenge and a struggle against sleep. Put together, they can become mind-numbingly complex. It's a lot like eating sand. Even after reading all the chapters, most readers would be hard-pressed to visualize what can or cannot be built. That's why most cities of any size hire staff whose job it is to understand what is in the zoning law and how it all fits together. That's a good thing—and certainly better than having no one understand how it might fit together. But it would be better if we could all understand it, at least enough to know what we can do with our property.

Public perception of zoning documents was demonstrated vividly in a recent televised public service announcement emphasizing the importance of reading to children. The scene showed a father coming into his daughter's bedroom to read her a bedtime story. After a predictable voice-over about how reading to children helps them learn, the narrator suggests that if parents do not read to their children the kids might not know how interesting books can be. To prove this point, the father asks his daughter what he should read that night and she hands him a copy of a thick book titled *Zoning and Variances*. So not only are zoning laws complex, but they are now the poster child for boring reading. Perhaps only the Internal Revenue Service tax code is more pilloried as an example of turgid, inconsistent, and incomprehensible rules.

That's a shame, because zoning laws (and their half brothers, subdivision

regulations) are the filters that determine what gets built on private land—and the vast majority of urban land is private land. In well-run cities, zoning also determines what can be built on public land, but that is another story.

For better or worse, the roots of zoning run deep. Zoning as a legal tool originated about ninety years ago when New York City adopted the first zoning regulation. A lot has changed since then, and zoning has had to adjust many times to keep up with changing market forces and the increasing public demands for control over land. Cities often have wide latitude to update their zoning rules how and when they choose. Some have been pretty good at incorporating new tools, but others have not. As a result, any survey of zoning tools currently used in the United States will find enormous variations. There really is no "standard" approach to zoning—nor should there be. We have not had a standard approach since the Standard Zoning Enabling Act and the Standard City Planning Enabling Act were passed by Congress in the 1920s. Practices have been diverging ever since.

After revising scores of zoning ordinances over the past twenty years, I can confirm that every one is different, but many share common weaknesses. Cities generally don't hire a zoning consultant unless the situation is pretty bad. Many cities start off their first consultant meeting by stating, "We're pretty sure ours is the worst zoning ordinance you've ever seen." But they're wrong in thinking they're unique. Many ineffective zoning ordinances are broken in very similar ways, which led me to write this book.

The fact that local zoning regulations vary from one another is not really a problem—it is just one of the healthy ways in which democracy is "messy." The actual problem is much more serious. The problem is that many current zoning systems

- are more complex than they need to be;
- actually prevent many types of development that cities would like to approve;
- do not provide housing at prices that citizens can afford;
- adjust poorly to changed circumstances; and
- reflect and encourage poor systems of city governance.

Because zoning is so important to the quality of American cities, we really need to make it work better, more efficiently, and more understandably. It is time to take the old zoning machinery apart and ask ourselves, "What is this piece really

supposed to do?," "Do we still think that is something we should be doing?," and, if so, "Is this the right piece to do the job?"

This book is an attempt to outline what a better approach to zoning would look like and how we can move in that direction. It explores how zoning was born; looks at how it grew up, including its awkward teenage years; and considers its somewhat dysfunctional adulthood. The story begins with basic Euclidean zoning and wends its way through the major milestones since then, including planned unit developments, performance zoning, and form-based zoning. Of course, there have been other changes as well, but these three illustrate how we have been trying to address some of the problems inherent in the system. Taking into account the various ways different cities have mixed and matched these tools—often just stapling a new chapter on the end of a book we thought was finished—it is not surprising that the results have been mixed at best. Jerry Garcia, was not thinking of zoning when he sang "What a long, strange trip it's been"—but he could have been.

This book asks three key questions that should influence how we design our zoning systems. First, it asks whether the assumptions that underlie traditional zoning tools are still true (or ever were true). Zoning has always been based on assumptions about how to manage the impacts of land use, and if that thinking has been wrong, then we have to wonder whether the tools themselves make sense. Second, this book asks whether zoning really addresses the forces currently driving the development of American cities. If it does not, then it needs to be changed so that it does. Finally, it asks: "Whatever happened to the sometimes-lost art of governance?"—that is, the skill of designing predictable systems of governing that produce good results over the long run without wasting resources. Running a successful city is not just about making the maximum number of people happy on city council night; it's about making decisions that will stand the test of time.

After critiquing the current zoning system from these three perspectives, this book examines the constitutional limits on how zoning can be changed. The technicality and rigidity of zoning lead many to think that "the law" must constrain it to be that way. But states have remarkable freedom in how they can allow their cities to zone land, and many states pass some of that freedom on to the cities. The law of zoning turns out to be anything but a straitjacket. It has a moderate number of fixed rules (mostly constitutional rights and federal laws) and lots of room for innovation. The state of the law is not the problem. In fact, it is part of the solution.

Finally, this book depicts a better way to zone. It identifies *how* zoning needs to change but does not offer a model of *what* it should look like at the end. Because of the huge stakes that property owners have in keeping property rights predictable, changes in big city zoning tend to be evolutionary rather than revolutionary. Systemic change in big city zoning almost always happens through a considered process over a period of time—as well it should. Rather than offer another model ordinance, this book identifies ten principles toward which zoning needs to move in order to be simpler, more effective, and able to guide real estate markets to produce better cities. It closes with five pointers about how to get started and make those changes happen.

We all have biases that color our opinions, and here are mine. First, this book is aimed at mature cities—those that include older areas that are ripe for reinvestment and redevelopment, even though they may still be growing with new development on their outer edges. It is not aimed at small towns, rural counties, or brand-new cities. Some of the discussion here may also apply beyond mature cities, and some may not. This is not to imply that other areas are not important, but I find the zoning problems of mature cities particularly interesting and I believe that current zoning ordinances are compounding the problems of mature cities in important ways.

Second, I have a bias for zoning systems that produce faster decisions for applicants. Private landowners are often more aware than city governments that "time is money," but cities should be just as concerned about it. Mature cities need private investors, because they do most of the building and rebuilding in our communities. Private investors—who include not just big companies but also you when you want to add a bedroom to your house—often need clear decisions to approve or deny an application, and they need them fairly promptly. Private landowners with a pending application have sometimes told me in frustration: "I can accept a 'yes' or a 'no,' but I cannot accept a 'wait until next month.'"

Third, I have a bias in favor of simplicity. Unnecessary complexity in any law that the general public has to use is not just unfortunate but also bad governance. Somewhere in the past ninety years, we seem to have accepted the fact that if you are going to get into zoning matters you probably need a lawyer. But that shouldn't be the case. Complex zoning matters may require lawyers, but most should not. Ordinary citizens should be able to understand the zoning ordinance as it relates not just to their property but also to their neighborhood, at the very least. The answer is to

make simplicity and understandability not just an aspiration but a guiding principle in zoning. After reviewing and rewriting lots of zoning ordinances, I have concluded that much of the public good comes out of some of the simpler zoning controls, and that some of the details that cause the most vociferous debates have little impact on the future quality of cities. Some readers may accuse me of oversimplifying complex topics in my descriptions of both how zoning works and how I think it should work. Some of that is deliberate. I think it helps to focus on the big picture of "What are we really trying to achieve here" and to regulate from there. So I plead guilty to simplification. Only time will tell whether it is oversimplification.

Fourth, I do not think the fundamental problem with zoning is that it interferes with private property rights. Throughout the ages, most civilizations have qualified the rights of citizens to use their land in order to prevent unwanted impacts. Since 1916, zoning has been the primary tool to condition property rights in the United States, but before that we had the law of nuisance, and if zoning were abolished tomorrow we would have to find another tool to address the same issues. Citizens are always going to care about the quality of their cities and neighborhoods, and in a democracy they are going to continue to support city government in regulating to reduce negative impacts and encourage good ones. However, I do believe that ineffective, inefficient, or unfair regulations are burdens on private property rights and that many cities could improve their performance in these areas. This book is not about *whether* cities should zone but about *how* they should zone.

Fifth, while I support most of the tenets of both New Urbanism and Smart Growth, this book does not advocate those principles and does not assume that readers endorse them. Volumes have been written on both of these planning movements, and I cannot add to that discussion. I believe that cities that support one or both of those movements could implement them through the better way to zone described in this book, with one caveat: very prescriptive use and design regulations often complicate zoning ordinances more than they improve the quality of our cities. It is important to remember that many of the cities we love best do not use detailed design or strict use controls in the areas we love. To be consistent with this book, use controls would have to be flexible, form controls would have to be as simple as possible, and detailed design controls would need to be limited to unique areas. With that one caveat, the approach in this book is consistent with both New Urbanism and Smart Growth, but it is also useful in cities (or parts of cities) that don't endorse those views of the future.

Sixth, although I believe that environmental regulations can and should be integrated into zoning ordinances to achieve sustainable forms of urban development, I have not addressed that topic in this book. Again, this does not imply that environmental standards are unimportant—just that the topic is being addressed by many other authors. The field of environmental regulation is complex, and building sustainability into zoning ordinances is really a topic unto itself. Tomorrow's best zoning ordinances will include controls that reduce resource consumption and pollution through good design and will, in the process, make it easier to comply with state and federal environmental requirements. The approach in this book can incorporate those controls, but in limiting myself to ten directions for the future, I have chosen to leave this topic to the many specialists already wrestling with it.

Finally, although much of my career has been spent as a zoning and land use consultant with Clarion Associates, the opinions in this book are not necessarily those of Clarion Associates or any of its partners or employees. Professionals in any field can disagree, and some of my colleagues at Clarion may disagree with me. Just as importantly, zoning consultants have to tailor their work to respond to unique development patterns, real estate markets, political realities, and personalities in each client city. So I may have given advice to clients that is not consistent with the opinions stated in this book. Sometimes the advice may have differed because the local government was not open to the types of changes discussed in chapters 7 and 8 and we had to search for a second- or third-best alternative. In other cases, the difference occurs because I have learned from experience and changed my opinions over time. After all, that is what this book is all about—learning to think about zoning in different ways than we have in the past.

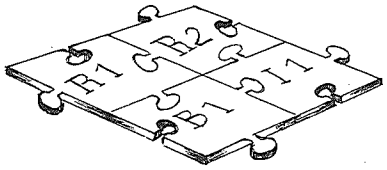
A BETTER WAY TO ZONE

CHAPTER 1

A Brief History of Zoning

TO UNDERSTAND HOW ZONING doesn't work, we need to start with how it is supposed to work—or how it was supposed to work when it was shiny and new. We also need to understand how it has already been modified to deal with new problems and pressures. We need not explore the history in detail—several good books already do that[1]—but we do need to understand today's starting point so we can avoid repeating the mistakes of the past. By reviewing how we have already tried to "fix" zoning, we can identify what parts of the fix worked and what parts did not (and why).

"Euclidean" Zoning



Traditional zoning is "Euclidean" zoning, named not after the Greek mathematician Euclid nor because a zoning map looks sort of geometrical, but after the town of Euclid, Ohio, which won the first lawsuit over the legality of zoning. But before Euclid there was New York City, which adopted the first major zoning ordinance, in 1916.[2] If you can imagine the chaos of New York during the early twentieth century, when it was bursting at the seams with more poor immigrants arriving daily, you can understand why the city

leaders felt they needed to do something. They had already adopted a partial building code (the Old and New Tenement Laws) requiring that apartment houses be built so that a certain amount of light and air could reach the inner rooms. But now those tenements were sprouting up everywhere, even near factories—and, worse yet, near mansions.

So New York City adopted a "zoning plan" restricting the uses to which land could be put. Basically, they divided the city into "zones" for residential, commercial, and industrial uses. While they were at it, they also established an imaginary box within which buildings had to be built on each site. Some parts of the box—for example, requirements for access and light—were simply concepts carried over from the Tenement Laws of 1867, 1879, and 1901. The sides of the box were defined by distances that the building had to be "set back" from the front, rear, and side lot lines, and the top of the box was a maximum height limit on the overall structure. That was it. There were no parking controls (not many cars back then), no sign controls, no landscaping requirements, and no design controls. This was the backbone of zoning: a division of the city into use zones and boxes into which buildings had to fit in order to avoid crowding their neighbors; to avoid creating public health, safety, or fire hazards; and to prevent land use combinations likely to cause nuisances in the future.

The structure of the zoning document was straightforward. It included one chapter for each zone, with a narrative list of permitted uses and a list of setbacks and height limits. A separate chapter described the procedure for amending the zoning text or the zoning map. Importantly, we could change the text without changing the map (everyone in the affected chapter now had new rules for the future), and we could change the map without changing the text (owners in the recolored area now just followed a different set of rules). This is important, because this book is about changing the text of the zoning ordinance—not the map that applies it to specific parcels of land in the city.

Of course, even back in 1916, people were smart enough to know that no rule will work perfectly. For example, there may be parcels of such a weird shape that they physically cannot meet the setbacks, or instances where the height limits make no sense because the property is in a valley and the surrounding buildings would tower over it. So they allowed for "variances," which required an appearance before a "board of adjustment" to show that yours was a unique situation created by history, or by the land itself, and not by you yourself. You also had to show that, because

of that uniqueness, applying the rules rigidly would produce a result that was unnecessarily harsh on you and that flexing the rules for you would not create significant problems for your neighbors. If you created the problem yourself (for example, by selling off some buildable parcels in a way that left you with an unbuildable one, or because you just paid too much for the land and you needed a taller building to break even on the deal), then tough luck. You couldn't create a problem and then ask your neighbors to bear the burden of fixing a problem you could have avoided. This was all very logical and straightforward—a set of simple rules and a way to make exceptions in unique circumstances.

These basic Euclidean zoning tools did not change much until after World War II. The structure of the system was robust. We could do a lot with it. The original New York system had three colors—residential, commercial, and industrial—but there was no reason it could not have six colors, or twelve, or twenty. Instead of a "business" zone, you could have "business 1" and "business 2" zones to cover different types and scales of building. If you wanted a residential zone where the uses and boxes would allow only single-family houses, just create one and recolor a part of the zoning map to the new color. If you wanted a residential zone that makes each box sit far from the others—in effect requiring larger lots and encouraging more expensive houses—just create one. If you wanted to have one zone for heavy (smelly and smoky) industry and another for light (clean and quiet) industry, create them.

So Euclidean zoning remained largely unchanged in concept, but it became more complicated in practice. Denver adopted its first zoning ordinance in 1923 and its second ordinance in 1957. Table 1.1 shows how the menu of districts within the city changed over time. Not only were the basic categories (residential, commercial) being sliced into more varieties, but entirely new types of zones appeared.

Zones typically are shown on maps in different colors—lots of them. Residential zones are often shown in yellow, so as residential zones multiplied, we could use dark yellow and then light yellow and then lemon yellow. Anyone with a computer monitor knows that there is no shortage of different colors out there—but there *is* a limit to how many variations of yellow the human eye can distinguish when they appear next to one another on a map. Multifamily residential is often shown as somewhere between yellow and brown, but not all of us can spot the difference between dark orange, rust, and burnt sienna without constantly referring back to the map legend. So even though each new zone could have its own color, both the public and the planners sometimes had trouble keeping track of

Table 1.1: Denver Zoning Districts

1923	1957	1994
5 residential	5 residential	16 residential
3 business	6 business	12 business
3 commercial	1 office/institutional	7 mixed-use
2 industrial	1 park	2 office
	3 special	1 park
	3 industrial	3 industrial
		1 planned unit development (PUD)
Total = 13	Total = 19	Total = 42

what the different colors meant. This foreshadows one structural problem in thinking of each zone district as a world unto itself.

As the number of Denver's zone districts expanded, the number of topics covered also expanded. The 1957 ordinance covered new topics like parking; loading; the emission of heat, glare, radiation, fumes, and vibration; zone lots (for cases where zoning was applied to something other than a single platted parcel); and special zone lot plans.[3] By 1994, the list of topics was too long and complicated to summarize. To its credit, Denver is now engaged in an ambitious effort to simplify the ordinance. Similar changes were taking place in many other cities over the same time period.

Perhaps the most important addition to Euclidean zoning between 1920 and 1960 concerned the automobile. Particularly after World War II, it became clear that even if the building uses and boxes were compatible with those around them, some of those uses attracted lots of cars that clogged the streets and annoyed the neighbors. Addressing this issue did not require the creation of a new zone but instead required the addition of a chapter that was stapled to each zone through cross-references. Now you had to provide a certain number of parking spaces that varied depending on your land use, and those provisions applied in nearly every zone district. This was an important change. Now zoning regulations did not vary just by zone district; some regulations varied by specific use rather than by the zone in which it was located. When sign controls came along, they were handled the same way.

Something similar happened with floodplains. Planners and engineers have

always known that some places flood and they worry about it. Engineers try to keep it from happening and planners try not to have lots of people where it happens. But every type of zone district may have some parcels of land that are located in floodplains and others that are not. One solution might be to create more new zone districts—for example, for every "business 3" zone, there would also be a "business 3 floodplain" zone with fewer allowed uses and more prohibited types of buildings to protect public safety. But that would double the number of zone districts (and colors). To avoid that result, some planners decided to create a single new zone called *floodplain* and then "lay it over" all of the mapped flood areas. This was like drawing the floodplain boundaries on a clear sheet of plastic and taping it over the zoning map: you could see right through the plastic to determine the color of the zone where your land was located, and you could see whether the additional restrictions for the floodplain applied. There was no need to double the number of districts, but the practical effect of an "overlay zone" was the same. Again, this was an important change. These regulations varied based not on the underlying zone or the specific use but on geography or some other factor.

So now we had lots of zone district chapters describing uses and boxes, some overlay zone districts that might apply to all or none or some of the underlying districts, and some freestanding chapters (like parking and signs) that applied pretty much everywhere. The document was becoming more complex. There was a lot of overlap between chapters—you had to look in more than one place in the ordinance to find out what you could do on your property. But that was better than repeating identical parking and floodplain text in every zone district chapter, which would really have made the book an exercise in heavy lifting.

Along the way, planners and lawyers were discovering one of the wonderful loopholes of zoning law. Although state enabling laws often required that every property within a zone be treated the same, there was nothing to prevent you from creating as many zones as you wanted. You could create a new zone even if you suspected that it would be used only once, and you didn't have to admit to that when you adopted the text of the new zone; you just mapped one piece of land, and in the future you could color other parts of the city into the new zone if you wanted. But if tomorrow never came, so what? As far as the law was concerned, everyone whose land was in that zone (all one of them) was being treated the same. A legal doctrine on "spot zoning" emerged to stop unfair use of this loophole if the rules that were applied to one parcel differed too dramatically

from the rules applied to the neighboring parcels (see chapters 4 and 5), but it was used rarely and it did not address the proliferation of almost-but-not-quite-identical zone districts.

Although zoning was now in common use, not everyone was happy with it. In addition to generalized angst by those who thought there should be no land use controls, criticism of Euclidean zoning came from two other quarters. First, there were those who wondered whether the system was getting too complex. In theory, there was no limit to the number of zone districts that could be created. Didn't that start to erode the idea of uniformity behind the use of zoning districts? How much time and effort did the city want to put into operating this zoning system, and how hard would it be for the public to understand the regulations that applied to their property?

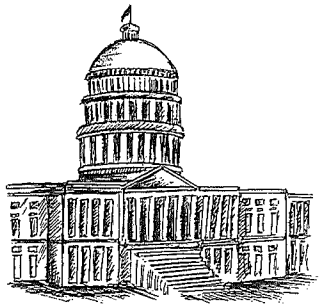
Second, some folks—lawyers mostly—wondered whether the move from a few general districts affecting large classes of people to many smaller and more specialized zones opened up possibilities for unfairness and abuse. Changing a widely used zone district, such as "business 3," could not be done in the dark. Text changes usually required newspaper notice—not individual notice to every property owner—but that works well only for large districts with many owners. Many "B-3" landowners would see the newspaper notice, and some inevitably would object. A debate would follow and city council would at least be informed about the objections when it decided whether to approve the amendment.

But as zoning districts proliferate, the more specialized zones often apply to smaller groups of landowners. A general "B-3" zone district might be refined so that a new variation called, for example, "B-3.2" applies only to properties along collector streets, and then further refined so that a variation called "B-3.2.5" applied to properties along minor collectors with significant industrial traffic. Amending the text of the "B-3.2.5" district would affect only a small number of properties and might not get much attention from the media or industry groups. It might be harder for the landowners to learn about the proposed change, and if they objected to the amendment their few voices might sound like only minimal opposition.

The expansion of zoning to cover new topics also had consequences. One predictable outcome was that variances were needed more often. A site that was buildable before the adoption of parking or landscaping standards might not be once those requirements were added. Over time, boards of adjustment found that they had a steady, if not daunting, workload. In some cities, the board's hearing calendar was

backed up for months, even for property owners who were requesting something minor. The basic idea that land could be regulated through a few simple zones addressing a few topics, and that exceptions would be rare, was on shaky ground. But in spite of its weaknesses, Euclidean zoning was still the bedrock of most American cities' land use controls. So many people rely on the predictability of the Euclidean zoning approach that increasing complexity and concerns about fairness and due process have still not discredited this most basic tool.

Standard Zoning and Planning Enabling Acts



When New York adopted its zoning plan in 1916, it acted alone. There was no national model that it "tweaked." But the same problems were occurring in other American cities, and the idea caught on. Edward Bassett, chairman of the New York committee that drafted the 1916 zoning ordinance, was a true believer who visited every state in the United States between 1917 and 1927 to spread the gospel of zoning.[4] By the 1920s, America was in the midst of the municipal reform movement, and talk about better ways to run cities was on many lips. This was the era that gave us the city manager form of government, merit-based municipal civil service systems (as opposed to patronage), and requirements for competitive bidding for city contracts. Zoning became associated with the reform package, and it spread in part because of the broader wave of urban reforms washing over America's cities.

During his years as Secretary of Commerce and then President, Herbert Hoover helped lead the movement toward progressive urban government and took a great interest in planning as a solution to urban problems. By 1922, some states had already adopted enabling acts for zoning and some cities had adopted zoning laws without waiting for state authority. Hoover appointed an Advisory Committee on City Planning and Zoning, which produced the Standard Zoning Enabling Act in 1924 and then a revised version in 1926.

Three things about the Standard Zoning Act are notable. First, it was just a publication. This "Act" was not an "Act of Congress." The federal government pub-

lished it as an example of progressive legislation that individual states might want to adopt. No one was forcing cities to zone, but some in the federal government thought it was a good idea. If your city wanted to zone, this was a good place to start. Second, the Standard Zoning Act required that zoning be "in accordance with a comprehensive plan," but it did not recommend what specific controls zoning should contain. It focused primarily on procedures: how to adopt and amend a zoning ordinance and how to allow variances. Third, one of the most strongly debated sections of the Zoning Act was the one authorizing variances—the rules on how much latitude the board of adjustment should have to vary the zoning rules and when they could do it. This debate foreshadowed ninety years of continuing discussions about how zoning should reconcile the need for both predictability and flexibility.[5]

In 1928, the Advisory Committee went on to publish the Standard City Planning Enabling Act, which outlined the establishment of a planning commission to draft a "master plan," street plans, controls for the subdivision of land, and even the need for regional planning.[6] Again, this was a publication of the Commerce Department, not an "Act of Congress." These two publications very effectively promoted both city planning and zoning. By 1930, the U.S. Commerce Department reported that thirty-five states had adopted legislation based on the Zoning Act and that ten states had adopted statutes based on the Planning Act. These were ideas whose times had apparently come.

The sequence of these events, though, has created lots of trouble for planning and city management ever since. Most importantly, creating legal authority to regulate land before creating the authority to plan for future land uses puts the cart before the horse, at least in the minds of planners. It reflected a "ready-fire-aim" approach to land use and suggested that it was OK to set the rules for what could be done with land based on current conditions—and without thinking about the future. In publishing the two Standard Acts separately, Congress was only suggesting that states might want to do both, or one, or neither. Although most well-run cities now support both planning and zoning, the connection between the two is often weak, and the legal structures underneath them are very different. And we still have large cities that zone without planning first as well as those that plan without zoning (well, actually, just Houston, which does it just to prove that it can).

Less important, but still frustrating to planners, the Standard Zoning Act used

the term *zoning plan*—but the Planning Act four years later used the term *master plan*. So was the zoning plan different from a master plan? Evidently so, and more troubling (again for planners), the term *zoning plan* really meant "the map that shows you where the different zones are located in the city"—which is really a "map," not a "plan." To planners, a plan involves some amount of thinking ahead and deciding what to do about the anticipated future. Of course, by stating that the zoning had to be "in accordance with a comprehensive plan," the Zoning Act did imply (maybe) that thinking about the future was necessary.

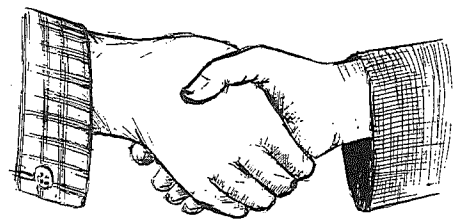
But if that was what the Advisory Committee meant, why did they use the term *comprehensive plan* in the Zoning Act and *master plan* in the Planning Act? That difference suggested that the document guiding zoning was something different from the master plan envisioned in the Planning Act, which really did have to think about the future. Even today, state zoning enabling acts modeled on the Standard Zoning Act (a surprisingly large number, given that the model is ninety years old) still use this term, and state legislators are still confused as to what a zoning plan is. Debates about what these various terms mean still occur regularly when amendments to state acts are proposed.

The Standard Zoning Act showed merely the outlines of this powerful new tool to shape cities. Essentially, it allowed the "police power" of the cities to be used not just retroactively (by removing nuisances that were threatening citizens' health and safety) but proactively (to prevent bad things before they occurred). This was a watershed in legal thinking about property rights. Although the use of Standard Acts was a very effective way to "broadcast" the use of these powers across the nation, it had its downside. All of the flaws inherent in the zoning-then-planning sequence of publication and the confusion over the different names of the required plans were also broadcast nationally.

It is interesting to think about what might have happened without the Standard Acts. On one hand, it is unlikely that the use of zoning would have spread nearly as fast as it did, because each state that wanted to use the powers would have had to find models from other states (without the Internet) and then choose among them or create its own, and that would have taken time. On the other hand, it is unlikely that so many states would have confused zoning with planning so thoroughly. Somewhere along the way, some smart state legislature would have gotten the sequence and terminology right, and the logic of that approach might have made it the preferred model for later adopters.

Nevertheless, by 1928, the United States had Standard Acts for both planning and zoning. In the following years, state after state climbed on the zoning bandwagon, and the nations' citizens and city planners never looked back. Zoning appealed to planners' innate sense that the world would be better if there was "a place for everything and everything in its place." More importantly, it appealed to citizens who wanted to protect their homes from factories and industrialists who wanted just the opposite. And it appealed to city councils, which now had a new tool with which to respond to their constituents' complaints about conditions in their neighborhoods. In fact, zoning has come to be one of the most zealously guarded city council powers because it's so "real." It touches the land and people's lives in ways that they care about, and it's so much more interesting than just approving municipal contracts and settling lawsuits.

Planned Unit Developments



It was only a short jump from the idea of creating new zones that looked like normal zones but would probably be used by only one landowner to the idea of a *planned unit development* (or PUD) custom-designed for one parcel of land. PUDs differed from specialized Euclidean zones because no one pretended that they would ever be used on any land other than the parcel for which they were written. Probably the first PUD ordinance adopted was in Prince George's County, Maryland, in 1949.[7] State PUD enabling acts soon proliferated across the country. This time, the federal government did not have to publish a Standard Act. PUDs were a tool that invited negotiation between cities and property owners to create something that met both their needs. And they were needed.

By the 1950s and 1960s, planners and the elected officials who hired them had moved beyond concern for uses and boxes; they also wanted quality. Landscaping was becoming a standard development practice, and ever-increasing parking requirements led planners to start asking that at least the big parking lots have some trees and bushes. A few cities were talking about requiring quality in other areas as well, including walkways for pedestrians, bicycle parking, lighting controls,

erosion controls, and even architectural controls addressing the design of buildings. Raising the bar to require that all new developments include these types of "quality" often provoked opposition from landowners and developers who felt the added costs would come from their pockets, so change was slow and sporadic. But the trend was clear: more zoning topics and more complexity.

The situation was different, however, when a property owner asked for a zoning change. Here was someone who needed something from the city, something discretionary and usually within the power of the city council to grant or not. In theory, thought the planners, someone who wants a discretionary approval from city council should be a little more willing to increase the quality of development—and that was sometimes true. In fact, because developers often found that they needed variances for some of their proposed uses or boxes and because planners wanted the bells and whistles of quality, negotiated zoning districts looked like a classic win-win situation.

State legislation authorizing PUDs simply legalized this practice. Instead of adopting more and more specialized residential districts with shades of yellow indistinguishable to the human eye, the city could adopt one PUD ordinance authorizing the creation of individualized PUDs. Each PUD had to be adopted publicly—with due process, as an ordinance—but it didn't have to be published as a new chapter in the zoning book because each one was so tailored that it would not be used again. PUDs were sort-of-zoning and sort-of-a-contract situations, and not every city contract has to be published in full. Officially, PUD ordinances gave permission for developers and cities to reach acceptable compromises that balanced innovation, quality, and flexibility, and that compromise would become the zoning. Large, mature cities generally added PUD regulations as an option to be used on a case-by-case basis to replace individual pieces in the Euclidean zoning map.

Cities began encouraging their developers to apply for PUDs so that they could negotiate for more quality. Developers used PUDs not only to authorize new layouts and combinations of uses not allowed by standard zone districts but also to buy time. They sometimes used PUDs to "lock in" the right to build certain amounts of development while leaving the details vague.

But this created some challenges. If a PUD were approved today but the landowner did not have to really decide the final land uses and layout until later, how was the city to plan for adequate roads and infrastructure? It was well and good to say that the land use would be residential and the overall density would

be X dwelling units per acre, but different types of housing generate different amounts of traffic, and it could make a big difference whether that traffic would exit the site onto Main Street or Cedar Drive.

Many PUD systems solve this problem by requiring two or more approvals before the new zoning is final. The ordinance allows the applicant to file a general plan laying out basic land use "bubbles," transportation and open space systems, and total amounts of development, and that general plan has to be approved when the land is rezoned as a PUD. Once the general plan has been approved, the applicant can talk to builders and tenants and banks about a much more specific project, with much less risk that it will not happen. But she still cannot build because the ordinance requires that once the developer knows what she really wants to do within those bubbles, she needs to come back and get a "site plan" approval showing that the detailed layout works, that the connecting roads and pipes are big enough, and that the whole thing is consistent with the approved PUD general plan. Sometimes the site plan can be approved administratively, but many cities require that it go back to city council for approval. While landowners would generally prefer not to go back for a second approval, the added flexibility still makes the deal worthwhile—it just makes the administration of PUDs more complex than other zones.

Still, some landowners and developers began to get a little skittish. What had started out as a way to vary standards for flexibility could now become a no-holds-barred negotiation in which the government held the upper hand. When an old Euclidean zone was being modified for the developer, the city had to at least pretend that the terms of the new district would be applicable to other landowners who might want the same type of zoning. They had to sound like good policy for the city in general. But PUDs were a one-on-one customized negotiation, so the city could tailor its negotiating strategy to the strengths and weaknesses of particular landowners and could even (unofficially) take into account what they knew of the developer's financial position and time constraints.

On the other hand, sometimes it was the landowner who was more sophisticated and had the stronger bargaining position. When an applicant was offering development to a city that had little, or if an applicant had more experienced planners than the city had reviewing the plans, the negotiation could be one-sided in the other direction. At the extreme, developers used PUDs as a way to get large-scale "variances" without offering any innovation or better quality. Instead of having to prove that every lot had a physical problem that the landowner had not caused, the owner could now ask that the standards be lowered for all of the lots and not have to show any hardship at all. If the city council was not smart or strong enough to extract some quality in return for the flexibility, what of it? A deal was a deal.

As PUDs moved from being the exception for innovative development to a form of zoning used regularly and for not-so-innovative projects, cities woke up to a problem. PUDs took a lot of time to negotiate, to draft, to get adopted, and to administer. One source of time delay was the two-approval system discussed above; many of the steps involved in rezoning had to be done twice, once for the initial PUD zoning and general plan and then again for approval of the site plan.

But that was not the only source of complexity and delay. In the old days, the city's planners all knew what uses were and were not allowed in the "business 3" zone, how tall the building could be, and how far back from the property lines it had to be. They could keep the basics of all the zones in their heads, plus general information about how much parking was required. But no one could memorize every PUD—there was too much detail, and there were too many of them. Questions that used to have a short answer now evoked responses like "Please wait while I go and pull the file (and read it for the first time)" or "We'll have to call you back on that."

In addition, some PUDs were overly detailed. High levels of detail may have seemed good to both the city and the developer at the end of a long, drawn-out negotiation, but they could seem like overkill to their successors. At their worst, PUDs locked in a very specific idea and allowed nothing else: the applicant showed a pretty picture, the city negotiated over the picture, difficult issues were resolved by hashing out the details, and when they reached agreement they locked in those details. That was bound to cause problems down the road, because life rarely comes out like the picture on the box.

A PUD was a snapshot of what was acceptable to one developer and one city council on a given date, but that snapshot now became the law. The developer often wanted to sell parcels of the newly zoned PUD land, and the buyers sometimes shook their heads when they reviewed the detailed provisions regulating those lands. The more detailed the PUD was, the greater the likelihood that the new owner would need to change it when conditions changed and market assumptions proved wrong. The same was true for the city council, who found that outdated ideas of quality were hard to change ten years down the road.

Because PUDs basically treated all of the land in their boundaries as a "unit"

within which the development must achieve its goals (hence the "U" in "PUD"), they often contained provisions allowing individual lots to be smaller, in return for larger parcels of contiguous open space somewhere else on the site. Often, that is good planning. But it also means that if you need to amend a PUD in the future, you will probably need to get consent from every property owner in the "unit." The owners of the small lots were intended to benefit from that open space, so the PUD could not be changed without consulting them. This was hard to do after parts of the land had been sold off. Technically, a property owner on one side of the development parcel could object to the redesign of an open space corridor on the other side, even if the owners of the parcels along the open space did not object. So not only did PUDs seem to require a lot of amendments as conditions changed, but the process of amending them was cumbersome.

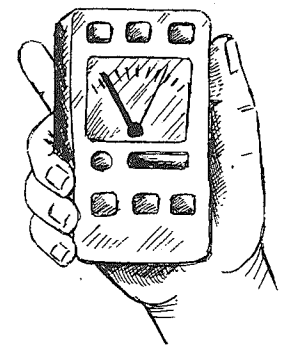
Finally, PUDs proved vulnerable to misuse. If you are not careful, PUDs could become a zoning narcotic. I have worked with several cities that became addicted to negotiated zoning and begged for the cure. The problem is that once you start using PUDs, you have trouble drawing the line between what should and should not be negotiated. Recall that PUD zoning was originally created to address innovative developments where the applicant would give increased quality in return for flexibility. It was not intended to be a back door way to package variance requests without showing hardship. And it was not supposed to be used to legitimize zoning problems by "shrink-wrapping" their current operations into personalized zone districts. Shrink-wrap zoning happens when a use or structure is clearly illegal but wants to remain in business and the neighbors will accept that as long as the illegality does not increase and the operations maintain their current levels of impact. The neighbors say: "This can stay, but it must be limited to the current square footage and the three trucks a week that currently visit the site. Expanding your operations from within your current facility is not OK," and the owner agrees. Although shrink-wrap zoning is often legal, it is not what PUDs were created for and it shows an unhealthy addiction to the tool itself.

But in spite of these problems, PUDs survive and in most cities they are thriving. At their best, they are used for truly innovative developments by thoughtful builders who offer quality in return for flexibility. In a fair percentage of cases, they fall prey to strong-arm tactics by either the city or the developer and result in one-sided deals. At their worst—and this really happens—they are used because it is easier to negotiate case-by-case deals than to fix the problems with the underlying

Euclidean zoning ordinance. Planners may know that the setbacks are wrong or that the parking standards are too low or too high, but there is no political will to fix the problems in the zoning ordinance. Worse, some cities' basic ordinances have been amended so often that they contain serious inconsistencies, and planners may be reluctant to approve Euclidean rezonings that may have unpredictable outcomes. It's much safer to do a series of one-off deals, even knowing that they will be more labor intensive to administer and modify over time.

Importantly, though, PUDs did not and really cannot replace zoning, except perhaps in very small towns. PUDs address new development—but most of every mature city is old development that is not coming forward for redevelopment approval. Even if all significant new development were forced into PUDs—which is not wise, but it has happened in some cities—there would be a need for preexisting, underlying zoning. Property owners who want to add a room to their house or commercial property owners who want to change from a shoe store to a lawyer's office, for example, should not be made to go through a negotiation. There have to be basic rules with a defined amount of "breathing room" so that the vast majority of property owners with smaller projects can simply get a building permit or a nondiscretionary approval without having to negotiate or obtain city council approvals.

Performance Zoning



Because of the rigidity of Euclidean zoning and the complexity that seems to accompany both Euclidean zoning and PUDs (after they are approved), a second alternative to Euclidean zoning also gained adherents. Performance zoning is listed third in this history not because of chronology (some cities moved in this direction long before PUDs came on the scene) but because it can apply to both standard Euclidean zoning and PUDs.

Performance zoning says: "Many zoning provisions are really trying to avoid a bad impact on neighbors by creating distance between them or setting a numerical limit on some dimension of development. Why don't we just prohibit the bad impact and let the developer figure out how to do it? Maybe we don't need that

much distance or rigid size controls. We'll regulate land to require the performance we want and not try to guess what physical shape that has to take."

Performance zoning makes a lot of sense, particularly for commercial and industrial land uses. Early Euclidean zoning addressed "heavy" (i.e., possibly smoky, noisy) industry primarily through separation. While a "light" industrial use could have setbacks of 50 feet, a "heavy" factory might require setbacks of 200 feet so that the smells and noise and maybe glare and heat from the operations could dissipate before they reached a nearby shopping area. Obviously, that was a pretty blunt instrument. What if the operations were completely enclosed? What if they used a technology that produced no smells or noise? Why 200 feet?

Performance zoners tried to quantify what levels of noise, smoke, emissions, glare, radiation, and other bad impacts were tolerable at the property lines and then wrote zoning provisions to prohibit anything higher. Then they reduced or removed setbacks and other physical spacing and dimension requirements. Where there was a requirement for a wall or hedge or buffer to keep out unwanted impacts, they took it out. It was up to the developer to decide which, if any, barrier would be installed if and when it turned out that the facility violated tolerable impacts. Performance zoning was designed to improve flexibility, and it did.

Strong adherents of this approach felt that many physical standards throughout zoning ordinances could be replaced by performance standards. Moderate followers tended to limit performance standards to commercial and industrial development and to the operation of those facilities after they were built. Most large cities did not replace Euclidean zoning with performance zoning, but they did adopt some performance measures over time. It is rare to find a large city without some kind of performance standards (usually related to noise impacts). Unlike PUDs, which are so different from uniform districts that everyone remembers when the tool came into being, performance zoning snuck in under the radar. Although there was a period in the 1970s and 1980s when performance zoning was a hot planning topic, many cities had already adopted performance-oriented industrial standards before they became trendy.

Also unlike PUDs, performance zoning generally did not require enabling legislation from the state government. If the standards were uniform, then the fact that they were not physical standards was a point too subtle to attract many lawsuits. Those who did challenge performance zoning generally lost, because the idea was so logical (or it looked so "scientific") that the courts concluded it must be OK.

So why didn't performance zoning sweep the board? After all, it solves all those problems with rigid boxes and setbacks that need to be varied or negotiated? There are two reasons. First, writing and administering performance standards was complicated. Developing the standards themselves took time (What is a tolerable level of vibration? How do we know that?). Consultants and engineers had to research the issue and come up with a standard that not only would pass judicial muster under the "rational relationship" test (there must be a rational relationship between what city council does and the outcome it is trying to achieve) but also would pass political muster when opposed by those whose facilities would not meet the standards. But once technical standards were established, some of them could be shared between cities—at least between cities with similar soils and climate and geography.

But the bigger problem was administering the standards once they were adopted. A builder could show up and say, "I've used the best architects and engineers for this job. It meets the performance standards. They all say it will not create vibration beyond X or smells beyond Y." While a capable planner could review a drawing to see that it included a 200-foot setback, the same planner could not look at a drawing and tell that the building's foundation engineering and ventilation system would in fact take care of the vibration, noise, and glare impacts.

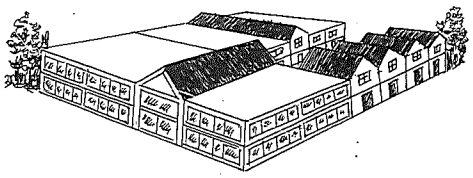
The planners could take the builder's word for it, but if it turned out to be wrong, there would be some angry neighbors at city council meetings and a builder complaining that he had just invested a fortune in the facility and could not change it. That was an unhappy prospect, so the city council had to either require the builder to indemnify the city for mistakes (which builders are very reluctant to do) or develop the internal staff capacity to check the work before it was built (in effect becoming quasi-engineers in specialized fields themselves) or hire consultants to do it for them. All of these cost money and took time. Training departmental staff was also subject to the "skilled public employee" problem. If the city trained a planner in the technical skills to confirm that development plans really met the performance standards, there was nothing to prevent another city government or a developer from simply hiring her away. Easier to hire away a skilled planner for a small raise than to risk training one yourself and losing that one. So, as a practical matter, it proved difficult to create an efficient, sustainable system to enforce broad-ranging technical performance standards.

The second problem was that many zoning regulations are not really designed to avoid measurable negative impacts; rather, they are designed to make develop-

ment more predictable. Some neighbors—particularly residential neighbors—do not just want to know that your house will have no adverse impacts on their property. They also want to know that your house will not look weird compared to theirs and others in the neighborhood. Many neighbors want the area to look and feel pretty much like it does now, at least for a while. Planners know that you can have nice residential communities with 30-foot front setbacks, 20-foot setbacks, 15-foot setbacks (provided that any cars in the driveway don't overhang the sidewalk), 10-foot setbacks (if there are alley garages), or even zero-foot front setbacks (for urban townhouses). There is no magic number that produces "health" in the community. Residents in all of these neighborhoods are happy because they choose to live there, but they generally want others to follow the same pattern. Try putting a house with a 10-foot front setback in a neighborhood where everyone else has 30 feet and see what happens. That's because one of the impacts that neighbors care about it is consistency with what they already have.

Even where there is a desire for consistency, however, there may be room for performance standards. Increasingly, cities are treating front setbacks in residential areas as a performance zoning item for which you have to show that you addressed the impact not of noise or glare but of "inconsistency"—that is, you pretty well match your neighbors. This is an evolution of the original, technical idea of performance standards, but one that has worked because it leads to a different kind of predictability. So performance zoning does not necessarily lead to unpredictability, but it sometimes results in creative (read "unexpected") solutions, and that sometimes leads to opposition, particularly within residential neighborhoods. The desire for predictability is one of the main reasons why performance zoning did not replace Euclidean zoning as the bedrock of American land use control.

Form-based Zoning



A third departure from Euclidean zoning has emerged only in the past twenty years. Proponents of form-based zoning are trying to rebalance the elements of Euclidean zoning to focus more on the form of development (hence the title of their movement) and less on permitted uses. The trouble, they say, is that standard

zoning was never right in the first place, because it is based on a crude assumption that commercial, residential, and industrial uses have to be separated for their mutual good whereas most people can see with their own eyes that this is not true. Americans spend their vacation money to visit places where the uses are all mixed together—if not Europe then at least older American cities like Boston and San Francisco. Saying that residential and commercial uses cannot exist side by side or in the same building does not even pass the straight-face test. People seem to prefer mixed-use environments at least some of the time. So why not allow—or even require—mixed use more often?

Although form-based zoning is not the same as mixed-use zoning—cities can and do sometimes endorse one without the other—the two topics often get confused. To keep the issues straight, let's take a short detour to look at why mixed use might be a good idea regardless of whether a city adopts form-based zoning. Three basic arguments support mixed-use zoning. The first is that it leads to more interesting, less sterile development. Anyone who has driven through endless suburban streets trying to find an address, or who has walked through an old-style urban downtown trying to find an open restaurant after 6:00 p.m., gets the point. Too much of any one land use in one place gets boring.

The second argument is that mixed-use development is safer. Jane Jacobs made this argument famous in her book *The Death and Life of Great American Cities* with her plea that planners design for "eyes on the street."[8] Her point was that people tend to pay attention and informally monitor public spaces (streets and parks and plazas) near where they live, and that vigilance makes places where people live safer than places where they don't. That is not always true, of course, but it appeals to our gut instincts—many people don't feel safe walking at night where nobody (except possibly those who are waiting to cause them trouble) can see them. William Whyte's research in *The Social Life of Small Urban Spaces* tends to confirm that the liveliest spaces are those where people can see and be seen.

The third argument is that mixed-use zoning is more efficient, in terms of both land consumed and transportation and infrastructure dollars required to serve the development. It is more efficient in terms of land because the same parking areas can be shared between commercial uses (which need spaces during the day) and residential uses (which need them mostly at night). In addition, many stores need to be on the ground floor to attract walk-in traffic, but apartment dwellers and condo owners often prefer not to be on the ground floor, because the upper

floors offer better views and feel safer. There can be a natural sharing of land by allowing residential-over-commercial uses.

Something similar happens for roads and pipes. Streets used only for office development have to be designed for peak loads during morning and evening rush hours but are often underused during the rest of the day. Shopping centers have their own peak-hour traffic demands: they open later than offices and close later. Residential traffic is more evenly distributed over the day as drivers do nonwork errands and make incidental trips. If the land uses can be combined, then a given road may be better used more of the time and we might have to construct fewer big-but-often-empty roads. Water and sewer pipes are similar; the same mains could carry water to different uses at different times of the day if they were located close together. Offices need water during work hours, but people cook and shower in their homes before and after those hours. For these reasons, mixed-use zoning has understandably become a discussion topic in its own right—even apart from form-based zoning.

In all fairness, many Euclidean zoning ordinances already allowed mixed uses through "pyramid zoning." Each less-restrictive zone allowed all the uses from the more-restrictive zones. Industrial zones often allowed the uses permitted in commercial zones, but not vice versa. If you had a shop and you wanted to locate it in an industrial zone, you could. That was your choice, and best of luck to you. But a factory could not be located in a commercial zone. The same was true for residential zones. It was OK to put apartments in a commercial area, but not OK to put shops in a residential area. This was also a fairly crude instrument, but it did allow some degree of mixed use.

Along the way, however, pyramid zoning got a bad name, partly because it implied that some uses are inherently more favored than others. It used the language of "higher" and "lower" uses and zones; residential was often considered "higher" and industrial "lower" (although in land use intensity and impacts, it could be the other way around—even planners got confused). Some planners thought that the one-way ratchet of allowing "higher" uses in "lower" zones but not the other way around was a little simplistic. There could also be residential areas where corner shops were appropriate—that is, a "lower" use in a "higher" zone might be OK. And some light industrial buildings fit just fine into commercial areas—the line between heavy commercial and light industrial uses has always been blurry, after all. Instead of a one-way ratchet, a better approach to mixing uses was needed.

But form-based zoning goes well beyond the idea of mixed use. It also

suggests that zoning should pay far more attention to the form of development. Defining an imaginary box within which buildings had to fit was only a lazy man's tool to reduce the impacts of neighboring uses—separate them from each other and they won't complain as much. But many of the great places we like to visit don't fit into site-specific boxes at all. Some have continuous frontage along the streets with no spaces between buildings; some have occasional buildings much taller than the rest. Many allow public and religious buildings and monuments to violate the boxes, and having a big town hall or church or synagogue at the end of a boulevard makes the area visually exciting. That can't easily be done with standardized boxes unless you handpick the box for each site.

But the problem is not just with generalized, uniform patterns of boxes; the problem is that the buildings inside the boxes can be beautiful or ugly. We can all point to some modern buildings that are about as visually nourishing as eating sand and to others that fit into the same box but manage to feed the soul. We gaze at the latter and avoid the former. And no, it is not just a matter of taste. To some degree, we can also tell the difference between good and bad buildings through objective standards.

Early proponents of a form-based approach included Peter Katz, Peter Calthorpe, Douglas Kelbaugh, Andres Duany, and Elizabeth Plater-Zyberk. Peter Katz's book *The New Urbanism* brought together examples of developments that deliberately created a more human, less auto-oriented scale of development and helped "reconstruct the urban fabric," while Doug Kelbaugh and Peter Calthorpe's *Pedestrian Pocket Book* helped popularize the idea of compact designs based on walkable streets focused on transit access nodes. Those works, together with the writings of the husband-and-wife team of Andres Duany and Elizabeth Plater-Zyberk, emphasized the need for zoning to go far beyond the idea of "boxes" for each building, to focus on the relationship of the building to the street, to surrounding buildings, and to people as well as cars, and to recognize that the location and design of each building should better reflect its function in the community.

Each of these authors is now identified as a New Urbanist, and planners have had more than a decade to enjoy the debate about whether New Urbanism is right or wrong. Instead of joining that discussion, however, this book will focus not on the planning vision behind New Urbanism but on the tool that is often used to implement it: form-based zoning. For purposes of this book, we need to recognize that form-based zoning is a fourth approach to land use regulation that is not the same

as the vision of New Urbanism. Form-based zoning does not have to be linked to New Urbanism (or to mixed use, for that matter); one of the most ambitious uses of form-based zoning even links it to rural development patterns. To avoid perpetuating this confusion, we will not pursue the discussion of New Urbanism here.[9]

The early form-based zoners were building on two important works that preceded them. The first was Christopher Alexander's monumental work, *A Pattern Language*.[10] Professor Alexander upset some of his fellow architects with claims that, by examining how different architectural elements "feel" to a broad spectrum of users, he could develop a series of principles of what was good and bad, which could be applied to everything from a window detail or a sitting area to a building, a block, a city, or a region. According to Alexander, style was not just a matter of taste; there could also be a somewhat rational method behind it.

The second work was *Visions of a New American Dream*, by Anthony Nelessen.[11] Mr. Nelessen (and others) developed a system of "visual preference surveys" by presenting a series of pictures of buildings and places and then asking groups of people which pictures they preferred. By analyzing the results of a wide variety of pictures and responses, Nelessen could identify what elements people liked—be it porches, or open spaces with a sense of enclosure, or continuous sidewalks unbroken by driveways, or distinctive public buildings on corners. He didn't claim that it was completely objective or scientific, but it was at least documented and (through statistics) could be shown to reflect public opinion fairly accurately. Under most state statutes governing zoning, city councils have to base their decisions not on science but on a "rational relationship" between the action they are taking and the outcome they hope to achieve. The visual preference surveys clearly passed the rational relationship test: if you required these types of plans and buildings, it was very likely that your voters would think the city was a better place. And it was better than guessing whether architect A was more right than architect B.

Standing on the foundation laid by Christopher Alexander and Anthony Nelessen, form-based zoners said that good urban form requires regulating much more than imaginary boxes within which buildings could be built; it requires some level of control over the architecture of the buildings themselves—not only individually but in relation to their neighbors. After all, if we know what makes "the people" happy, we should require builders to do some of that. A few free-spirited architects might complain, but city councils aren't there to make the architects happy. So form-based zoning tends to be somewhat prescriptive about what

buildings should look like, sometimes including such things as height relative to the width of the street, degree of detail on the facade, placement of parking in relation to the building, placement of public buildings within a block, and, in some cases, even the architectural style of the buildings. In general, the controls are intended to create a more pedestrian-oriented layout and scale and to focus on "place making" rather than a uniform set of rights for each lot.

The poster children for form-based zoning are the Traditional Neighborhood District (TND) ordinance (intended to be applied to a residential neighborhood) and the SmartCode (intended, on its face, to be used for an entire city). The model TND ordinance was developed by Brian Ohm, James LaVro Jr., and Chuck Strawser at the University of Wisconsin and by Duany Plater-Zyberk & Company (DPZ) with the help of affiliated firms and professionals. The SmartCode was drafted by DPZ.

A fair number of cities have adopted the TND ordinance in its "as published" form, but many more have consulted the model and adopted parts of it or variations on it. Basically, cities that find the idea attractive start with the canned TND ordinance and then send it through both staff and public filters to eliminate regulations that are considered excessive or inappropriate and then produce a version (often watered down) that is politically acceptable. The degree of detail in the TND is so high that lots of compromises can be made and a city can still wind up with something very different from standard Euclidean box controls.

The SmartCode is much more ambitious than the TND ordinance and has been adopted by far fewer cities.[12] Essentially, the SmartCode attempts to apply TND principles (and others) to an entire city. It takes some of the principles articulated for walkable, urban, residential/mixed-use areas; does similar analyses for higher- and lower-density areas; and proposes design-based templates to cover all of them. The authors identified six "transects," or idealized models of good design, that start with the most dense neighborhoods and taper off to the least dense at the edge of a prototypical city. SmartCode advocates say that most built-up areas fit into one defined transect or another and that, if you choose the one that is right for the density and function of the area, its regulations will produce a better development than standard Euclidean controls. The tool is not intended to be concentric—you might apply a denser transect model to an area farther from the core than some lower-density transect controls. Go with what is on the ground or the type of place you are trying to create, but apply the controls for that type of transect. SmartCode also allows for special zones (such as airports) that do not fit

one of those six transects. Many of the SmartCode controls can be summarized into a single chart, although, like Euclidean zoning, the chart sometimes has cross-references to regulations that are not on the chart.

Because it is so ambitious, it is not surprising that few cities have decided to replace their current zoning ordinances with the SmartCode. Among the twelve cities reported as having adopted the SmartCode by summer 2007, about half have adopted it as an option to be used at the request of the landowner. Some larger cities—including Fort Myers and Sarasota, Florida; Gulfport, Mississippi; and Petaluma, California—have adopted forms of the SmartCode but have made its use mandatory in only specific areas of each city. The small number of adoptions to date is not intended as a criticism, however; at least fifty-eight additional cities had SmartCode discussions in process by early summer 2007, and that is a pretty high number for a fairly radical reform program.

In contrast, many more cities have adopted TND zoning ordinances or some hybrid form of TND. In some cities, the tools have been adopted only as "floating zones"—chapters of the ordinance that are not yet applied to specific lands but are available if and when the city needs them or a property owner wants them. In other cases, they are optional or required for some but not all of the land in the city. In yet other cities, they are adopted as an optional alternative alongside the Euclidean zones. Usually, they implicitly assume that some Euclidean procedures (like standard provisions for permits and variances) will remain in place. Like PUDs, both TND and the SmartCode have been applied where they seem to be most appropriate or where the property owner requests or consents to it. Most commonly, a downtown area, a key "main street" area, a prime mixed-use node, or the land around a transit stop gets form-based zoning but the rest of the city does not.[13]

While it is still maturing, form-based zoning is clearly having a positive impact on how we think about zoning. Even if many cities start from the TND and SmartCode models and then create homegrown hybrids between those models and standard Euclidean/PUD/performance tools, new paths are being charted.

Unlike PUDs and performance zoning, which were created to make Euclidean zoning more flexible, form-based zoning was aimed at a different failing: that earlier tools were not producing the types of neighborhoods people wanted. Because the goal of form-based zoning was not really administrative simplification, it is not surprising that the result is not simple. In fact, the result is a mixed bag. It makes regulation of uses easier and regulation of building design more complex.

Form-based tools substitute drawings of preferred or required building types for zoning text where possible, and the trade-off is illustrated by the amount of computer memory involved. Graphics require lots of memory. In the old days, a zoning ordinance text might require two or three megabytes of computer memory. As more graphics were inserted to illustrate the text concepts, we started seeing zoning ordinances requiring ten or fifteen megabytes. The most recent version of the SmartCode uses fifty-six megabytes.

As with most good ideas, the strengths of form-based zoning are also its weaknesses. Its advantages in communicating intended patterns of development also make form-based zoning a relatively static tool. Unlike PUDs, which can always be negotiated to reflect the latest trend in development and architecture, or performance zoning, which might be satisfied in different ways as new technologies emerge in the future, form-based zoning is more of a snapshot tied to the present. Although proponents make a fairly strong case that there is a semiobjective difference between "good" and "bad" design forms, only time will tell whether they are right. After all, in the 1970s we all had orange carpets and olive green appliances. If all the neighborhoods met the requirements of the TND ordinance—theoretically resulting in a residentially perfect city—would it become a cliché? Would we see buyers start to demand something else just to be different? Is some of the attraction of form-based places the fact that they contrast with what is around them? The jury is still out as to whether form-based zoning is more or less time bound than other forms of zoning.

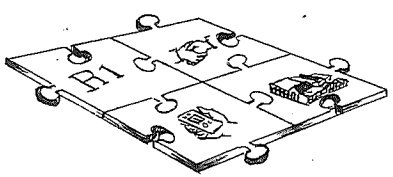
In addition, the benefits of lightening up on use control are offset in part by the fact that some uses really do matter. Bookstores are different than bars. Mainstream cinemas have different impacts than adult film arcades. What the form-basers really mean (I think) is that many forms of retail, commercial, and (at least) light industrial uses can be substituted for one another with few, if any, adverse land use impacts on surrounding areas. And there is no inherent reason why most commercial, institutional, and residential uses *need* to be separated, as long as the scale of the uses is compatible. Some may want them to be separated and others may want them together, but there is no reason why the government *has* to separate them. At a minimum, the mixing of those uses should be allowed in some places, and perhaps even be required in others, because of some secondary public benefits (e.g., less traffic).

Finally, the strength of focusing on building forms may be offset in part by over-

focusing on details. The standard text of the TND ordinance is very prescriptive—it includes much more detailed design requirements than we are used to imposing on private development. Certainly, PUDs have been negotiated to include very detailed standards, but those are "deals" that apply only to the parties that negotiated them. Sometimes we also impose very strict design standards in historic areas, but most people agree that those are special cases; the historical architectural character can be identified in minute detail, and we want new buildings to fit in with that character. But to impose very detailed design standards—minimum as well as maximum heights, requirements for porches, balconies, consistent cornices, consistent window dimensions, and even mandatory locations for public or institutional uses—as general requirements for nonhistoric areas is not common.

In fairness, the TND ordinance is a voluntary tool. It was intended to be used primarily when a landowner buys into the vision of a traditional neighborhood and is willing to subject herself to very strict regulations in order to achieve that vision. It is sort of like a pre-packaged PUD: "If you like the picture, then here are the regulations to make it happen." In contrast, the SmartCode was intended to be adopted either in pieces or for a city as a whole. Its six transects all relate to one another. They use a common vocabulary and similar types of tools. But adopting a new zoning ordinance for a large city is not a consensual act on the part of the landowners. It is done by a city council when they believe that the new tools will promote the public good better than the old tools, even though a significant number of landowners may disagree. In this case, the relatively strict form regulations would be applied not voluntarily but over the objections of at least some of the landowners.

The Result: Euclidean Hybrid Zoning



In most cities, the result of these four streams of zoning thought—Euclidean, PUD, performance, and form-based—is a hybrid zoning approach: its roots are clearly in Euclidean zoning, but its branches have grown pretty far from the original idea. The resulting mélange of tools differs by city, but that does not prevent us from sketching the basic outlines of a typical mix. The term *Euclidean* still deserves to be in the name because few,

if any, big cities have actually replaced the fundamental idea of coterminous zone districts that collectively cover the developable land area in the city. "Euclidean-ish" zone districts cover the land area the way counties cover all the land in a state. There is no part of Nebraska that is not located within a defined county, and there is generally no land in a city that is not located in a defined zone district.

Most variations suggested by PUDs, performance zoning, and form-based zoning build on this Euclidean foundation, but they do not replace it. PUDs are generally an owner-initiated alternative to standard zones, and they appear on the zoning map the way cities appear on a state map; they cover discrete areas of land but not all of the land. The areas between PUDs are still generally subject to Euclidean zoning. To be sure, a few cities (generally small ones) have said: "Everyone has to do a PUD—we negotiate everything." But those are few and far between. Usually, the city allows some uses and densities without negotiation, and that is good practice.

Although performance zoning could in theory replace Euclidean zoning, that is rarely seen. More often, performance measures are "injected" into the text of the zoning ordinance rather than seen on a map. The map may still say this is a light industrial or mixed-use zone, but if you read the text of that chapter you find that some topics that could have been addressed by physical parameters (heights, setbacks, or even parking) are now governed by performance measures.

There are exceptions, but they are notable in part because of their instability. Fort Collins, Colorado, developed a Land Development Guidance System (LDGS) that won both national and state awards for implementing a "do (almost) anything (almost) anywhere as long as you mitigate the impacts" approach. But the LDGS was eventually repealed because the pendulum of city politics swung away from flexibility toward predictability. Some neighbors did not want to know only that the new development next door would have no adverse impacts; they also wanted to know that it would be houses instead of shops. The demise of the LDGS experiment helps prove the point that Euclidean zoning is hard to replace. There may be parts of the city where performance zoning is appropriate, but in and around stable middle- and high-income neighborhoods, there will still be a demand for zones that produce more predictable development.

Form-based tools are still in their adolescence, but I believe that in the end they are likely to supplement rather than replace Euclidean zoning. Although form-based ordinances are often being used as optional alternatives to Euclidean zoning or as mandatory replacements in only limited areas of the city, they leave much

of the Euclidean framework in place around them. This is not to diminish the accomplishments of form-based zoners, because their influence on zoning has been very positive. It has encouraged us to avoid overfocusing on specific land uses, reinforced the importance of good design in general, and led planners and citizens to rethink what makes a great city. But form-based zoning will not completely replace Euclidean zoning for two reasons.

First, most form-based tools do not address the full range of issues that need to be addressed in zoning. Form-based zones focus on building form, streetscape, and land uses. But they often ignore matters like minor or accessory structures (fences, swimming pools, satellite dishes, telecommunications antennae), procedures (how to get an approval), nonconformities (how properties that don't meet the rules are treated), variances (what happens when you want to build something new that doesn't meet the form rules), enforcement, or definitions. If you are yawning now, you are in good company. Those topics represent the unsexy side of zoning, but they need to be addressed. In addition, some form-based tools don't address more significant issues like environmental protection (at least storm drainage and runoff), sustainability, and parking. Despite claims that form-based zoning can replace Euclidean zoning, I believe it is really designed to replace the building design and land use aspects of particular zones and not the whole structure. That is why, to date, form-based zones generally show up as islands surrounded by non-form-based zones.

The second reason is that not every "place" (with a lowercase *p*) is a "Place" (with a capital *P*). More specifically, not every "place" in the city is so important to the public health, safety, and welfare that the city wants to spend taxpayer money to create detailed form-based controls that will make the area a memorable "Place." The fun part of physical planning is helping to design a memorable, notable, beautiful "Place"—a neighborhood, a park, a transit-oriented development, or a mixed-use building—that may actually get built. Maybe you'll even win an award for it! "Place" makers tend to focus on some of the major elements of urban design highlighted by Kevin Lynch in his landmark book, *The Image of the City*: paths, edges, districts, nodes, and landmarks. Those are the kinds of areas that citizens see or visit often and that they can see in their mind's eye when they are somewhere else—locations where good urban design is particularly important because it contributes to the image of the city and to citizens' ability to understand and enjoy it. When these important locations are attractive, the public fights to preserve them; when they are rundown, the public wants them restored.

But in between those important "Places" are lots of other "places" that don't leave images in the public mind—back streets, middle-of-the-block locations in stable neighborhoods, warehouse zones, bus parking lots, heavier commercial areas, and areas in transition from one use to another. These are places that most citizens don't see or visit very often or where the neighborhood's primary goal is just to have everything "fit in" with its neighbors. They are important to those who live and work there, but not to the image of the city as a whole. Could a good urban designer make these "places" into "Places"? Absolutely, and it happens regularly. But does the government require that all the "places" become "Places"? Not usually. Or, rather, it assumes that compliance with basic heights, setbacks, parking, and landscaping requirements will create an acceptable public image, given the importance of the location.

In addition, carefully designed "Places" happen only when a private or public landowner spends the money to build them. At any one time, only a small fraction of the property owners in a mature city are actively planning for redevelopment or willing to spend money on it. The rest of the property owners are happy with what they have or are only vaguely thinking of change sometime in the future.

Another way to state this is that many landowners do not want to create a "Place" on their property, and I don't think that city councils are going to force them to. Some form-based zoners have complained that existing zoning uses difficult-to-understand text rather than easy-to-understand drawings to show what types of development the city wants to see, and that if more drawings were used most landowners would understand the form preferred by the city and would be happy to develop their property that way. I think that argument is logically flawed. While zoning ordinances clearly need drawings to illustrate building controls and incentives better than words alone, not all landowners wake up wanting to make the city government happy. Many property owners wake up wanting to build what *they* want to build. They don't walk in to the planning department asking, "What does the city want me to build?" Rather, they walk in asking, "What am I legally permitted to build?" I think that is unlikely to change. In light of this reality, city councils will continue to limit strict form and design controls to more visible and important locations.

This is heresy to some urban designers, I know, but I think it is true. Cities will continue to have to draft and administer zoning ordinances that treat most aspects of land regulation as urban management tools rather than design tools, simply because there is not enough time, money, or political support to treat every

part of the city as a separate "Place" worthy of more detailed form and design controls. So, while I would like to see form-based tools flourish and I welcome their integration into the zoning toolbox, I don't think they will replace other forms of zoning throughout our cities.

Now that we have reviewed how Euclidean hybrid zoning got to be the way it is, let's look at how well it is doing its job. The next three chapters review how zoning matches some basic assumptions about how it should work, how it responds to new forces driving land development, and how well it promotes sensible governance of our cities.

CHAPTER 2

Failed Assumptions

A Few General Rules Will Do It

EUCLIDEAN HYBRID ZONING is grounded in assumptions about how cities ought to be and how land use regulation should work. These assumptions are the foundation underneath the zoning structure we have cobbled together over the years. If the foundation was laid in the wrong place, then it is not surprising that the building does not look like we thought it would. And if the foundation was right for its time but has now become obsolete, then the building itself may be obsolete. I think that many of the assumptions behind zoning do not stand up to scrutiny.

The need to question assumptions was graphically illustrated in David Sobel's book *Longitude*, which describes the search for a way for sailors to tell where they were east-to-west on the face of the earth. Mariners had long known to determine latitude by looking at the stars—they looked different at night depending on how far north or south you were. So the great minds of the day were fairly sure that longitude could also be determined by looking at the stars. Their search took them deeper and deeper into a morass of calculations. But each apparent solution had exceptions that required a different calculation. And then some of the special calculations themselves had internal problems that required special-special

CHAPTER 8

The Way Forward

THERE IS NO SHORTAGE OF GOOD IDEAS about how to improve our zoning and our cities. But there is a pressing shortage of citizens and planners who can see the path toward change and a shortage of leaders with the political will to build a system based on the long-term interests of the city. This book cannot address the creation of political will—that comes only from the convictions and courage grounded deep inside those we elect. But it can address the path forward for those who have that will. In the United States, we usually end meetings with an agenda item called "next steps," but I prefer the phrase used in Uganda: "the way forward." It conveys a better sense of direction. So how do we find the way forward from good ideas to better zoning?

To begin with, it is important to think about zoning change as a *process*, not a destination. There is no "model code" that embodies the ten changes listed in chapter 7. The larger the city, the more difficult it is to achieve sustainable change (as opposed to radical reform that gets overturned with the next election) and the more important it is to start from the zoning ordinance you already have. Most cities understand this intuitively, but sometimes frustration with the current ordinance is so high that we are tempted to chuck it all and start over. Telling cities to throw away their zoning ordinances is a great way to get press coverage and personal notoriety, but it is remarkably poor public policy. Three times in my career, I have had a new client city say: "It's so broken it cannot be fixed. Just take the best

ordinance you've written for a city about our size, substitute our name for theirs, and let's start with that."

And each time I have refused, because it won't work. The very first time the stakeholders come across a proposed change they don't understand or don't agree with, someone is bound to say: "Why don't we handle it like we did in the old ordinance? People seemed to accept that, and everyone understood it." If we have just pitched the old zoning ordinance, we will rapidly find ourselves rooting around in the wastebasket to get parts of it back.

So a first rule of the journey is to start from where you are. Start with the zoning ordinance you have. Despite the venting about "starting all over" from those who know the ordinance best, most citizens feel more comfortable fixing what is broken and keeping the rest. Starting all over makes most citizens who are not zoning junkies nervous about how the brave new world will treat their house and their neighborhood.

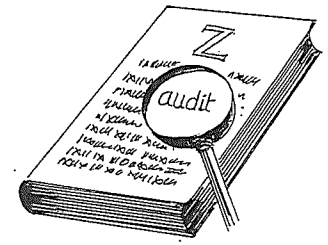
The way forward is not a blank sheet of paper, and it is not a model of what the perfect ordinance looks like. It is a set of tools to be used carefully to work on specific problems. In theory, it would be nice if we could work on the most serious problems first, but, in fact, it sometimes works better to start on the easiest problems first because initial success can build confidence. In fact, however, we usually end up working on neither the hardest nor the easiest problems, but on the ones that are politically ripe for action. Mature cities take the steps along the road to change as it is politically feasible to do—not according to an outside schedule. Zoning is a political act, but the tools listed in this chapter can help ensure that the political acts move forward rather than stalling in the discussion stage—or moving backward.

The next step is to keep the citizens informed about the process and involve them in the solutions. It is their city, after all. Zoning was invented to protect the quality of life in their neighborhoods and their property values. Anyone who attempts to craft a zoning solution without good public discussion deserves to have their motives questioned. The most dysfunctional zoning reform efforts I have watched are those where the city set out to negotiate with handpicked interest groups about a technical solution to a specialized problem and intended to inform the public about the outcome when those discussions were over. The best reform efforts have had citizens at the table—the same table with other stakeholders—throughout the process. Involving citizens has a leavening impact on "technical" discussions, preventing them from becoming narrow, polarized discussions where defensive thinking becomes the norm. Incidentally, it turns out that citizens regularly have good ideas about possible solutions, even on technical topics. Not only is ignoring them unethical, but it wastes one of your good problem-solving resources.

Finally, you almost always need citizen involvement to get anything controversial passed through city council. Zoning redraft efforts tend to focus on drafting the right language to get the key stakeholders on board (particularly the loudest ones). But that ignores two important constituencies: citizens who are not at the table and those who administer the ordinance in the city government. You need a strategy to bring along even those citizens who are not involved in stakeholder discussions. No matter how carefully you craft the solution, or how long the task force has worked, there will probably be at least one elected official who will ask: "Do my neighborhoods like this solution?" A few confident voices in support can make a world of difference. On the other hand, admitting that there was no early public outreach, or that you can't get even a single citizen group to voice support, can give elected officials serious qualms about going forward. Thoughtful technical solutions to zoning problems can get tabled quickly, and in spite of strong stakeholder support, if council members learn that no one has been consulted except the industries or businesses most directly concerned.

Beyond these two baselines—starting from what you have and seriously involving citizens from the start—the five steps on the way forward are to (1) audit for specifics, (2) prioritize for political will, (3) draft for integration, (4) illustrate how, and (5) adopt the possible. Each of these steps is reviewed in more detail below.

Audit for Specifics

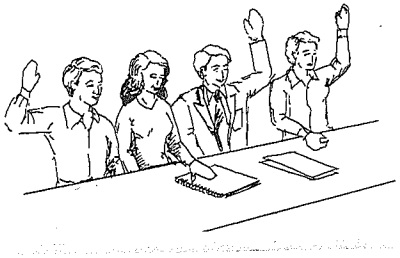


The first step is to get beyond general frustration with the current zoning ordinance to identify in detail what is wrong. That requires the city to compare the zoning ordinance against the ten principles in chapter 7 and to identify—specifically—the areas where it is most out of line. Statements like "Our uses are too inflexible" don't help much. Which ones, and how do you know? What adverse impacts (e.g., constant amendments, too many variances, frustrated business community) are you trying to address?

Similarly, the statement "We have too many zone districts" does not help. What types of districts do you think you have too many of, and why? What

specific impacts need to be addressed (e.g., staff frustration at having to administer similar things as if they were different; citizen frustration with the sheer number of districts; the time required to create a new district for each new idea that comes along; developers regularly asking for specific new types of districts)? Just like a financial audit, a true zoning audit identifies specific shortcomings that can be addressed. The inability to identify specific failings is the first clue that the city is not ready to start reforming its zoning ordinance. If you can articulate specific problems in only three of the ten areas identified in chapter 7, start with those three areas. On the other hand, if the city has made a policy decision to implement Smart Growth policies or green building policies, the audit should also look for specific shortcomings in those areas. The topics discussed in chapter 7 are not intended to be an exclusive list of what is important, but they do represent "big picture" issues that often get overlooked.

Prioritize for Political Will



The ten good ideas discussed in chapter 7 are too many to act on at once, so it is important to prioritize. Personally, I have a hard time thinking about a complex problem from more than about three perspectives at a time. If I am reviewing an ordinance to look at its efficiency, clarity, and procedural due process, it is hard to also think about it in terms of consistency with the plan and predictable flexibility. I need to make more than one pass through the document to think about it from multiple perspectives. I suspect the same is true for the planning commission, city attorneys, and elected officials. It is sometimes unrealistic to ask them to focus on a long list of "fixes" at the same time, and it would be even more difficult to keep the citizens informed—citizens who don't speak zoning for a living and would rather spend evenings with their families. If you want to talk about protecting neighborhood open space, they're with you. But if you want to talk about redrafting the zoning ordinance to achieve ten goals simultaneously . . . where did they go?

So, for the sake of effective public participation if nothing else, it is wise to prioritize the topics that need to be addressed first. As with the audit for specifics, prioritization will probably have a strong dose of politics in it. Political priorities

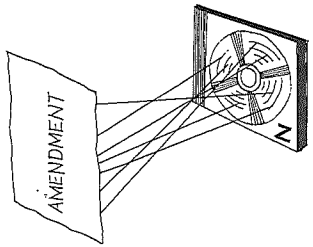
may reflect the latest round of embarrassing headlines that city council wishes it could have avoided. Or the latest broadside from a business or environmental group. Or the latest corporation or institution that decided to leave the city. Or the theme of the latest planning conference that a key council member attended. Again, zoning is political, and the problems that can be solved are those the elected officials are willing to solve.

Having said that, each round of reforms should try to tackle at least one of the ten topics that falls into the "serious-but-not-yet-on-fire" category. Those are the types of problems that usually get ignored year after year. If the problem is on fire (i.e., recent bad headlines or controversy), then it is not too hard to find some political will to take it on, because that looks like responsible government and pleases the voters. It is also not too hard to find the courage to handle "cleanup" changes—things that need to get done but that only staff and those who use the ordinance regularly will even notice were improved. These are usually introduced with a comment like this: "We didn't change what people can do with their property—we just cleaned up the language."

The hard changes to address are those that are more than housekeeping but not yet on fire. Solving this middle range of problems requires rethinking detailed topics like permitted uses, zone districts, rights and responsibilities, and the costs of development. But they are generally topics on which the media is not demanding action. This is one of those areas where democracy can lead to poor governance unless there is good leadership willing to bridge the gap. Poor governance says you act on a problem only when it can no longer be ignored—that way you get credit for working on "real problems." But working on solutions when the problem is front-page news—when it is on fire—is often the worst time to work on it. Tempers are high, sound bites steer the debate, and political pressure may push for quick, popular solutions rather than thoughtful ones.

Zoning problems are often complex, and the best solutions usually come from having all of the affected parties at the table, where they can articulate their interests without much risk of being quoted in the press or being accused of taking sides in a front-page debate. That doesn't mean the meeting should be secret—they should be open and noticed—but if the problem is not front-page news, then public and stakeholder discussions to resolve it will not be front-page news either. It takes strong municipal and elected leadership to realize that the right time to tackle some of the thornier issues is when they are not news.

Draft for Integration



Now that the city has agreed on a prioritized list of what it is trying to fix, the drafting can begin. This can be done by zoning or planning staff, by the city attorneys, or by consultants. There is no magic involved, but four key steps are to put specific text on the table for discussion, to make sure the new provisions fit into the structure of the existing regulations, to provide illustrations as you go along, and to avoid "legalese." The first two of these steps are discussed here, and the last two are discussed in the next section.

As long as stakeholders are discussing broad concepts like predictability, flexibility, mixed use, and pedestrian-friendly approaches, there will always be wide latitude for them to misunderstand one another (or to think they agree when they really don't). It is common for stakeholders with diametrically opposed views of what is wrong with zoning to endorse the need for both predictability and flexibility (see chapter 4). The problem is that one wants predictability in exactly the areas where the other wants flexibility, and vice versa. I want predictability that the areas of the ordinance that are favorable to my project will not change and flexibility in areas where I don't quite meet the adopted standards—and you want exactly the opposite. Talking past each other can be avoided only by having everyone look at the same proposed text (even a very preliminary draft) fairly early in the process.

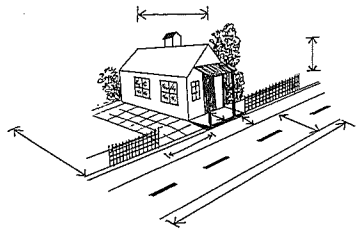
After the specific text changes have been debated and refined, they need to be integrated into the existing ordinance—that's "integrated into," *not* "stapled onto." Many cumbersome zoning ordinances got that way because past amendments did not respect the structure of the document. For example, a new ordinance on cell towers is just stapled onto the end of the ordinance. If we had seventeen zoning chapters, then this one is chapter eighteen. The cell tower ordinance includes provisions on the height of these structures, but those are not reflected in the zoning chapter dealing with structure heights (and, in most cases, the two are not even cross-referenced). The new chapter creates new procedures on how to get a cell tower permit, but they are not inserted into or cross-referenced with other provisions on permits and procedures. "Don't lose any sleep over it," the city attorney tells you. "The later one trumps inconsistent earlier acts as a matter of law, and more specific rules trump more general ones as a matter of law anyway—so it's

clear to me." But it is often not clear to the public, who wonder whether the general provisions on public notice apply to the new procedures for cell tower permits, which don't mention public notice.

In short, amendments are usually structured as if they are freestanding books and the only people who need to read them are the stakeholders who sat around the table to draft them. Of course, the telecommunications industry would like to have all the cell tower provisions in one chapter so that they do not have to read all the rest of the ordinance, but doing so is a disservice to everyone else who is trying to understand what might be built on the corner lot—including but not limited to a cell tower.

For paper ordinances, integration may mean that new pages have to be slipped into the general section on heights (to reference the new provision) and procedures (to reflect the new permits and public notice requirements). That takes a little more time than just stapling a chapter onto the end of the ordinance, but it is more sustainable in the long run. Fortunately, Web-based ordinances will handle this easily. Web pages on heights, permits, and a variety of other regulations can be updated in real time so that the new answers show up seamlessly and where they are supposed to. The Web doesn't really care whether the provisions are in one chapter or two, because it simply links together related provisions electronically.

Illustrate How



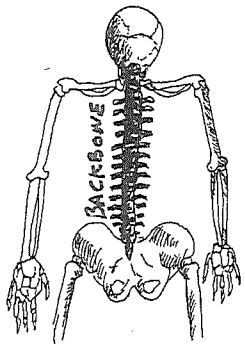
Illustrations are important, and they should not be left until the end of the reform process. In modern zoning ordinances, almost everyone (except perhaps a few city attorneys) wants drawings and charts and pictures (and if it is Web-based, even movies) to illustrate what is required or desired. Form-based zoning communicates desired building forms visually rather than trying to describe shapes in words. But in the press of refining draft language to make everyone happy, it is all too common to say: "We'll do the drawings at the end. It will save time if we only have to do them once." I hear myself saying those words.

But the very reason we want illustrations is why they should not wait until the end of the zoning text discussions. Some people (mostly lawyers, it seems)

understand development regulations through words written on a page, but many others (especially architects but also a surprising number of citizens and elected officials) understand rules from pictures much better than they do from words. Producing the illustrations early—even if they are just draft sketches—can help citizens and stakeholders better understand the draft language and can hasten agreement on what it should say. We want visual learners to say: "I thought I agreed with the proposal, but if this picture shows how it works, I want something different," or "I don't understand all those words, but if this picture shows how it will work, I'm comfortable with that." Illustrations help that level of understanding to emerge sooner rather than later.

Finally, avoiding legal terms helps include the public more meaningfully. Even if some citizens understand what those legal terms mean, the need for specialized words suggests that zoning is a technical matter where citizens are out of their depth. But that is not true. Citizens can easily grasp all of the important principles of zoning and the trade-offs involved among different types of regulations. So why use language that suggests otherwise? Almost all legal concepts express ideas that could also be expressed in other words, and using "or part thereof" instead of "or part of the building" is a poor way to save trees.

Adopt the Possible



Benjamin Franklin once wrote: "Energy and persistence conquer all." Getting zoning reforms through the finish line (i.e., getting them adopted) is sometimes hard. In fact, it is usually hard. Expectations have been set and investments made based on the current zoning rules, and there are always some who benefit from the status quo. Many property owners really believe in their hearts that fundamental changes to the zoning rules cannot be made, while others are confident that "politics as usual" will ensure that only minor changes are made.

Regardless of how well the city publicizes its intention to reform the zoning ordinance, no matter how many public meetings it convenes, and no matter how well it uses cable TV, Web sites, press coverage, and elementary school contests to build awareness, as the amendments move toward final adoption, it is very likely

that someone (often someone important) will claim to have known nothing of the entire effort. Further, he or she will claim that if the city is really serious about changing zoning it needs to start the process all over in a more inclusive way. Sometimes what that really means is: "If I ever thought it would get this far I would have participated earlier, but I really don't like the decisions that were made without me. Since I really can't admit that I voluntarily sat out the discussions, I have no choice but to discredit the process itself." Whether the proposed zoning improvements survive this last-ditch tactic depends on three factors.

First, the city must have done a good job conducting business in the open and giving plenty of opportunity for stakeholder and public comment, and it must have documented that effort. An extensive list of outreach events and copies of Web pages, newspaper advertisements, and invitations almost speaks for itself. It is easy to say that you couldn't make it to a public meeting or two, but say that you missed all ten meetings and you can expect city council to take your comments with more than a grain of salt.

Second, the city needs to have created an atmosphere of compromise. Many efforts to reform zoning are dominated by small groups of citizens who are highly vocal about a few discrete interests—a magic density number, or group homes, or the environment, or property rights in general. The city needs to conduct a process that does not allow niche groups to drive the agenda or to hold the long-term interests of the city hostage to the personal goals of the loudest people in the room. Narrow interest groups that try and fail to dominate zoning reform do one of two things—they become more moderate (which is fine), or they leave the process (which is also fine). Staff noted their concerns before they left. Just as importantly, city council knows exactly what it means when angry people walk away from an well-run public involvement process, and they don't conclude that the process was flawed.

However, assuming that the process is not being dominated by narrow interests, the city still needs to be willing to compromise—right up to the last minute. In many reform efforts, a lot of good work that everyone can support gets held up at the end over a "hot button issue" debate. When that happens, my experience is that it is not worth forcing that last ounce of reform. Not insisting on the final yard allows everyone to take credit for the reforms that are adopted and preserves the most contentious debate for another day. Remember, the better way to zone described in this book is a *process*—not a product—that involves periodic maintenance of the ordinance. Forcing the last bit of zoning change often destroys

goodwill, makes it harder to reconvene stakeholders in the future, and risks having the losers run single-issue candidates in the next election. And successful single-issue candidates sometimes try to reverse not just the final unpopular change but the whole reform effort. It happens—regularly.

Finally, getting important zoning reforms adopted takes backbone. It takes political will, and it takes elected officials who recognize that they were elected to represent the long-term interests of the city (or their district) even if it makes some people unhappy. Usually, elected officials want to be presented with a deal—something that all the key stakeholders agree with, so the hard work of getting there has already been done. But sometimes there is no deal. The stakeholders made effective compromises, but there is still vocal opposition. Or the stakeholders just couldn't agree on the last few issues and refused to compromise any further. That is when it takes backbone. Council needs to resolve the last issues or carve them out for additional work and then approve the remaining reforms. Ordinance reforms are not like a site-specific rezoning, where city council's "no" just means "your land will not be changed to another zoning district." Zoning text reforms concern the long-term operation of the city's zoning system, and a city council "no" vote on the reform package leaves all the systemic weaknesses in place. It's far better to solve some of them than none of them.

The city should also create an expectation that it will pursue zoning ordinance improvements to completion. Failure to carry at least some of the reforms through the finish line creates an impression that zoning is too complicated to reform or that a few loud voices can derail the process, which is much more damaging. Who can blame stakeholders and citizens for not showing up to participate if the city's past behavior shows that their time may be wasted? This is particularly important because of the need for periodic maintenance of the zoning ordinance. The city will be asking for regular involvement in zoning text reforms, and stakeholders need to know that the city will complete what it starts. Over time, that will produce a better way to zone.

Euclidean zoning is now ninety years old, and it has proven itself to be useful, durable, popular, and changeable. As it has changed to meet our needs over the years, it has become more complex, less understandable, and less well matched to the needs of America's large mature cities. But it does not have to be that way. The soil of Euclidean hybrid zoning has already proven to be fertile ground for

innovation, and it will continue to produce new ideas in the future. By following the guidance in this book, American zoning practice can turn a corner, and future zoning can be simpler, more effective, and easier to understand. If that happens, not only will we have learned from the mistakes of the past, but we will be creating more livable cities for the future. Our children will thank us.