

# Smart Codes: Model Land-Development Regulations



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MARYA MORRIS, GENERAL EDITOR

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## CHAPTER 1

### Introduction



This report provides an overview of the structure of land development regulations and is a guide to the development of model smart growth ordinances, including models that may be adapted by local governments to implement special planning policies for multimodal transportation, infill development, affordable housing, and other best practices in planning and development regulation. As used here, “smart growth ordinances” and “smart growth development codes” mean regulations intended to achieve a variety of objectives, including encouraging mixed uses, preserving open space and environmentally sensitive areas, providing a choice of housing types and transportation modes, and making the development review process more predictable. In addition, because smart growth ordinances involve providing more transportation options and more compact, mixed use development, they inevitably have public health implications; they encourage walking, bicycling, and human interaction, with the potential to support more active, socially engaged lifestyles that result in better physical and mental health. The environmental and social aspects are profound as well.



### **How Policymakers Can Use This Report**

Local policymakers, such as mayors, city council members, and planning commissioners, can use this report to familiarize themselves with:

- The contents of land development regulations;
- Alternative ways to update such regulations;
- Methods to incorporate smart growth objectives; and
- Particular types of smart growth ordinances.

The model ordinances contained here provide a starting point for discussion among policymakers as to the desirability and general approach to such regulations. In some cases, the model ordinances give several regulatory alternatives. Policymakers can select among these alternatives or, by working with their planners, devise a hybrid approach that suits their community.

### **How Planners Can Use This Report**

Professional planners can use this report to assist policymakers in understanding both land development regulation and the formulation of ordinances that meet smart growth objectives. Chapter 2 in particular provides professional planners with detailed guidance about how to update development regulations and how to conduct smart growth audits of plans, local development practices, and land-use controls. By reviewing the description of existing models in Chapter 3, the proposed models in Chapter 4, and those local ordinances that served as a basis for the models, planners can absorb the details of drafting and administering such ordinances. Thus, professional planners can have a head start on drafting smart growth ordinances and understanding their technical and administrative complexities.

### **Organization**

This report is divided into four chapters, including this one, plus a bibliography.

Chapter 2 discusses land development regulations and smart growth. It outlines the elements, standards, and procedures of land development regulations, and, in particular, the concept of a unified development code that consolidates such regulations in a single document that includes zoning, subdivision controls, design standards, and administrative procedures. It then proposes a series of strategies for evaluating and revising land development regulations. It also describes smart growth principles formulated by the American Planning Association and the U.S. Environmental Protection Agency and sets forth an approach for conducting a smart growth audit.

Chapter 3 summarizes and evaluates a number of model codes and related materials produced by state agencies and nonprofit groups. The chapter is divided into three parts:

1. Comprehensive codes, meaning materials organized or drafted in a code format that cover a wide variety of land-use regulation, including zoning and subdivision;
2. Non-comprehensive code models, meaning codes that focus on a single topic or combinations of single topics (e.g., affordable housing, street standards, impact fees, and street graphics); and
3. Related materials that provide guidelines (e.g., APA's *Growing Smart Legislative Guidebook*), whose model planning and zoning statutes contain minimum content requirements for a wide variety of land development regulations.

Chapter 4 contains 18 model ordinances and 3 model policies, all with commentary. Each model is preceded by commentary about the model itself and remarks concerning the locally adopted ordinances used as a basis for drafting them. We have provided references or web links to useful reference materials related to the topic of the ordinance. The discussion will also indicate primary and secondary smart growth principles that may be satisfied by the use of the ordinance.





## CHAPTER 2

### **Development Codes and Smart Growth**



This chapter discusses land development regulations and smart growth. The first sections outline the elements, standards, and procedures of land development regulations and, in particular, the concept of a unified development code that consolidates such regulations in a single document. The next section proposes a series of strategies for evaluating and revising land development regulations. And the final section describes smart growth principles formulated by the American Planning Association and the U.S. Environmental Protection Agency and sets forth an approach for conducting a smart growth audit.

### LAND DEVELOPMENT REGULATIONS AND UNIFIED DEVELOPMENT CODES

The term “**land development regulation**” refers to a broad range of governmental controls that affect one’s ability to use or develop land. Historically, such regulations came in the form of zoning ordinances, subdivision regulations, impact fees, floodplain controls, sign ordinances, stormwater controls, erosion and sedimentation regulations, and various other local laws.

Zoning divides a community into **districts** and specifies different sets of rules or development standards for each district, and some requirements that are common to all districts. Zoning district regulations address three basic sets of issues:

1. *The permitted use of land and buildings.* The general use categories in most communities are residential, commercial (or business), and industrial (or manufacturing). Larger communities will have multiple districts within each of those categories. Many communities have separate categories for agricultural uses, public uses, and such specialized uses as colleges and universities.
2. *The intensity of the use.* Knowing that a particular tract can be used for residential purposes is one important dimension affecting the future of the property, but it is also important to know how many residences can be placed on the property—that is, a measure of intensity, expressed as density. In single-family residential districts, density is usually expressed indirectly through minimum lot sizes. In nonresidential districts, intensity is sometimes regulated directly through a floor area ratio (expressing how many square feet of building can be built on one square foot of land); in some communities, intensity in commercial districts is regulated indirectly through building height limits.
3. *Height, bulk, and other dimensional standards.* These standards define, in three dimensions, what portion of a lot can be occupied by buildings, auxiliary structures, and surfaces. Regulations may require that buildings be set back from property lines by specified distances or that yards of a particular dimension be maintained on some or all sides of a building. (Note that yard and setback standards serve essentially the same purposes, although local details may vary.) There may be different rules for the dimensions of accessory buildings, such as garages.

The other basic local land development regulations are subdivision controls. Such regulations typically specify street widths and design; requirements for sidewalks; shapes of lots and blocks; specifications for street lights, street trees, bus stops, and other amenities; and requirements for the installation of public utilities and other services for new development.

At one level, subdivision and zoning regulations are separate. Much new development in the United States begins with a rezoning, which is a change of zoning district from one type of use or intensity to another type of use or intensity. On the urban fringe, agricultural or other low-intensity district types are often rezoned to residential, commercial, or industrial districts consistent with plans for the area. In developed areas, a district or a parcel may be rezoned to permit more density or intensity of residential use or to change the permitted uses. The primary guide for whether property ought to be rezoned is the local comprehensive plan, a policy document in text and map form prepared under the direction of the planning commission with input from the public, which is then adopted by that body and the governing body. The plan should contain a unified physical design for the public and private development of land and water. The process of rezoning goes through the local planning commission for a recommendation and on to the governing body (usually a city council or board of county commissioners).

There is usually public notice of the action and one or two public hearings at which neighbors and others may express their views. In short, the process is a public and political one.

In contrast, the review of proposed subdivisions is often largely technical. Standards contained in subdivision regulations are typically developed by engineers and other technical experts, sometimes with little or no input from the planning commission or city council. In the review process, engineers for the local government check the developer's runoff calculations and determine whether the proposed facilities will be adequate; they recheck the developer's proposed street designs against the community's standards; and they verify that proposed utility systems will tie into the public system. Although many subdivision proposals eventually go to the governing body for acceptance of proposed **dedications** (a process for transferring legal control of property to a public entity) of streets and public facilities, the review is largely complete at that point. Many communities do not have public hearings on subdivisions, and if hearings are held, they are often narrow in scope.

There are logical as well as historical reasons why the zoning and subdivision processes are separate. Zoning developed in this country in response to concerns about incompatible uses (e.g., industrial uses in close proximity to residential areas) moving into residential or commercial areas, and those regulations focused on those issues. In contrast, subdivision regulations evolved as a system to provide accurate descriptions of small parcels of land and eventually grew to include requirements for the improvement of public streets and roads.

Increasingly, jurisdictions are consolidating land development regulations into more comprehensive (and comprehensible) documents that present controls in a more seamless and systematic manner. These are unified development codes, which are designed to address several issues.

First, as a substantive matter, weaving all of the regulations together in one legal document ensures that the regulations thoroughly implement the comprehensive plan. The drafting of a unified code provides a forum in which those involved can review the advice and comments of technical experts in the context of the broader public policy goals set out in the comprehensive plan. Further, drafters of a unified code can mitigate some of the concerns of the experts; for example, engineers will often accept a reduced road size if they believe that the proposed code provides a reasonable and finite limit to the total amount of development that will rely on that road or if standards for road connectivity are added to the regulations.

Second, the best unified development codes build on the strengths of planned development regulations; that is, such codes blend the use and intensity review process (typically a part of the zoning process) with design review (traditionally part of subdivision review). The integrated review process allows citizens and neighbors of the proposed development to get a clearer picture of what is being proposed on the site. For example, neighbors may object to a rezoning for a proposed "neighborhood commercial center," envisioning it as a convenience store with 22 gasoline pumps, a tall canopy over the pumps, and enough lighting to serve a stadium parking lot. A unified code, which requires the developer to package and present the rezoning proposal to include a design plan showing good pedestrian access, limited automotive access, and lots of landscaping (and no gas pumps), would be more likely to convince neighbors that the project would result in a "neighborhood" asset. While it may still be possible for such a development to be built without undergoing review under the terms of the planned development regulations, the absence of such regulations could mean that the center would be subject to a series of separate applications

reviewed at one time rather than sequentially and without specific design requirements, not the product of a unified proposal.

Third, the development code approach reflects the way modern development occurs, eliminating the often arbitrary distinctions between subdivisions and other developments. If, for example, the subdivision ordinance contains a community's road standards, is a development not subject to subdivision or platting bound by those standards? With a development code, there are no questions about the applicability of subdivision ordinance standards to developments that are exempt from subdivision.

Fourth, consolidating various development regulations into a single document helps provide full disclosure of the myriad regulations that can affect a proposed development. This leads to better predictability for all—developers, citizens, and public officials. When consolidation occurs in a thoughtful and deliberate manner, the development code approach can help to eliminate inconsistencies and redundancies among various code provisions. Keen attention to organizational issues can also help make regulations easier to understand, administer, and, ultimately, enforce.

Fifth, creating the code is a process that should lead to the elimination of duplication, contradictions, and confusion resulting from the presence of development regulations in several different ordinances, different parts of the local code, or elements drafted at different times by different people. Zoning and subdivision regulations often contain different definitions of basic terms like "street," meaning the effect of the zoning ordinance may be to allow construction of a dwelling on a street that does not meet the subdivision standards. Although there may be logical reasons for such a provision, it is important to review all such apparent inconsistencies and eliminate or explain them.

The advantages of a development code are particularly apparent when it comes to administrative and procedural provisions. Consolidation of all provisions related to zoning map amendments and the review and approval of proposed developments is inherently efficient and sensible. Such an approach lends itself to the drafting of consistent standards and criteria governing such matters as public notices, hearing requirements, decision-making criteria, and other factors common to nearly all development review processes. Planners can organize procedures in a way that tracks the "typical" development process, starting with basic land-use/intensity considerations (zoning classification) and proceeding through a series of more site- and project-specific issues, such as platting, site planning, the presence of conditional uses, and variances.

### **ORGANIZATION AND STRUCTURE OF A DEVELOPMENT CODE**

The basic components of a development code comprise all regulations and standards that have historically been scattered throughout zoning ordinances, subdivision regulations, and various other land development regulatory documents. The challenge is to organize those regulations in a way that makes sense. The process of creating a development code requires breaking conventional ordinances into their component parts, throwing out duplicative language, reconciling inconsistent or conflicting provisions, reassembling the regulations into a coherent structure, and editing them for consistency and clarity of language.

While there is no single organizational scheme that will work for every jurisdiction, every development code includes a number of common elements. In the discussion below, the "city code" identifies the code that contains all city ordinances, ranging from animal control to zoning and development regulations; a "Chapter" indicates a major heading within the city code, such as "Utilities" or "Development Code"; an "Article" indicates a major subheading within a chapter, such as "definitions" within the "Development

Code” chapter; and a “Section” refers to a particular, numbered section in the code, such as the tree planting requirements in parking lots.

### ANNOTATED DEVELOPMENT CODE TABLE OF CONTENTS

A table of contents for a development code might look like this (the table of contents has been annotated to explain the purpose of each article):

#### 1. General Provisions

This article contains legally important material that is of little daily concern in the administration of the zoning ordinance. For discussion of the specific items included in this article, see Article 1, below.

#### 2. Boards and Commissions

Many local zoning ordinances include language establishing the local planning commission and zoning board of appeals or adjustment. If these provisions have been included in a more general chapter of the city code dealing with all city boards and commissions, they can be left there. Otherwise, they must be incorporated into the new development code. State law will specify what many of these provisions must be, but it is important to fill in the gaps regarding the powers and procedures of each of these bodies. If a community has an architectural review board, historic preservation board, or environmental review board, their procedures may also be included in this article.

#### 3. Procedures

The procedures article of the code should describe the steps required for every type of approval necessary for a project. It should answer a developer or other code user’s question: How do I get my project approved? Similarly, homeowners often want to know, for example, What do I have to do to get my new deck (or garage or pool) approved? See the discussion in Article 4 below.

#### 4. Use Standards

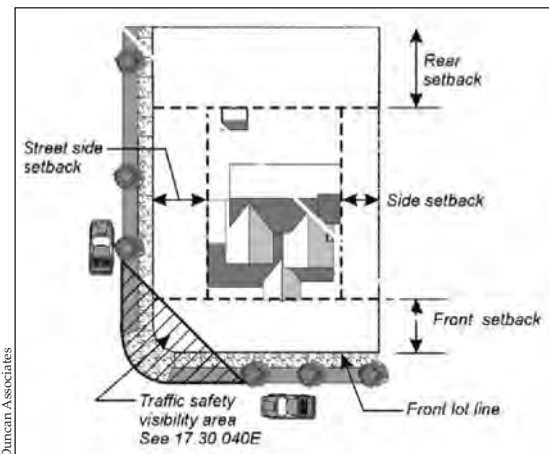
The development code will specify what uses can take place in which districts, just as a zoning ordinance does. When drafting the code, one might best consolidate all of these provisions into one comprehensive article, as discussed below in Article 2. Note that an alternative approach is to label this article “District Standards” and to incorporate the use, intensity, and dimensional standards into one article. Although that approach appears to make a simpler top-level outline, it may lead to a needlessly complex article.

#### 5. Intensity and Dimensional Standards

The development code must also specify what intensities of uses will be allowed in each district and what height, setback, yard, and other dimensional standards will apply. (See discussion immediately above about merging this article with the “Use” article and see Article 2 below for more detailed discussion of what is included in this section.)

#### 6. Development Standards

The development standards article will merge standards related to the development of a single lot (e.g., off-street parking, on-site stormwater design, driveway access, utility easements) with the related standards that affect development of an entire subdivision (e.g., street and utility easements, street design, public utilities, shared stormwater systems, automobile circulation, pedestrian circulation). See Article 3 below for a detailed discussion. Note that standards for “parking and loading” are often placed in a separate article to provide quick and easy reference to those standards, which are often presented in lengthy tables specifying the requirements for each category of use. Regulations for signs are sometimes included under this article or in a separate article (or, in a few cases,



*Figure 2.1. Intensity and dimensional standards include yard and setback requirements.*

even in a separate chapter of the city code). Regulations for floodplains are often kept in a separate article; because they must be approved by a federal agency for a community to qualify for the federal flood insurance program, it is often easiest to show that the community is using the approved regulations by keeping them (including the related definitions) in a separate article of the code.

### **7. Administration and Enforcement**

This article should assign specific responsibility for administration and enforcement; see discussion in Article 5 below. The treatment of nonconforming uses (i.e., legally established buildings, lots, and uses that do not conform to the provisions of the current ordinance) is often included in this article, but the issue can also be addressed in a separate article on “nonconforming uses.”

### **8. Definitions and Interpretation**

Most of the contents of this article will consist of definitions of individual words and phrases, such as how a particular body or official should interpret the words “may” and “shall.” This section should also clarify other issues of interpretation, such as whether zoning district boundaries should be presumed to follow property lines. Note that this article is often found at the beginning of a zoning ordinance or other chapter of a city code. Because definitions are reference material, essentially the glossary for the ordinance, there are good reasons to place it at the end. Each community, however, should make its own decision about the placement of this and each of the other articles.

## **CODE CONTENTS BY ARTICLE**

### **Article 1. General (Introductory) Provisions**

All codes should include an article with language that establishes the code’s legal context and framework and the local government’s authority to implement it. A General Provisions chapter may appear at the very beginning of the code or at the very end, depending on local practice and preference, and should include the provisions described in the following list.

1. *Authority.* A statement of authority is the description of the state statutes, constitutional provisions, or municipal charter elements that provide the legal basis for the code.
2. *Purpose.* Purpose statements in a code are clear expressions of what the jurisdiction seeks to accomplish in executing the ordinance. The statements will often refer to the protection of the public’s health, safety, and general welfare, and to specific objectives related to the ordinance (e.g., strengthening neighborhood commercial areas or increasing residential density to support transit). Note that, with increased concern about health issues (e.g., obesity rates in the U.S. population), the phrase “public health” has taken on renewed significance. Purpose statements should also reference the principles, chapters, sections, or other portions of the comprehensive plan that apply. Courts will often examine the purpose statements of a code when anyone brings a legal challenge to the actions of a local government under a development code. The best way to show the purpose is to specify it in the code.
3. *Applicability.* In this section, the code should specify the types of situations or activities the development code regulates—typically private use or improvements—and the types of activities that are excluded (certain public activities under most codes).
4. *Short title.* The short title is the legal name for referring to the development code without setting out a full citation, such as “Smarttown Unified Development Code.”



5. *The system of maps.* This section establishes a procedure for the creation, updating, and copying of official zoning and other related maps, and provides a way to identify at any time the most current, legally defensible version of such maps.
6. *Transitional provisions.* Transitional provisions clarify how new or changed rules will apply to projects that are partially built, under development review, or caught “in transition” by the new regulations.
7. *Accessory uses* are uses incidental and subordinate to the principal use but on the same lot. It is important to be specific about which accessory uses are allowed where. A detached garage at a residence and a Dumpster at a business are typical accessory uses. For example, it is often useful to treat a “drive-through facility” as an accessory use, so that it is possible to have a fast-food restaurant in one or more districts while prohibiting the accessory use (i.e., the drive-through facility) in certain districts, such as downtowns or pedestrian-oriented areas.
8. *Prohibited uses* are those not permitted by right or conditionally. The code should contain a general provision that “all uses not specifically permitted are prohibited.” It is sometimes useful to be specific; namely, some uses may be not permitted only in specific circumstances (e.g., “Drive-through facilities are not permitted as an accessory to any use in the Neighborhood Commercial District” versus “Uranium processing plants, rendering plants, and gambling casinos are specifically prohibited in all districts.”).

Generally, those drafting the code will take their lead about what uses will be permitted in which districts from the community vision as expressed in the comprehensive plan. The details affecting those uses (e.g., height, bulk, etc.) will be spelled out in the zoning code. For example, the comprehensive plan may indicate that a particular area should be “residential, including multifamily, at moderate densities” and define the range of “moderate density” (say, 8 to 24 dwelling units per net acre). The zoning ordinance should then clarify the exact density for each moderate-density district and clarify whether apartments and single-family homes can be mixed in the same district or whether two (or more) districts will be needed to implement the concept of “residential, at moderate densities.”

Zoning creates multiple districts and allows different uses in different districts. Unfortunately, much of the poorly planned or executed growth of the later twentieth century occurred in part because local officials and planners were focused on the separation of uses, often prohibiting such logical combinations as apartments above downtown stores, accessory dwelling units on larger lots, and live-work arrangements for professionals and artists in some districts. Thus, as part of the process of updating local codes to achieve smart growth, planners and public officials must review the proposed use combinations to be certain that preferential combinations are encouraged and facilitated, not just allowed. If providing apartments above the new mall is permitted only as a “conditional use,” the developer may choose the easier path and just build the mall. Not all mixtures of uses will prove to constitute “smart growth” in all zoning districts, but those drafting the code need to carefully consider the possible combinations to achieve the goal and not simply base decisions on past regulations and trends.

Those drafting the code will also need to review how different districts are related to one another geographically. From the early days of zoning until late in the twentieth century, it was common to place industrial uses as far as possible from residences. Before modern pollution controls came into common use in the 1970s, that strategy made a lot of sense. For some



*Figure 2.2. In order to achieve smart growth, planners and public officials must ensure that preferential mixed use combinations and pedestrian-friendly standards are encouraged and facilitated, not just allowed.*

uses (oil refineries, rendering plants, chemical plants), it still does. For other uses, however, including research and development facilities and high-tech industries, there is no need to separate them from sensitive uses. Further, smart growth dictates that employment centers should be as close as possible to residential areas (thus promoting what is referred to as the “jobs-housing balance”), preferably with easy access by mass transportation.

Similarly, as retail has grown in scale and become less neighborhood oriented, retail developers have resorted to siting most projects in the only areas where there is enough land available to accommodate their oversize-store format—namely, on the urban fringe. Smart growth principles call for some shopping and commercial activities to be within walking distance of residential neighborhoods. Obviously a supercenter operated by one of the major discounters is not a desirable use near a neighborhood, but a store selling similar things in a different format may work well in a neighborhood center so that it is in walking distance and has a pedestrian orientation.

Thus, the process of creating a new development code requires code drafters to reexamine the entire districting scheme of the community to ensure that there are adequate mixtures of uses in many zoning districts and that most shopping, service, and employment activities can be located in districts close to where people live (subject to significant development compatibility standards in those locations).

### **Article 2. Intensity and Dimensional Standards**

Intensity standards come in several forms:

- **Density** for residential units is typically expressed as a number of dwelling units per net acre (“12 DU/acre” means that the permitted density is up to 12 dwelling units per net acre).
- **Minimum lot sizes** for single-family residential units are the inverse of “density” and can be converted to an approximate density number by dividing the lot size into the number of square feet in an acre (43,560); thus, a minimum lot size of 10,700 feet results in a density of about 4 units per acre.
- **Floor area ratio (FAR)** specifies the maximum number of square feet that can be built for each square foot of land area; thus, on a 10,000-square-foot lot with an FAR of 2, it is possible to build 20,000 square feet of building. Note that, because of on-site parking, yard, and setback requirements, such intensity may be achievable only with a building that covers part of a lot but that goes up three or four stories.
- **Height** limitations are sometimes imposed in nonresidential areas in lieu of FAR limits. The height limit can be a very effective intensity limitation in a downtown area, where buildings are typically built to cover most of a lot and height is the primary variable. On the other hand, a generous height limitation may be a way of ensuring that an area can support transit. Height limits may be expressed in either linear feet or stories. If stories are used it will be necessary to define the height of a story in a manner that will result in acceptable (i.e., in keeping with policy) height. A height limit is generally unnecessary as an intensity limit in warehousing and manufacturing areas, where most modern facilities are just one or two stories.

Intensity and density regulations are critical to implementing smart growth principles in six ways:

1. Smart growth is generally relatively dense growth. More dense neighborhoods provide more destinations within walking distance.

2. The per-unit cost of installing and maintaining utilities and streets in areas of higher density should be reduced because, all things being equal, there will be fewer feet of pipe and pavement per dwelling.
3. Higher densities save land; if a new development with 400 homes is developed at 6 units per acre rather than 2 units per acre, the result saves 130 acres of land for open space or other uses.
4. Higher densities are necessary to support efficient and economical mass transit, which can result in shorter commuting times, environmental benefits, and infrastructure savings (e.g., less heavily traveled highways requiring less maintenance). Unfortunately, the base zoning in place in many developing areas allows only one or two units per acre. Thus, developers often have to obtain a rezoning to achieve densities supportive of smart growth principles. In the political climate of the early twenty-first century, neighbors almost always turn out to oppose rezonings that lead to density increases. Thus, part of a smart growth update to development codes must address the aesthetic, traffic, and open space impacts of the density to mitigate the perceived and real negative impacts of increased density.
5. Although most zoning ordinances for downtown areas superficially encourage appropriate intensity levels for uses there, other provisions often thwart those densities. The most common such provisions are suburbanlike standards that require downtown developers to provide off-street parking and on-site stormwater detention, just like a mall developer would provide. Stated intensities in the downtown area must be achievable, not hindered by other rules in the code.
6. Finally, a code designed to implement smart growth must carefully blend intensity calculations with density considerations for mixed uses. The benefits of mixed use in a commercial area may be lost if the number of square feet of commercial activity is reduced for every square foot of residential use. Similarly, a close examination of the real (as opposed to the perceived) need for parking may suggest some synergy with mixed use development and a corresponding reduction in required parking spaces. Indeed, maximum, rather than minimum, parking requirements are becoming more popular in modern codes. There is a more detailed discussion of parking requirements below in Article 3.1.

This article should, at a minimum, include the four following standards:

1. Yards and setbacks are related concepts, used to preserve open space around buildings and separation between neighboring buildings. Although some local ordinances make subtle distinctions between the two (e.g., saying that parking is allowed in setback areas but not in yards), for the purposes of this report the two are interchangeable. The existing zoning ordinance will provide a good starting point for considering yards or setback standards and building heights, although yard and setback requirements should be reduced proportionately when lot sizes are reduced to allow greater density.
2. Building height regulations serve the purpose of maintaining scale in a district. Height limits typically start at 30 or 35 feet in single-family neighborhoods and may scale up to much higher numbers in downtown and other intense areas. Height limits are sometimes given in stories; where given in feet, 10 feet per story is a reasonable conversion figure.
3. Building coverage is usually expressed as a maximum permissible percentage and refers to the portion of a lot covered by a building. It is largely an aesthetic measure.

## GREEN ROOFS

Many cities are experimenting with green roofs to counter the urban heat island effect.

In Chicago, all public buildings and planned unit developments are subject to green roof standards, which vary by building type and purpose and by zoning district. As of early 2008, there were more than 250 public and private green roofs in the city, amounting to more than 4 million square feet. Portland, Oregon, offers builders a density bonus for installing rooftop gardens and eco-roofs in the central city area. (Eco-roofs act as stormwater facilities.) The green roof must cover at least 50 percent of the roof to qualify for a bonus. In 2007, Toronto's Green Roof Incentive Program provided a financial incentive of \$50 per square meter, with an upper limit of \$10,000 for residential and \$100,000 for commercial or institutional projects, for green roof construction.

For additional information, see: Lowitt, Peter, and Stephen Peck. 2008. "Planning for Rooftops: The Benefits of Green Infrastructure." *PAS Memo*, March/April.

Retzlaff, Rebecca. 2005. "Building Green: Onus or Bonus?" *Zoning Practice*, April.

U.S. EPA Heat Island Effect website, [www.epa.gov/hiri/about/index.html](http://www.epa.gov/hiri/about/index.html).

- Impervious coverage, in contrast to building coverage, is a measure of the portion of the lot that is covered with surfaces through which water cannot easily flow, including buildings, paving, and decks. Impervious coverage limits are significant in a smart growth program because the amount of impervious coverage is proportionately related to the amount of runoff and, thus, to the extent and cost of required stormwater facilities.

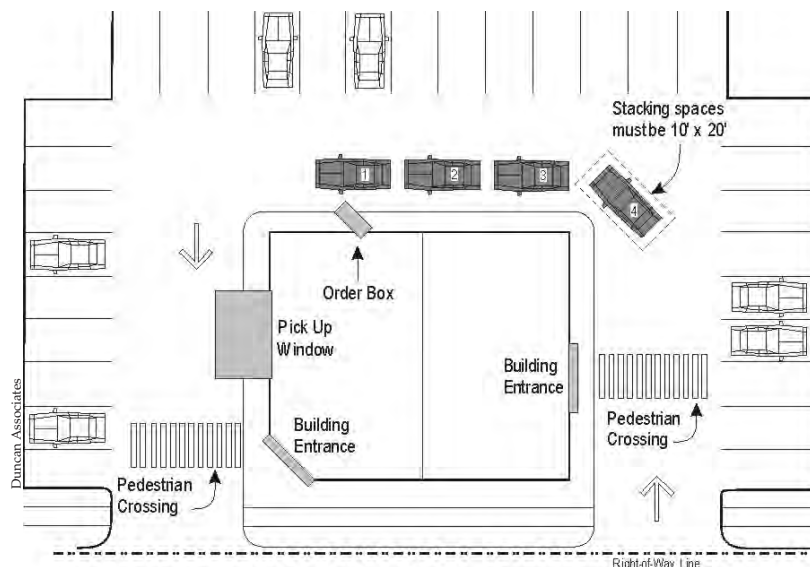
Communities with building coverage ratios in their current ordinances may want to consider replacing them with impervious coverage ratios in a development code; communities without either one should consider adopting impervious coverage limits, at least for nonresidential zoning districts. All such standards should be adapted to the planning concepts driving the smart growth program. Thus, in a downtown area to be intensely developed, the maximum allowed impervious coverage should be 100 percent. In a suburban setting it could range from 25 percent in single-family residential areas to around 50 percent at multifamily projects and modern industrial parks and as much as 80 percent in intense commercial districts. Some commercial developers may try for 100 percent coverage even in suburban settings, but local governments should not allow that to happen.

## Article 3. Development Standards

### 3.1. Site-Specific Standards

Many development standards are specific to the particular lot or site occupied by a single user or a group of related users (e.g., residents of an apartment complex or tenants in a shopping center). These standards in this article would likely include the following:

- Parking and Loading Standards.** This subsection would spell out how much space should be reserved for off-street parking, for loading and unloading of trucks, and for "stacking" lanes for drive-through facilities. Parking standards are typically provided in a table that lists categories of land use and the parking formula to be applied to each. For example, a local ordinance may require one parking space for each 300 square feet



*Figure 2.3. Development standards include site-specific standards such as parking, loading, and "stacking" lane requirements.*



of office space, one for each 200 square feet of certain types of retail space, one for each bedroom in an apartment complex, and one for every two seats of seating capacity in a place of public assembly, such as a house of worship or an auditorium. Collections of parking standards are available from the American Planning Association, and parking generation rates are available from the Institute of Transportation Engineers (ITE). Those same sources provide recommended formulas for loading space for retail and manufacturing uses and for stacking spaces for drive-through facilities. Stacking spaces are typically expressed as a multiple of the number of drive-through lanes, often requiring space for four or five cars to be “stacked” behind the car currently using the facility.

The seas of asphalt that surround big-box retail stores and malls often represent additional parking built by the developer beyond the local government’s minimum requirement. Because such extra parking wastes land and generates excess stormwater runoff and heat, local governments are increasingly setting a maximum parking standard or allowing shared parking. Shoup (2005) recommends a thorough reexamination of parking standards. He found the ITE parking generation rates to be statistically suspect. Shoup presents convincing evidence that off-street parking requirements distort transportation choices, warp urban form, debase urban design, increase housing costs, burden low-income households, damage the economy, and degrade the environment.

- (b) **Landscaping Standards.** This subsection should serve both aesthetic and environmental functions. Many local governments today require that a portion of most developed sites be dedicated to landscaping and that landscaping be incorporated into parking lots to soften the visual effect of the lot and reduce its heat generation. Such requirements vary by zoning district. They can be as high as 25 percent or more in light industrial districts; 4 or 5 percent in commercial areas; or zero in the downtown or other intensive commercial districts. Medium and large cities are increasingly encouraging or requiring mid- and high-rise buildings to install a green roof on some or all of the building’s rooftop as a means of reducing heat island effect.

Landscaping standards should specify not only the amount of landscaping but also the type. Deciduous trees provide shade, but evergreens and many shrubs provide visual buffers; lawn and flowerbeds break up the paving but provide neither shade nor screening. The landscape regulations should include a list of locally viable and easily maintained plants, developed by a landscape architect or other expert familiar with the community; most local parks departments have such a person on staff.

- (c) **On-site Circulation Standards.** This subsection would specify how vehicles and pedestrians move on-site so that conflicts between them are minimal and that fire lanes near the buildings remain open for emergency access. Where there is simply an office building with a single parking lot, such design will be relatively simple. Where there are multiple businesses, some with drive-through lanes, and some shared parking lots, however, the site plan can become complex. Although the local government ought not to draw the site plan, it must have standards to ensure that the site will function as intended. (See Chapter 4, Model Pedestrian Overlay District, and Model On-Site Access, Parking and Circulation Ordinance.)
- (d) **Easements.** Routes for sewer and water lines and other utilities must be designated to ensure that the land above buried utilities will remain open and accessible to repair and maintenance crews. Different utilities

will have different needs, and the site planning standards ultimately must blend all of those together. Similarly, easements can be used to designate and preserve access routes, such as bike and walking paths.

### **3.2. Development Standards for Environmentally Sensitive Lands**

Many local codes include a separate article dealing with development standards for environmentally sensitive lands (e.g., floodplains, wetlands, woodlands, steep slopes, geologic hazards, and water bodies). Such regulations are not particular to a zoning district or type of use; rather, they apply wherever and whenever the specific environmental resources or conditions exist.

In his landmark work, *Design with Nature* (1969), landscape architect and planning pioneer Ian McHarg argued that new development could be designed to protect environmental features and incorporate them as amenities in a development. This approach represented a significant change from conventional, post-World War II development patterns that maximized lot sizes, contained wide residential streets, and minimized open space. Such sites were prepared for development by clearing, grading, and removing all environmental features (e.g., streams were redirected underground through pipes). McHarg's approach also runs counter somewhat to the pre-World War II traditional gridlike development patterns that contained uniform, rectangular lots on rectangular blocks.

Smart growth principles call for increased density, greater street connectivity, smaller lots, and compact development patterns, all of which are applied on a traditional grid street layout. The challenge of applying smart growth in areas with environmentally sensitive lands is to address the possibly contrary objectives of maximizing the use of land while protecting its important environmental characteristics. If a 100-acre tract had 10 acres of wetland and was zoned to allow residences at five units per acre, the conventional approach would often lead to filling the wetland to ensure that the developer could get 500 units onto the site. A restrictive approach might allow the developer only 450 units, requiring that the wetlands be left untouched. In contrast, a smart growth approach, following McHarg's ideas, would allow the developer 500 units but require that they be built on only the 90 acres of dry ground, preserving the wetlands as an amenity. Assuming that an additional 10 acres would be required for roadways and easements, the net difference in lot sizes between the traditional approach and the smart growth approach would be about 10 percent, reducing the average lot size from about 7,800 square feet to just under 7,000 square feet.

Not all communities have embraced McHarg's approach. Some communities have few environmental constraints that limit developable land or preclude the use of a grid street pattern (e.g., when the land is flat and relatively unforested). The fundamental point is that a community implementing a smart growth plan must develop a philosophy of how the environmentally sensitive lands will be treated and accommodated in the context of growth. There are at least three approaches:

1. Eliminate or minimize the sensitive lands to allow a traditional pattern of development (note that federal and state law will impose some limits on this approach).
2. Design with nature, integrating the sensitive lands into a development pattern and allowing increased use of other lands on the same site.
3. Protect the sensitive lands entirely from development by either purchasing them with public money or requiring that developers set them aside permanently (exercise caution if using the latter technique so as to avoid a challenge to the regulation as an unconstitutional "taking" of property).



Having adopted a philosophy or policy, the local government can then establish criteria for the protection of particular types of sensitive lands:

- (a) **Floodplains.** In general, guidelines of the Federal Emergency Management Agency (FEMA) suggest that floodways, which carry the major flood flows, should remain undeveloped, while the flood fringe can be developed, subject to reasonable controls to limit the damage to property. Because local ordinances must conform to FEMA guidelines to qualify the properties in the community for federal flood insurance, most communities will follow these guidelines. The extent to which the flood fringe may actually be developed will vary with local conditions. Where the banks are steep and the flood fringe relatively narrow, it is usually desirable to limit development significantly even on the flood fringe. In contrast, on the Great Plains and in other flat areas where the flood fringe may be miles wide, development designed to mitigate flood damage may be entirely appropriate.

*Comment: A floodplain is defined as land area susceptible to inundation by water as a result of the flood. Within the floodplain are the floodway and the flood fringe. The floodway is the portion of the floodplain that must be left unaltered in order for it to carry and discharge an amount of water that federal and state floodplain regulations and maps consider to be a 100-year flood. The flood fringe is the remainder of the land that lies within a 100-year floodplain that is not part of the floodway.*

- (b) **Wetlands.** Some wetlands are protected by federal or state law, which will control any activities affecting those wetlands. There are many other wetlands of local significance, however, not regulated by the federal or state government. Larger wetlands play an important role in flood mitigation, and most wetlands contribute to biodiversity in a region. Development of or even immediately adjacent to a wetland will disrupt its ecological and physical functions.
- (c) **Steep Slopes.** Steep slopes may be unstable slopes, but that will depend in part on the geology of the site and on the surface soil characteristics. Thus, regulations for steep slopes must be based on local environmental and geotechnical evaluations. Many communities allow development at reduced densities on steeper slopes, but a reduction of density does not solve the problem of instability. In protecting steep slopes it is important to remember that prime agricultural lands are rarely found on such slopes; thus, as a community plans for growth, there may be a trade-off between allowing new development on some slopes or allowing new development of agricultural land.
- (d) **Geologic Hazards.** Certain areas are susceptible to natural hazards due to their slope, underlying geological makeup, or proximity to fault lines. These hazardous events can include subsidence, landslides, avalanche, erosion, volcanic activity, and earthquakes, and these problems can be exacerbated by development. To avoid property damage and possible loss of life, it is important to carefully regulate development in areas where known hazards may occur. Geotechnical reports can reveal development constraints and suggest appropriate mitigation techniques. Where the degree of risk is unacceptably high, land should be preserved as undeveloped open space.
- (e) **Woodlands.** The protection of woodlands should be based on local analysis of the character and viability of woodlands. Some substantial growths of trees consist primarily of invasive species (i.e., species not native to the area) that actually may supplant native vegetation and harm the local ecology. On the other hand, where there are remaining stands of

native or even old forests, they are worth preserving. And new development in areas susceptible to wildfires is inadvisable unless substantial precautions are made to protect the structure and its inhabitants.

- (f) **Prime Agricultural Land.** The physical characteristics of prime farmland (flat, generally well-drained) make it extremely suitable for development. Further, many communities started as farm-service centers and thus are located in areas surrounded by prime farmland. Thus, the pressures on agricultural land are both significant and constant. It is not practical in most communities to protect all existing agricultural land or even all prime farmland. On the other hand, there may be highly productive keystone parcels (e.g., certain sites that produce high-quality grapes for wine) essential to the regional economy that should be preserved. Because any residential development adversely affects the ability to farm lands around it, it is desirable to concentrate new development that affects farmland, rather than allowing it to be spread out on many sides of a farming community. A community interested in protecting woodlands or steep slopes must also recognize there are trade-offs as to where development is allowed; restrictions on development of woodlands or steep slopes will increase the development pressure on nearby farmland.

### 3.3 Development Standards for Utilities and Other Infrastructure

Developers who subdivide land for residential development or who create shopping centers or industrial complexes are typically required to provide the infrastructure necessary to serve the new development. As used here, the term infrastructure includes:

- streets and roads
- sidewalks
- curbs and gutters
- other stormwater facilities
- electrical facilities
- sewerage (wastewater) collection; and
- water distribution



Marya Morris

*Figure 2.4. Developers are typically required to provide infrastructure necessary to serve new development, such as the sidewalks for this residential subdivision.*

Developers typically provide the new roads, pipes, and other facilities within the development and reasonable connections back to the larger sewer, water, road, or stormwater systems. In the case of a large development, a community may require that the developer also contribute to improvements of surrounding roads or other facilities (e.g., adding a turn lane or a traffic signal) to help absorb some impacts of the new activity generated by the development.

Many infrastructure standards are generated by engineers who perform detailed calculations of how large a pipe must be to provide adequate water flow and pressure to a specified number of homes or how wide a road must be to provide access to the same development. There are policy considerations hidden in those specifications. Wider roads may handle more traffic, but they also encourage higher speeds; a community that wants less and slower traffic in residential neighborhoods may lobby for narrower roads. Installing an “oversized” water and sewer line to serve a new development and “allow for future expansion” may actually encourage future expansion in or near that location; thus, such oversizing makes sense only if the community has planned for additional growth in that area and has the other infrastructure (such as roads) to serve it.

Simply establishing standards for what infrastructure a developer must provide is only part of the equation. A developer may provide an ample road system that functions efficiently within the new subdivision. If, however, that system feeds into an overcapacity arterial road (perhaps a state highway once used primarily as a farm-to-market road) that serves as the sole route to local shopping or employment, the level of service (LOS) of the roadway for residents of the development—and those who live beyond—will suffer. That is, the road will no longer serve its function, given the volume of traffic road relative to the road’s design capacity.

Some communities have established adequate public facility ordinances as part of their land development regulations. Such ordinances make the availability and adequacy of public facilities a condition of development approvals. (Florida cities and counties use the term “concurrency,” owing to the state statute that requires facilities be available concurrent with the impact of developments). The purpose of such ordinances is to ensure that public facilities have sufficient available capacity to serve development at a predetermined LOS. A development is determined to be in compliance with the ordinance if its impacts do not exceed the ability of public facilities to accommodate those impacts at a specific LOS. If the proposed development cannot be accommodated by the existing system at the required service level, the developer must either install or pay for the required infrastructure improvements or postpone part or all of the development until the local government provides the needed public facilities. Alternatively, the local government can elect to give greater priority to constructing new or expanded facilities to make development possible. State law in Florida, for example, requires concurrency. Washington State requires concurrency as part of its growth management program but only for locally owned (not state-owned) transportation facilities. Jurisdictions in Colorado, Maryland, and New Hampshire also have adequate public facilities ordinances. Such systems require a major commitment in terms of evaluating LOS for infrastructure, upgrading and expanding public facilities in a timely manner, and establishing a method for keeping track of capacity and reserving it for approved developments.

#### **Article 4. Development Review and Approval Procedures**

An article on procedures in the development code presents an opportunity to consolidate and reconcile all of the development-related review and approval

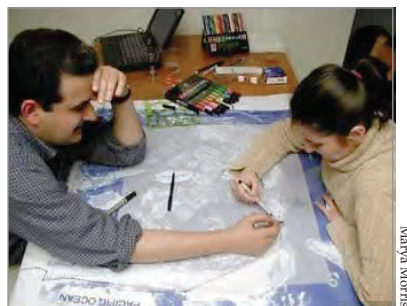
### **PEDESTRIAN CIRCULATION**

Smart growth plans and codes put a strong emphasis on pedestrian circulation. A traditional approach to pedestrian circulation has been to require sidewalks on one or both sides of streets and roads. Although sidewalks along local streets still represent an important part of a pedestrian circulation system, additional considerations that shape a smart growth plan for such circulation include the following:

- Providing pedestrian connections between neighborhoods and destinations that, while in close proximity with one another, have a street layout that requires a circuitous trip out of one development onto an arterial street and into the destination development. Examples of such connections include pedestrian paths that link adjacent cul-de-sacs and neighborhoods, paths from neighborhoods to schools that avoid busy arterial streets, and direct walking routes from residential areas to transit stops and stations.
- Addressing possible conflicts among multiple users on shared pathways, such as bicyclists, in-line skaters, runners, walkers, and people with baby strollers.
- Incorporating urban design elements that help create desirable, walkable communities. Minimize blank building walls, provide midblock connections, shade trees and other comforts (e.g., benches and awnings), and elements with visual interest (e.g., fountains or public art).
- Ensuring safe pedestrian crossings with clearly marked crosswalks and traffic calming measures. ■

procedures. This article of the code will describe the powers and duties of various entities involved in the development review and approval process. Essential actors in development review include the following:

- **The Governing Body** (e.g., city council or planning commission). Under most state laws, a “rezoning” of land (see below) can take place only with the approval of the governing body. Similarly, a “dedication” of land for public use (e.g., the roads in a new development) must be formally accepted by the governing body. Thus, the governing body in almost every community will have a key role in development review. In some communities—particularly smaller communities, where there is less regular business to come before the governing body—the local legislature may want to be more actively involved in development review.
- **Planning Commission.** In most states, the planning commission has multiple roles. It is typically responsible for preparation and initial action on the comprehensive or master plan. It serves as an advisor to the governing body on zoning and thus must review all rezoning proposals before they go to that body. It typically also has the primary responsibility to review proposed subdivisions, although the aspects of subdivisions involving dedication still must go to the governing body (see above). Local ordinances often give the planning commission additional responsibility for reviews of site plans and other types of development approvals.
- **Zoning Board.** Called variously the board of zoning appeals, board of adjustment, or zoning board of appeals (or adjustment), this body hears administrative appeals. When an applicant disagrees with a decision about a permit application, including the interpretation of the zoning code by the code administrator, or believes the facts surrounding the application justify a relaxation of the zoning code standards, the applicant can appeal to the zoning board. That board can not only reverse the action of the administrative official; it can, under specified circumstances, grant a variance from a regulation that it finds imposes an “undue hardship” (or similar standard) for a particular piece of property. This rule applies in all states. In some states, this board has the responsibility to review special use permits, conditional use permits, and special exceptions.
- **Technical Review Committee.** Although not established by state law, many local governments have such a committee that provides technical review of subdivisions and other proposed developments. This body checks the details of a proposed street and utility design, lot configuration, impact on sensitive lands, and other elements before a proposal is sent forward for further review by the planning commission or governing body.
- **Planning Director.** The planning director (or comparable official, such as a zoning or code administrator—see below) is typically responsible for receiving most applications for development permits. The director ensures that the applications are complete, forwards them to the appropriate review body, and handles other administrative functions under the code. The planning director or code administrator typically approves permits that require administrative check-off only (e.g., verifying that dimensional standards are met). Some communities give the planning director the authority to approve small development projects that meet a specified list of criteria.
- **Code (or Zoning) Administrator.** The code administrator is responsible for enforcement. In some communities, the person holding this position is also responsible for the administrative issuance of permits.



*Figure 2.5. Many local governments have internal technical review committees that review subdivisions and other proposed developments.*



There are six major types of development review that lead to the issuance of a permit:

A **building permit** requires zoning approval or clearance by the planning director, code administrator, or similar official. The standards the official(s) will apply are the ones discussed above (primarily the use, intensity, and dimensional standards), but a growing number of communities also incorporate some type of design or architectural review to encourage compatibility with the surrounding area. There is the possibility of an appeal to the zoning board if the permit is denied.

A **sign permit** authorizes an applicant to build a sign. In some communities, the sign ordinance is incorporated into the zoning ordinance. In others, it is a separate ordinance. Whichever the case, an applicant for a sign permit must have the proposed signage reviewed and approved (or approved with conditions) by the code administrator before proceeding.

An **appeal of an administrative decision** goes to the zoning board and may result in a **variance** if the board finds an “undue hardship” or similar standard as applied to a particular piece of property. In most states, the only appeal from the zoning board is to the courts, although a few states allow an appeal to the governing body.

**Rezoning** means changing the zoning designation of a piece of property from one zoning district to another, thus making it subject to different regulations. The process usually begins with an application to the planning director. Because rezoning is a legislative decision (typically made before there is a detailed plan for the development), this application may not be sent to the technical review committee (if one is in place). The first consideration of the rezoning thus occurs at the planning commission; in most states, the planning commission holds a public hearing on the proposal. It then makes a recommendation to the governing body. A positive recommendation sends the proposal forward to the governing body, which may then approve or deny the proposal. Response to a negative recommendation from the planning commission varies by state, but the governing body can typically still elect to approve the proposal—sometimes only by a supermajority (e.g., two thirds of all members).

Some governing bodies hold additional public hearings on rezoning proposals, although most state statutes do not require them if the planning commission has held a hearing on the same proposal. Appeals of rezoning decisions go to the courts. In about a dozen states, rezoning of individual properties is considered quasi-judicial, and the courts will examine whether the decision of the governing body was reasonable based on the evidence before it. In other states, rezoning remains a matter of legislative discretion, and the courts will intervene only if they find a violation of the Constitution or some other serious problem with the action.

**Use by review** occurs when a use is not allowed by right. The local name for a use by review varies, but special use and conditional use are the most common terms. In some states, an applicant submits an application for such a use to the zoning board, with the possibility of an appeal to the courts if the application is denied. In other states, local governments have the discretion to assign this review to a different local body. Most send it either to the planning commission (typical in larger communities) or the governing body. There usually will be a public hearing on the proposed use. Although the decision about a use by review should be based on criteria in the ordinance, if the governing body does the review it may consider the request from the applicant the equivalent of a request for a rezoning. If so, it will act in the best interest of the community (or that part of the community that has testified at the public hearing). Courts can review decisions about use by

review. They will base their decision on issues of reasonableness, based on the record given to the authority that made the initial decision.

**Subdivision (plat) review** is a process for reviewing proposals that result in the division of large tracts of land into buildable lots. The precise definition of subdivision is specified in each state law. The process will differ by state, but typically the application will be submitted to the planning director, who will usually forward it to a technical review committee. That committee will review the proposal to see that it conforms to all standards of the ordinance—particularly those standards for infrastructure, described above. In most communities, the technical review committee is a group of experts that does not vote on the proposal (although the proposal will go forward with comments of the committee members). The formal review of the proposal occurs before the planning commission. Although some commissions hold public hearings on subdivision proposals, many do not because the subdivision review is largely technical (the proposal either meets all of the development standards and approval criteria and must be approved, or doesn't and must be denied). In some states, the planning commission has final authority to approve the subdivision, but in others the local legislative body does. If the plat includes proposals to dedicate roads or other facilities to public use, the governing body must review those dedications.

In some communities, the action of the planning commission on a plat can be appealed to the governing body. Otherwise, it can be appealed to the courts. Subdivision plat reviews may take place in two or three stages:

- (1) **Sketch plan**, which is simply a general concept, usually presented to the technical review committee and, perhaps, the planning commission, to obtain feedback before the developer spends a lot of money on engineering fees to do a more detailed plan;
- (2) **Preliminary or tentative plat**, which shows all of the details of the subdivision of land but does not include all of the construction details on public improvements (this is most the critical stage of review); and
- (3) **Final plat**, which is the document that will be recorded in the land records of the county. It will be accompanied by full construction details on the entire proposed infrastructure. Final plats can be filed in stages, with each stage representing a portion of the preliminary or tentative plat.

**Planned [Unit] Development.** Since the 1970s, many local governments have adopted a form of planned development controls. Planned unit development regulations blend the rezoning and subdivision review process together, with the preliminary plat approval typically coinciding with the rezoning approval and becoming a condition of that approval. They provide the developer with flexibility in meeting dimensional and other standards on each individual lot while ensuring that the overall density of the project is consistent with the community's requirement. In a suburban or exurban residential setting, planned developments often involve the clustering of development on smaller lots, with some of the land preserved as open space which may be active (e.g., a golf course) or passive (e.g., a greenbelt). Review of planned developments requires initial review by the technical review committee (if one is in place), a recommendation by the planning commission, and final action by the governing body. Most planned development processes involve at least three stages of approval: (1) a concept plan, for general feedback; (2) a preliminary or tentative plan, which grants the rezoning but conditions the rezoning on a specific plan, which is also the preliminary subdivision plat; and (3) final plans and plats for each phase of the project.



### Article 5. Administration and Enforcement

This article sets out explicitly how the jurisdiction will administer and enforce the development code. Provisions in such an article will likely address the following:

- **Permits required.** This is a statement that specific work can be undertaken only after the issuance of a permit and that such permits will be issued only if the proposed work conforms to all aspects of the development code.
- **Violations.** The code should list all actions that will constitute a violation. Some examples include: undertaking specified construction or other work without a permit; subdividing land without required approvals; recording a document showing the subdivision of land without required approvals; undertaking work in violation of the terms or conditions of a permit; and using land or building on land in a way inconsistent with the terms of the code.
- **Enforcement provisions.** This list describes all the enforcement actions the local government may take in case of a violation, including issuing a stop-work order; withholding permits or certificates for the site or project; revoking permits or certificates already issued after some type of hearing; seeking injunctive relief; seeking civil (monetary or other) penalties; and seeking criminal penalties.
- **Penalties.** The code should spell out the maximum civil and criminal penalties that the jurisdiction may impose and should specify whether such penalties may be cumulative for each separate violation or for each day or other period of a continuing violation.
- **Procedures.** Most local enforcement efforts begin with informal contact with the violator, such as calling them or visiting their home to discuss the violation, followed by a written notice of the violation with a reasonable opportunity to cure. Any further action, such as revoking issued permits, should employ a hearing process to ensure that the affected parties are given due process under the law. Certain other actions, such as withholding permits, should be subject to appeal. This section should spell out how all such procedures work.

### Article 6. Definitions and Interpretations

Many codes present definitions and rules of construction (i.e., how various phrases or words will be used) throughout. An example would be “Trillium County Community Development Department, hereinafter referred to as ‘the Department’” in an introductory article, although an increasing number of codes includes definitions and terminology near the end in a glossary. Although the definitions are sometimes placed near the beginning of a code, the most frequent users of the code will be familiar with most of the words and thus will not often need to refer to these materials; for those users, definitions near the beginning actually get in the way of efficient use of the code. Regardless of where they appear, definitions are an essential element of a good code. Crafting a good definitions section would seem fairly straightforward, and for the most part it is. There are some basic rules:

- Terms defined in related state statutes should match the state definitions; the specific statutes giving those definitions should be formally cited.
- The definition for a term should be consistent throughout the development code.
- Where a term is defined or used in a specific way in the comprehensive plan—or any element of the comprehensive plan (e.g., the land-use element, the transportation element, etc.)—that definition or meaning should be carried over to the development code.

## CODE UPDATES

For each statement that is true of the community add or subtract the number of points listed in column 2 to a running total. See the key at the bottom of the worksheet to interpret the numerical results.

### CODE REVISION ASSESSMENT

Item	Points	Score
There is no comprehensive or master plan, or such plan is more than ten years old.	STOP; see note	
New comprehensive plan was adopted within the last year.	1	
The comprehensive plan is one to five years old.	3	
The comprehensive plan is more than five years old.	5	
Development regulations have NOT had a major update since the last comprehensive plan was adopted.	5	
Development regulations have had some corrective amendments since the comprehensive plan was adopted, but they still do not totally match plan.	3	
Development regulations have been fully updated to conform to the comprehensive plan.	-2	
The zoning map bears close resemblance to the future land-use element of comprehensive plan.	1	
The zoning map has many similarities to the future land-use element, but some major differences in undeveloped or developing areas exist.	3	
The zoning map bears little resemblance to the future land-use element.	5	
Annual growth rate in percent (enter nearest whole number for growth rate; if less than one percent, enter 1).	%	
Much new development occurs outside existing city boundaries.	5	
The majority of new development has only septic tanks rather than sewer service.	5	
Many new homes front on cul-de-sacs with the only pedestrian connections following the street grid.	4	
There is "leapfrog" development in and around the community (i.e., developments are separated from the existing community by large undeveloped areas).	5	
The average density of new residential development is lower than the average density of developments built 30 years ago.	3	
The average density of new residential development is less than three units per acre.	5	

(continued on page 25)

- General terms (e.g., person or land) need not be specifically defined; there should be a reference to a named dictionary to consult when seeking the meaning of such terms.
- A common term used with a specific meaning (e.g., director) must be defined (e.g., "means the head of the Department of Planning and Zoning").
- Where local practice gives an odd meaning to a word, it may be desirable to enhance the meaning of the word by turning it into a phrase (e.g., use "driveway access" rather than "driveway" where the intent is to refer to the connection between the driveway and a public road).
- Definitions for each use and regulatory phrase should be provided. The definition should *not* incorporate development standards. For example, a definition of a kennel should not describe the use as "an indoor-outdoor facility for domestic animals with not more than 12 runs and a six-foot fence around it." Rather it should be defined generically, using development standards to establish requirements for size, fencing, and other features. There are tricky issues, however, that will be resolved differently in different communities. One is how to handle use-related terms. Some communities group all use definitions (e.g., kennel, campground, automobile dealer) in one part of the definitions article (or even a separate article) and more general definitions (e.g., street, sidewalk, director) in another part or article.

Another difficult issue is how to handle terms with specific applicability. For example, consider the term "alteration" in floodplain, historic preservation, and airport regulations. An alteration to a historic property would mean something very different than an alteration that would affect the condition of a floodplain or an alteration that might interfere with flight paths to an airport.

A way to solve this problem is to use synonyms for the term in each of its various applications. For example, as to "alterations," use "modifications" or "changes" in the historic preservation provisions; "floodplain alterations" in the floodplain provisions; and "obstructions" in the airport-related regulations. If it is impossible to find enough synonyms to meet all the required instances, the related definition should be conditional (e.g., "for purposes of this Article/Section only, 'alteration' shall be construed to mean...").

There are other issues to address in this article:

- Inclusive provisions clarify that the singular includes the plural and that words of one gender should be construed to include words of other genders, as the context may suggest.
- Clarifications of how the words "may," "must," "will," and "shall" are used in the code.

- Indication of how duties may be delegated (e.g., “any duty assigned to the director under this code may be delegated by the director to any person reporting to the director,” or “director shall mean the director or the director’s designee”).

This article or, alternately, another one on administration and enforcement should describe a procedure for determining how the jurisdiction will classify and regulate new or unusual uses. For example, when video rental stores suddenly became popular, the closest definition in most local zoning ordinances provided only for “retail sales of books or sound recordings.” Clearly a video rental store is in many ways like a bookstore or a music store, but code definitions were typically not broad enough to include video rental. Some codes refer to an organized system, such as the American Planning Association Land-Based Classification System ([www.planning.org/lbcs](http://www.planning.org/lbcs)) and provide that an unlisted use should be treated the same as any listed uses under the same general heading in that system. Others provide for an interpretation by the zoning administrator or the zoning board; some combine the two. Any of those approaches will work, but it is important to include one of them.

### APPROACHES TO CODE REVISIONS

There are four basic approaches to incorporating smart growth objectives into existing development regulations:

1. Corrective amendments
2. Selective amendments, additions, or supplements
3. Alternatives to conventional zoning and subdivision codes
4. A comprehensive rewrite

For some communities, the choice among these alternatives will be relatively obvious. For others, the worksheet shown in the sidebar may help.

### Corrective Amendments

Ideally, jurisdictions that have updated their development regulations on a regular basis will be better able to implement smart growth goals through strategic amendments to existing standards and procedures. Some of the types of amendments that can be accomplished through corrective amendments include the following:

- Updating parking requirements to reflect smart growth goals
- Updating other site development standards to reflect smart growth goals
- Requiring pedestrian accessibility for new developments

### CODE REVISION ASSESSMENT (continued from page 24)

Item	Points	Score
Most new residences have pedestrian access (i.e., they are within six blocks) to at least two of the following uses: convenience shopping, school, park, and library. <i>Note: Block lengths will vary depending on local conditions.</i>	-3	
Most new residences must depend primarily on automobile access for all of their daily activities.	5	
Most new commercial development occurs along major arterials.	5	
There is excellent pedestrian access from neighborhoods to most new commercial development, regardless of where it is located.	-3	
There is a comprehensive system of bicycle and pedestrian paths in the community.	-2	
The zoning ordinance last had a major update more than 20 years ago.	10	
The zoning ordinance last had a major update between ten and 20 years ago.	5	
The zoning ordinance has had a major update in the last five years.	-2	
Zoning and other regulations have already been incorporated into a development code.	-8	

*Note: if the community does not have a current comprehensive or master plan, it cannot achieve smart growth. Any energy or funds that might be spent on new or updated development regulations should be redirected to the preparation of a new comprehensive or master plan that includes smart growth goals.*

### CODE SCORING

Score	Recommended Action
40 or more	A comprehensive rewrite of the development regulations is both essential and long overdue; do not cut corners.
30 to 39	A comprehensive rewrite of the development regulations is strongly recommended; it may be possible to get by with a supplemental code or supplemental ordinances addressing smart growth issues.
20 to 29	A comprehensive rewrite of the development regulations is one option to consider, but a supplemental code or supplemental ordinances addressing smart growth issues or even selective additions or supplements may be adequate.
10 to 19	A comprehensive rewrite is not recommended; consider a supplemental code or ordinances or selective additions or supplements to existing ordinances.
5 to 9	Corrective amendments to the existing code should be adequate; consider selective additions or supplements to existing ordinances.
Less than 5	Consider nothing more than corrective amendments.

- Amending street design standards to incorporate smart growth goals
- Increasing the mixture of uses in some zoning districts

Corrective amendments typically require the least staff work of any of the methods of updating development regulations. Ideally, staff will be able to compose a drafting checklist for these amendments by consulting the comprehensive plan and any adopted smart growth elements. Further, many of the types of changes suggested here are likely to be accepted by the community without much controversy, which facilitates the adoption process. With a little luck and community acceptance, a community could adopt many corrective amendments within three to six months after adoption of the comprehensive plan or other triggering step.

### Selective Amendments, Additions, and Supplements

When existing ordinances are sound but lack a few important regulatory tools, new provisions or sections must be added through the code amendment process. Such amendments may involve adding several pages or even tens of pages to some parts of the code. New zoning districts aimed at implementation of smart growth goals will also require new development standards and review procedures. This could entail any or all of the following:

- Adding adequate public facility standards for new developments
- Adding environmental standards to protect sensitive lands (assuming that the code already contains adequate procedures for such regulations and includes appropriate clustering provisions)
- Adding cluster development procedures to allow developers to more easily “design with nature”
- Adding new zoning districts to implement particular smart growth goals
- Adding landscaping standards to existing site development standards
- Splitting development standards so that there are different standards for categories such as streets and sidewalks in the downtown, suburban, and exurban areas
- Establishing new procedures to facilitate the approval of desirable infill and other smart growth projects
- Mandating certain types of uses in certain situations, such as retail or pedestrian-oriented activities on the first floor of all buildings in the central business district



*Figure 2.6. New zoning regulations that mandate retail and pedestrian-oriented activities on the first floor of all buildings in the downtown will help implement smart growth goals.*

The amount of work involved in preparing new material will vary, depending on the level of complexity of the new provisions and the specificity of the sources. For example, if the comprehensive plan says that all new downtown buildings should have retail on the first floor, drafting the code amendments to meet that objective will be fairly simple. If, on the other hand, the comprehensive plan has broad statements about the need for new landscaping standards or updated parking regulations, the update will require some policy discussion with the planning commission and governing body before moving to drafting or formal adoption can occur. Some of the types of additional provisions suggested above may attract community interest and opposition, possibly extending the adoption process.

### Alternatives to Conventional Zoning and Subdivision Codes

Alternative codes represent an increasingly common tool used to encourage or at least accommodate development at odds with older, conventional develop-



ment regulations. Under this approach, a community adopts an entirely new set of standards and procedures that serve alongside (parallel to) an existing code. There are three types of alternative codes in common use today:

1. **A smart growth zoning code** with special districts to be applied primarily to developing or redeveloping subareas, with the old zoning left in place in developed areas. This is probably the simplest approach because it does not disturb mature parts of the community.
2. **A form-based code** that is required for development in certain zones. Implementation of such a code is typically through a process similar to the one used for planned development, with the initial approval by the planning commission and governing body placing the land in a special zoning district with different use, intensity, dimensional, and site development standards than traditional districts.
3. **A unified development code** incorporating subdivision and site development standards but overlaid onto existing zoning, which would remain in place.

The process for preparing a supplemental code will be somewhat less complex than, but just as lengthy as, the process for preparing a comprehensive rewrite, described below. There will undoubtedly be the need for consultant assistance or substantial research by the staff on alternative approaches. That research will provide the basis for informal discussion with stakeholders and public officials about possible approaches. Preparation of a draft code should occur only after those steps are complete. That is followed by the formal hearing process, which can be expedient if decision makers are already engaged in the subject matter or lengthy if they are being presented with new concepts at this late stage. The formal adoption process follows the hearings. The designated governing body that formally adopts the amendment will have received a recommendation from the reviewing body (i.e., the planning commission).

### **Comprehensive Rewrite**

There are cases in which corrective amendments, an occasional new provision, and alternative codes represent mere patches on an overall code framework that is completely out of step with local objectives and policies or that has become virtually unusable due to piecemeal amendments over a long period of time. In such cases, a comprehensive rewrite of all local land development regulations may represent the only cure.

A comprehensive code amendment includes dozens of corrective amendments, a substantial amount of new material, and a complete reorganization and reformat of the regulations. It should also include a comprehensive edit of all sections of the regulations to ensure consistent use of terminology, drafting conventions, and overall writing style.

Preparation of a comprehensive development code rewrite can take from 12 to 36 months, from the beginning of the process to final adoption. Although the drafting process itself may take only a third of the total time, planners need to conduct extensive discussions with stakeholders and to undertake in-depth research about alternative approaches before drafting even begins. Because such a code will contain many substantive changes from existing rules—and because the new format and new terminology may make people think that it involves even more changes than it actually does—there will be a need for substantial informal discussion of the draft code before it goes to the adoption process. With a comprehensive rewrite, there are likely to be some changes and delays even in the final adoption process as more stakeholders become interested and identify more issues needing attention.

### **APA SMART GROWTH POLICY GUIDE**

The American Planning Association (APA) adopted a policy guide in 2002 that defined smart growth to mean:

Using comprehensive planning to guide, design, develop, revitalize and build communities for all that:

- Have a unique sense of community and place;
- Preserve and enhance valuable natural and cultural resources;
- Equitably distribute the costs and benefits of development;
- Expand the range of transportation, employment, and housing choices in a fiscally responsible manner;
- Value long-range, regional considerations of sustainability over short term incremental geographically isolated actions; and
- Promote public health and healthy communities.

The policy guide notes that “compact, transit accessible, pedestrian-oriented, mixed use development patterns and land reuse epitomize the application of the principles of smart growth.” In contrast to prevalent development practices, says the guide, smart growth “refocuses a larger share of regional growth within central cities, urbanized areas, inner suburbs, and areas that are already served by infrastructure.” In addition, smart growth “reduces the share of growth that occurs on newly urbanizing land, existing farmlands, and in environmentally sensitive areas.”

The full policy guide may be accessed at: [www.planning.org/policy/guides/adopted/smartgrowth.htm](http://www.planning.org/policy/guides/adopted/smartgrowth.htm).

### **THE U.S. EPA SMART GROWTH PRINCIPLES**

The U.S. Environmental Protection Agency has published a series of smart growth policies that appear on its website ([www.epa.gov/smartgrowth](http://www.epa.gov/smartgrowth)) and in publications that it has sponsored through the Smart Growth Network, a partnership of government, business, and civic organizations, including APA, that support smart growth. These policies, which form the framework for this report and are similar to principles contained in the APA smart growth policy guide described above, are summarized here:

1. *Encourage Community and Stakeholder Collaboration in Development Decisions.* This collaboration ensures the early and frequent involvement of all stakeholders throughout the planning and development decision-making process. The means of engaging the community and stakeholders are myriad and range from early stakeholder input in community plans to ongoing feedback and evaluation of plan implementation as projects are constructed. Ensuring a high level of public involvement is fundamental to guaranteeing that community needs are fully integrated into the planning and development process, as well as contributing to avoidance or creative resolution of development conflicts.
2. *Take Advantage of Compact Building Design.* This refers to the act of constructing buildings vertically rather than horizontally, configuring them on a block or neighborhood scale that makes efficient use of land and resources, and making them consistent with neighborhood character and scale. Compact building design reduces the footprint of new construction, thus preserving greenspace to absorb and filter rainwater, reduce flooding and stormwater drainage needs, and lower the amount of pollution washing into our streams, rivers, and lakes. Compact building design is necessary to sustain transit ridership at levels necessary to make public transit a viable transportation option.



3. *Direct Development Toward Existing Communities.* This refers to the act of encouraging reinvestment and redevelopment of communities that possess previous investment of infrastructure and development. Directing development to existing communities strengthens the tax base, ensures a closer proximity of a range of jobs and services, increases the efficiency of already developed land and infrastructure, and reduces development pressure in edge areas, thereby preserving more open space, and, in some cases, strengthening rural communities.

4. *Foster Distinctive and Attractive Places.* These are regions, towns, and communities whose architectural and natural elements reflect the interests of all residents and that reinforce and contribute to community cohesiveness. Such places set standards for development and construction that respond to community values of architectural beauty and distinctiveness, as well as expand choices in housing and transportation. Ultimately such places retain their economic vitality and value over time, in the process making an efficient use of infrastructure and natural resources.

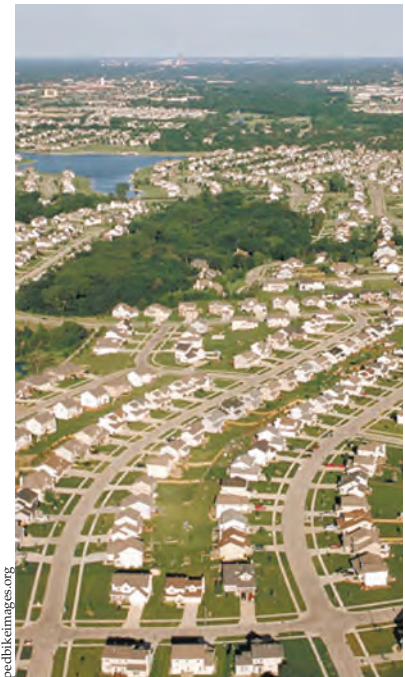
5. *Mix Land Uses.* This refers to the act of putting differing land uses (residential and commercial, residential and business, etc.) in close proximity to one another to foster alternatives to driving, such as walking or biking. Mixed land uses provides a more diverse and sizable population and commercial base for supporting viable public transit, and they enhance the vitality and perceived security of an area by increasing the number of people on the street. Mixing land uses helps streets, public spaces and pedestrian-oriented retail again become places where people meet, attracting pedestrians back onto the street and helping to revitalize community life.

6. *Make Predictable and Cost-Effective Development Decisions.* This refers to the act of removing barriers in the regulatory process that inhibit the construction of pedestrian-oriented, compact, mixed use development, and making public investment and infrastructure decisions that support such development activity. In doing so, governments create a fertile policy framework that frees the private market to provide pedestrian- and transit-friendly development.

7. *Preserve Open Space and Farmland.* This refers to the act of protecting natural areas (habitat, farm and ranch land, places of natural beauty and critical environmental areas (e.g., wetlands)) from being converted to development, either through the acquisition of land or development rights, or through the removal of development pressure. Protection of open space provides fiscal benefits, prevents flood damage, and provides a less expensive and natural alternative for providing clean drinking water, combating air pollution, attenuating noise, controlling wind, providing erosion control, and moderating temperatures.

8. *Create a Range of Housing Choices.* Housing choice means providing households of all income levels with the ability to live in homes that meet their needs. This requires communities to promote housing of varying type (apartment, rowhouse, or traditional suburban) and cost, and locate them in proximity to places of work, services, and transportation. Expanded housing choice allows communities to mitigate the environmental costs of auto-dependent development, use their infrastructure resources more efficiently, ensure a better jobs-housing balance, and generate a strong foundation of support for neighborhood transit stops, commercial centers, and other services.

9. *Provide a Variety of Transportation Choices.* Transportation choice entails providing residents with multiple, safe, and connected options—driving,



*Figure 2.7. Smart growth goals promoting infill, distinctive places, and a mix of uses can help prevent the monotony and negative environmental impacts of unchecked sprawl.*



*Figure 2.8. Providing a variety of transportation choices gives residents multiple, safe options to get from one place to another.*

rail and bus transit, bicycling, walking—to get from one place to another. Doing this effectively requires adopting development practices—mixed land use, compact building design, et cetera—that support multiple travel choices, or modes. Providing choice ultimately enables regions and communities to move toward a less congested transportation system and cleaner air.

10. *Create Walkable Neighborhoods.* These are places that locate within an easy and safe walk goods (such as housing, offices, and retail) and services (such as transportation, schools, and libraries) that a community resident or employee needs on a regular basis. Walkable neighborhoods are characterized by mixed land uses, compact building, inviting pedestrian corridors, and a streetscape that serves a variety of users—pedestrians, bicyclists, transit riders, and automobiles. Walkable neighborhoods allow people to substitute walking, bicycling, or other nonauto modes for short trips, thus contributing to reduced congestion and better air quality.

### THE SMART GROWTH AUDIT

Note: This section originally appeared in different form as “Conducting a Smart Growth Audit” by Dr. Jerry Weitz, AICP, in *PAS Memo* (April 2002), 1–4.

Smart growth audits assess growth policies and implementation measures in a systematic manner. The ultimate goal of the audit is to change existing plans, policies, and practices so that they promote accepted principles of smart growth. Even though the audit may result in a final report, it must be viewed as a means to an end—what a government does with the findings of a smart growth audit is much more important than producing the audit report itself.

### Scope

A smart growth audit seeks to identify consistencies and inconsistencies between stated intentions, accepted principles, and actual practices. The audit examines whether adopted plans and policies encourage and facilitate smart growth and are consistent with one another.

The auditor cannot assume that governments have embraced generally accepted or locally adopted principles of smart growth. Therefore, he or she must first examine the extent to which local plans and policies embrace accepted smart growth principles, and then evaluate implementation measures and their effects.

### Seven Steps of the Audit

The smart growth audit is conducted in seven steps. Followed sequentially, these steps provide a method for conducting a comprehensive audit.

1. *Define Smart Growth in Community Context.* This step involves defining smart growth, selecting from a list of smart growth principles, and achieving local consensus on such definitions, policies, and principles. Various stakeholders, such as homebuilders, developers, neighborhood representatives, and planning commissioners, should debate and propose definitions and principles. The local governing body should reconcile conflicting views and select the most appropriate definition, policies, and principles.
2. *Decide to Conduct the Audit.* Smart growth audits are often initiated as part of a community’s efforts to revise its comprehensive plan or development regulations. In some instances the need for an audit will be born out of a comprehensive plan revision, in which case the local government should include the task in the implementation component of the local comprehensive plan.

The local governing body should make a formal decision to commit time and resources to a smart growth audit. That decision should be made in consultation with planners, citizens, the planning commission, other development-related advisory boards and commissions, and interest groups with a stake in long-range planning. The governing body's approval is necessary when the audit requires additional spending, or if it is to be adopted as part of a plan, program, or budget. Local governments with appropriate staff, budget, and prior guidance may choose, without governing body approval, to complete various smart growth auditing tasks and then use the results to inform the planning and implementation processes.

3. *Determine Audit Scope and Content.* Because no two communities will define smart growth in the same way or emphasize the same smart growth principles, the scope and content of a smart growth audit will differ from community to community. Priorities will differ among communities and sometimes within the community itself over time. Local governments should develop a list of all the plans, policies, programs, and regulations that will be considered for inclusion in the audit. A comprehensive audit looks at the comprehensive plan, small area or neighborhood plans, facility capital-improvement master plans, the zoning ordinance, subdivision regulations, and other land-use regulations.

If a comprehensive audit cannot be undertaken, auditors should pay special attention to those policies and regulations that have the strongest influence on shaping growth in the community. In most cases, this will be the zoning ordinance and facility plans for transportation and sanitary sewer. Auditors are cautioned, however, that unless the comprehensive plan itself includes goals, policies, and objectives that support smart growth, regulations should not be expected to promote smart growth on their own.

4. *Select Auditor and Reviewer.* While planning staff in metropolitan areas may have resources and expertise to conduct an audit, outside assistance might be needed or desired. Local staff members may not observe issues and problems in the same manner as someone outside the community, such as consultants. Even if the local staff or one or more community organizations are capable of conducting an audit, there are advantages to using a consultant. A consultant can bring expertise in smart growth not available on staff, articulate how local policies compare with those of other communities, lend additional credibility to the process, and organize and implement the audit without interruptions that staff is likely to confront. The local planning agency should assign a project manager, whether or not a consultant is used.

The local government also needs to decide who will review and comment on the audit. Establishing an independent review team or panel is useful. The principles of review should be determined locally rather than suggested by the outside auditor, because the outside auditor will likely not have detailed knowledge about the community. The review team should include planners, academics, designers, land developers, and builders who have appropriate backgrounds and interests in smart growth. Environmental health and civil engineering professionals are also appropriate for inclusion on the review team.

5. *Choose Criteria for Evaluation.* This step involves developing a set of criteria against which existing growth policies can be compared. Articulating the principles in checklist form provides for easier implementation (see Table 2.1 for an example). These criteria should relate directly to the

smart growth definitions or principles agreed upon in advance by the community. Such a checklist would include items such as:

- Efficiency of land consumption
- Direction of growth
- Density
- Urban form
- Land use
- Jobs-housing balance
- Open space
- Housing
- Transportation
- Environmental factors

The checklist should provide some commentary and principal rationales for selecting the evaluation criteria. Including commentary helps inform stakeholders and elected officials about exactly why smart growth policies should be pursued in their community. For example, under the topic of urban form, the checklist may ask, “Does the land-use plan propose a sequential, phased pattern of future development in areas contiguous to developed areas so that a compact urban (or suburban) form can be obtained?” The accompanying commentary may read, “Smart growth means that urban areas are expanded efficiently (only as much land is used as is needed) and in a pattern where new growth is contiguous to existing developed areas. To develop in a contiguous and compact form means that scattered development and sprawl can be avoided. Sequential development also provides for a better return on the public investment in public facilities, and it reduces the linear footage that facilities must be extended.”

6. *Compare Document with Evaluation Criteria.* This step involves assessing all the plans, including the comprehensive plan, policies, and implementation measures related to development, and determining the extent to which they encourage and facilitate smart growth principles. This comparison also should assess how policies and regulations work together as a system. If the community is not conducting a comprehensive audit, this process involves those plans, policies, and measures selected for auditing. The auditor should note any inconsistencies between policies or gaps in policies and regulations. Analyzing content and assessing information are the most time-consuming steps in the smart growth auditing process. During this step of the audit, Avin and Holden (2000) suggest that auditors produce a synopsis of the findings for each document, so that others can quickly grasp their significance for smart growth.
7. *Implement Recommendations.* Local elected officials should formally accept the smart growth audit recommendations and systematically integrate them into the local government’s short-term work program of the comprehensive plan. In considering whether audit recommendations can be implemented, the following questions might be asked (Mazmanian and Sabatier 1989):
  - Do the audit’s recommendations provide clear and consistent (measurable) objectives?
  - Is the extent of change modest and reasonable to accomplish?



TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
<b>EFFICIENT LAND CONSUMPTION</b>				
Population and employment projections: Are they realistic in terms of regional and state projections?	Comprehensive Plan			
<i>Commentary: Population projections provide the basis for all other planning efforts, including projections of households, numbers of housing units, acreage needed for residential land use, job base, and community facilities and services. Population projections should not exceed any population projection for the jurisdiction published by a regional or state agency.</i>				
Are housing unit projections based on a housing needs assessment?	Comprehensive Plan			
Is the amount of future residential land use shown on the land-use plan based on calculations of the number of acres needed for each type of residential land-use category and prevailing or planned densities (e.g., 200 acres of R-1 vacant land at 3 units per acre = 600 units; 75 acres of MR vacant land at 8 units per acre = 600 units, etc.), based on reasonable projections of housing units by type?	Comprehensive Plan			
Is the land-use plan efficient in terms of the amount of undeveloped land devoted to residential uses when compared with the projections of residential land needed?	Comprehensive Plan			
<i>Commentary: By "efficient," it is meant that the amount of vacant acreage devoted to residential uses in the future land-use plan should be approximately equal to the projections of land needed for residential use based on the housing needs assessment. A smart growth land-use plan does not designate excessive amounts of future residential land use when they are not needed. Exceeding the projected residential acreage needs by more than 15 percent in the land-use plan (which can be shown by calculating the difference between existing residential land-use acreage and future residential land-use acreage shown on the plan) would probably be grounds for a finding that the plan is not achieving smart growth. Excessive residential acreage in a plan will encourage consumption of more land than is needed for residential uses and encourage residential development to spread out at lower densities than those suggested in the land-use plan.</i>				
<b>DIRECTION OF GROWTH (INWARD, NOT OUTWARD)</b>				
Do land-use policies favor an inward "direction of growth" toward existing developed areas (where such areas exist), instead of promoting or favoring new development on the fringe of developed areas (i.e., "greenfield")?	Comprehensive Plan			
Does the land-use analysis identify in quantitative terms (i.e., number of acres and preferably buildout potential in numbers of units) what the potential is for residential infill development?	Comprehensive Plan			
Are there specific policies that promote and encourage infill development (where such areas exist)?	Comprehensive Plan			
<i>Commentary: Efficient land use, or smart growth, means that undeveloped land within built-up areas should be used rather than left vacant, because it saves on the consumption of land at the urban fringe and often can make use of existing infrastructure (e.g., roads, water and sewer line capacity, etc.). Local governments cannot be smart about infill development unless they have provided an inventory of vacant lands that can serve as infill development sites. A land-use plan is smart when it studies the capacity of residential infill land (currently vacant or underused), determines the capacity of that land for new residential units, and poses policies, strategies, and regulations supportive of development on infill sites.</i>				
Does the land-use plan contain an analysis of redevelopment potential? If it finds there is redevelopment potential, does the land-use analysis identify what the redevelopment potential means in terms of new housing units and square footage of nonresidential development?	Comprehensive Plan			
Does the plan recognize the need to reclaim and reuse any temporarily obsolete or abandoned sites (TOADs) and to clean up and reclaim for future use any brownfields?	Comprehensive Plan			
<b>DENSITY</b>				
Does the land-use element contain an analysis of developed residential densities and how they relate to planned densities and densities permitted by zoning districts?	Comprehensive Plan			



TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
<b>DENSITY (continued)</b>				
<p><b>Commentary:</b> Cities and counties should calculate the built residential densities (i.e., number of units per acre) of recent developments to get an idea of the average or prevailing densities being constructed. These figures on existing densities should be compared to the land-use plan for differences or inconsistencies. They should also be compared to allowable densities according to the various zoning districts in which the recent development is located. If actual (built) densities are much less than planned densities, or if actual densities are much lower than the maximum densities permitted by zoning district, residential development is not occurring efficiently with regard to land consumption and use of planned infrastructure. Smart plans bring actual (developed) densities in line with densities recommended in plans and allowed by zoning ordinances. In other words, if the number of residential acres consumed vastly exceeds the number of acres projected to be used during a given time period, it can be observed that residential growth has occurred inefficiently, counter to accepted principles of smart growth.</p>				
Do land-use policies encourage the establishment of minimum (not just maximum) densities to promote the efficient use of lands designated for higher densities? Alternatively, does the plan address any findings that density allowances in the land-use plan and zoning district have been underutilized?	Comprehensive Plan			
Do land-use regulations establish minimum densities to promote efficient use of lands designated for higher densities?	Zoning Ordinance			
<p><b>Commentary:</b> Underuse of residential lands, due to building at lower densities than planned and zoned, results in the consumption of land for residential use faster than planned. This means more land is needed for residential uses, which probably means that land needs will be satisfied by taking more land out of productive agricultural use at the urban fringe. One way to strive for more efficient use of land for residential development is to establish minimum densities in areas where it is very important that planned densities be achieved (e.g., around transit stations and in areas master planned for sewer service, to name just two).</p>				
Do minimum lot sizes allow for urban-sized lots?	Zoning Ordinance			
<p><b>Commentary:</b> City zoning ordinances should provide a significant portion of single-family zoning devoted to single-family development on lots of 5,000 to 6,000 square feet. Cities that provide zoning for urban lots should receive higher scores in a smart growth audit. (Also see discussion under “housing”.)</p>				
Is at least some of the residential land in the community planned and zoned for densities between 8 and 15 dwelling units per acre, with even higher densities provided for in urban centers?	Comprehensive Plan and Zoning Ordinance			
<b>URBAN FORM</b>				
Does the land-use plan propose a sequential, phased pattern of future development in areas contiguous to developed areas, so that a compact urban (or suburban) form can be obtained?	Comprehensive Plan			
<p><b>Commentary:</b> Smart growth means that urban areas are expanded efficiently (only as much land is used as is needed), and in a pattern where new growth is abutting (contiguous to) existing developed areas. To develop in a contiguous and compact form means that scattered development and sprawl can be avoided. Sequential development also provides for a better return on the public investment in public facilities, and it reduces the linear footage that facilities must be extended.</p>				
Does the zoning ordinance zone much of the fringe land as exclusively agricultural (i.e., a holding category) or with a substantial minimum lot size that discourages single-family tract housing and preserves large sites for viable farm use?	Zoning Ordinance			
<p><b>Commentary:</b> Smart growth means that land-use controls inhibit the scattering of low-density residential uses at the urban fringe—a condition that constitutes the epitome of sprawl. Many local governments in the metropolitan Atlanta region have “agricultural” districts, but they allow a minimum lot size of one acre. Minimum lot sizes need to be much higher (10 acres is probably the smallest land area that can function effectively as a farm; preferably 25 to 40 acres) to discourage “exurban” development, “hobby” farms that are really residential tracts, “ranchettes,” and other forms of low-density suburban sprawl. In cases where large agricultural minimum lot sizes are not feasible, the smart growth auditor should look for other ways that the comprehensive plan and regulations discourage the consumption of agricultural lands on the urban fringe, such as a greenbelt or taxation policies.</p>				
<b>LAND USE</b>				
Does the land-use plan designate areas, where appropriate, for mixed-use development?	Comprehensive Plan			

TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
LAND USE (continued)				
Do plan policies discuss opportunities and encourage the mixing of land uses at the building, site, and neighborhood levels?	Comprehensive Plan			
Does the local zoning ordinance provide at least one or more zoning districts that allow mixes of residential and commercial uses?	Zoning Ordinance			
If the community has a downtown, are residential uses allowed in the central business zoning district?	Zoning Ordinance			
Do the future land-use plan and zoning ordinance allow for compatible, small-scale neighborhood commercial uses (e.g., a corner store) adjacent to or within residential neighborhoods?	Comprehensive Plan and Zoning Ordinance			
Does the local zoning ordinance provide for traditional neighborhood development (TND)?	Zoning Ordinance			
Are home occupation regulations flexible enough to allow a wide variety of telework activities, while maintaining the peace and quiet of the neighborhoods in which they are located?	Zoning Ordinance			
<p><b>Commentary:</b> <i>Mixing of land uses is a major tenet of smart growth. Plan policies and land-use regulations should provide for and even encourage mixed land uses, especially residential and commercial. Such mixtures allow people to work and reside in the same area, sometimes even within the same building. It is generally accepted that mixing land uses allows for walking, shorter trips, and reduced vehicle miles traveled, which can help to improve air quality and relieve traffic congestion.</i></p>				
JOBS/HOUSING BALANCE				
Does the comprehensive plan consider the appropriateness of balancing jobs and housing, both qualitatively and quantitatively?	Comprehensive Plan			
Do any small area plans or corridor plans for the community consider and integrate the notion of jobs-housing balance?	Subarea Plans			
Do planned unit development (PUD) regulations provide for an appropriate mixture of housing and jobs, or do the PUD regulations result in predominantly single-family residential developments with no jobs nearby?	Zoning Ordinance			
<p><b>Commentary:</b> <i>The concept of jobs-housing balance holds that communities should plan for a rough match between the number of jobs and the number of housing units. A desirable range is approximately 1.5 housing units for every job in the community. Plans should also investigate whether the characteristics of housing in the community match the needs of workers residing in the community, and whether the types of jobs in the community match the skills of the resident work force (i.e., consider the “qualitative” aspects of balance). A quantitative balance of jobs and housing does not necessarily signal smart growth, especially if there are qualitative mismatches between jobs and housing.</i></p>				
OPEN SPACE/GREEN SPACE				
Does the plan establish a goal, policies, and implementation measures to set aside a certain percentage of total land area in the community as open space or green space?	Comprehensive Plan			
Do all (or most) zoning districts require a minimum open space ratio (i.e., a percentage of land area for each development that must be open space)?	Zoning Ordinance			
Do land-use regulations require developers to consider connecting open spaces and greenways to existing destinations and open space reservations?	Zoning Ordinance			
Are open spaces and green spaces accessible to all or most of the residents of the community?	Parks and Recreation or Green Space Master Plan			
Has the community considered a special funding measure such as a special local option sales tax or general obligation bond referendum for acquisition of green spaces?	Comprehensive Plan; funding components			

**TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY**

Topic	Document	Yes	No	Reviewer Comments
<b>OPEN SPACE/GREEN SPACE (continued)</b>				
Do local land-use regulations provide for “conservation subdivisions” or “cluster subdivisions” as a matter of right?	Zoning Ordinance and Subdivision Regulations			
<p><i>Commentary: Open space, conservation, and cluster subdivision practices are among the more effective ways of setting aside green space and open space. Local regulations are not “smart” unless they provide for, and even encourage, these types of subdivisions. When clustering or conservation design is not allowed, subdividers wind up incorporating all land into the individual lots, which are then sold and the opportunity to preserve natural features and open space is then lost, probably forever.</i></p>				
<b>ENERGY CONSERVATION</b>				
Does the comprehensive plan identify energy conservation as a goal, and do policies exist to promote energy conservation?	Comprehensive Plan			
Do land-use regulations require the planting of shade trees along new subdivision roads and within parking lots?	Zoning Ordinance and Subdivision Regulations			
Does the community have guidelines for designing development sites and buildings for energy efficiency?	Design Guidelines			
Does the local zoning code provide an option for subdivisions to be designed for solar power use?	Zoning Ordinance			
<p><i>Commentary: There are multiple ways a local plan can promote energy conservation. For instance, tree protection ordinances help retain and enhance shade, which reduces cooling costs. Shade tree requirements along streets and parking lots provide aesthetic benefits in addition to helping to attain energy conservation objectives. Local governments can adopt design guidelines for energy efficient buildings and site designs. Though more popular in the 1970s than today, changing local codes to facilitate efficient energy use can provide for designing subdivisions with appropriate solar access, which then facilitate solar panels (and cells) for domestic energy use.</i></p>				
<b>WATER QUALITY</b>				
Do local land-use regulations prohibit development within, and the filling of, floodways and floodplains?	Zoning Ordinance; other regulations			
Have the community’s development regulations been revamped recently to encourage or require best management practices for water quality?	Various land-use regulations			
Does the local jurisdiction have the minimum required water quality ordinances in place as required by state administrative rules?	Various land-use regulations			
<p><i>Commentary: Local governments should adopt regulations for the protection of water supply watersheds, groundwater recharge areas, and wetlands that are consistent with any state standards or guidelines.</i></p>				
Has the community instituted programs of water quality monitoring and other related programs to ensure total maximum daily loads (TMDLs) are not exceeded?	Various land-use regulations			
<b>AIR QUALITY</b>				
Does the comprehensive plan discuss the issue of air quality and identify policies and implementation measures to protect air quality?	Comprehensive Plan			
If the community is in a nonattainment area with regard to air quality, is the local plan consistent with, and does it reference, regional and state goals for the management of air quality?	Comprehensive Plan			
<b>HOUSING</b>				
Does the housing element of the comprehensive plan contain a housing needs assessment?	Comprehensive Plan			
<p><i>Commentary: A local plan cannot be “smart” unless it has forecasted the future housing needs of the community and ensured that land-use regulations provide for development practices to meet those forecasted housing needs.</i></p>				

TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
HOUSING (continued)				
Does the comprehensive plan establish a policy of providing for a wide range of housing types (detached single-family, duplex, manufactured home, apartment, etc.)?	Comprehensive Plan			
Do the use provisions within at least some of the residential zoning districts allow for a wide range of housing types by right (versus requiring a conditional use permit)?	Zoning Ordinance			
Does the comprehensive plan establish a policy of providing for meeting the housing needs for all income levels, as determined by a housing needs assessment?	Comprehensive Plan			
If the regional planning agency has established a fair-share allocation for the city or county with regard to a specific number of affordable housing units, does the comprehensive plan reflect that goal and provide for its implementation?	Comprehensive Plan			
Do local regulations allow for mixed-income housing developments?	Zoning Ordinance			
If the housing needs assessment identifies a need for multiple-family residences, does the zoning ordinance provide sufficient vacant land to meet future needs?	Zoning Ordinance			
Does the zoning ordinance allow for “accessory apartments” within single-family residential zoning districts?	Zoning Ordinance			
Are manufactured homes a use permitted outright in at least one residential zoning district?	Zoning Ordinance			
Are minimum lot sizes set low enough in at least one residential zoning district to provide for homeownership for all income classes?	Zoning Ordinance			
Does the local zoning ordinance provide flexibility with regard to house sizes (i.e., do they allow small-sized units versus establishing large minimum floor areas for all dwelling units)?	Zoning Ordinance			
<i>Commentary: Exclusionary zoning is the opposite of smart growth. A community’s zoning regulations are “smart” only if they provide reasonable and fair opportunities for diverse housing types and price ranges. Local governments can do this by reducing minimum lot sizes, eliminating or lowering minimum house sizes, providing for manufactured homes in one or more residential zoning districts, allowing accessory apartments, and providing for apartment development where needed.</i>				
TRANSPORTATION				
Does the comprehensive plan include a transportation element that addresses long-range needs for roads, sidewalks, bicycle paths, transit (where appropriate), freight movement, and water and air travel (where appropriate)?	Comprehensive Plan			
Do local transportation policies provide for the maintenance of current roads and existing transportation systems before spending money on new ones?	Comprehensive Plan			
Do transportation policies and the future transportation system provide for local street networks (as opposed to the conventional hierarchical system of arterials, collectors, and local streets)?	Comprehensive Plan			
Do development regulations have some requirement to consider and if appropriate provide for new local streets at designated intervals (e.g., every 1,500 feet)?	Various land-use regulations			
<i>Commentary: Over time, planners have learned that a major cause of traffic congestion is, in addition to an overreliance on automobile travel, the way road systems have been built. Conventional thinking, which is not considered to be “smart” growth, calls for local roads to empty onto collector roads, which often empty onto a single (or few) arterial(s). Because only one or a few major routes of travel are provided, all traffic is concentrated onto those few roads, resulting in traffic congestion. Smart growth means providing a road network with more than one means of through travel in any given area.</i>				
Does the comprehensive plan provide for an analysis of local street standards and recommendations for reducing excessive right-of-way and pavement widths?	Comprehensive Plan			

TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
TRANSPORTATION (continued)				
Have street standards been revised to lower any excessive requirements for local subdivision streets?	Various land-use regulations			
<i>Commentary: Many suburban street standards require excessive pavement widths for streets (e.g., 29 to 36 feet for local streets). Smart growth means local streets are placed on a "diet," so that "skinny" streets are provided. Reducing street pavement width standards (e.g., to 24 feet rather than 29 to 36 feet) reduces development costs and impervious surfaces and may increase safety by lowering vehicle speeds.</i>				
Are sidewalks required within new residential subdivisions with the cost paid for by the developer?	Subdivision Regulations			
Do land-use regulations encourage or require the provision of bike paths in accordance with a bikeway master plan?	Various land-use regulations			
Do development regulations require the installation of a sidewalk along existing public streets abutting the development, where such sidewalk does not already exist?	Various land-use regulations			
Do subdivision regulations allow the planning commission or local governing body to require the connection of subdivision streets to existing streets and the stubbing of streets to allow connections to future subdivision developments?	Subdivision Regulations			
Do land-use regulations encourage, if not mandate, the provision of interparcel connections between individual developments, where compatible?	Various land-use regulations			
<i>Commentary: Smart growth includes the objective of reducing reliance on major thoroughfares. Requiring driveways to connect with adjacent compatible developments is one way to reduce the need for vehicles to exit a development onto a thoroughfare, just to get to an adjacent or nearby store or activity.</i>				
Are land-use regulations "transit-friendly" or "transit-supportive?"	Various land-use regulations			
<i>Commentary: Developments near rail stations and along bus routes need to be planned for the transit user. This means requirements that pedestrian facilities connect from the transit corridor or rail station to adjacent and nearby developments. It also means that businesses should be oriented to the transit user, rather than the automobile. Various design changes are needed to make developments friendly to the transit user. For instance, large building setbacks from the major thoroughfare with parking lots in front and no designated pathways on-site make for a pedestrian-hostile environment, counter to the principles of smart growth. Land-use plans and regulations also need to ensure a certain density threshold in the area of rail stations and bus routes to ensure they have minimum ridership levels.</i>				
PARKING				
Have local parking regulations been reviewed with an eye toward reducing excessive on-site parking requirements?	Zoning Ordinance			
Do land-use regulations include maximum parking ratios (i.e., a cap on the number of parking spaces that can be built in a particular development) or simply eliminate parking requirements?	Zoning Ordinance			
Do parking regulations provide for reductions of on-site spaces in places where transit is available?	Zoning Ordinance			
Is on-street parking allowed in places where it can be safely provided, such as in downtown areas and pedestrian-retail districts?	Zoning Ordinance			
<i>Commentary: Planners and policy makers now realize that minimum parking requirements in land-use codes are often excessive or may not be needed. Under a smart growth approach, the need for on-site parking is more carefully evaluated to determine whether alternatives are available that will allow a reduction.</i>				
Do engineering construction specifications for parking lots allow for porous pavements where appropriate?	Construction Specifications			



TABLE 2.1. A RECOMMENDED SMART GROWTH AUDIT CHECKLIST WITH COMMENTARY

Topic	Document	Yes	No	Reviewer Comments
PARKING (continued)				
<i>Commentary: Porous pavements are environmentally smart because they allow the infiltration of stormwater into the ground, versus having stormwater run off into streams or detention structures. However, there is not a lot of literature yet to show that porous pavements have “proven” themselves. Generally, porous pavements are not designed to handle heavy loads such as garbage trucks. Practices today generally limit porous paving materials to overflow parking and areas that are not heavily used. Porous pavements also require provisions for cleaning or vacuuming the “pores,” or they will become clogged and no longer function as designed. Pavement engineers should be consulted when considering regulations allowing for porous pavements.</i>				
WATER, SEWER, AND OTHER INFRASTRUCTURE				
Does the comprehensive plan provide clear discussions of how water and sewer infrastructure policies are tied to the goals and objectives of the land-use plan and the transportation plan?	Comprehensive Plan			
Do water and sewer facility master plans provide for the phasing of future trunk water and sewer extensions into areas designated for development in the short term, versus allowing such lines to be extended without restraint anywhere in the community?	Comprehensive Plan			
<i>Commentary: Some communities designate “urban service boundaries,” beyond which they do not intend to extend public water and sewer lines. Smart growth means tying facility planning and land use together. Controlling infrastructure is one of the most powerful means of guiding the urban form of a community (see related commentary under “urban form”).</i>				
Does the comprehensive plan reference the plans and policies of the local school system, with an eye toward bringing consistency of school-siting policies with comprehensive plan policies?	Comprehensive Plan			
PERMITTING PROCESSES				
Have land development permitting processes been comprehensively reviewed to identify opportunities for eliminating duplication, unfairness, excessive and unnecessary requirements, et cetera? If so, have inefficient processes been reformed?	Special study; various land-use regulations			
Does the community’s building code provide flexibility with regard to restoring historic structures, as opposed to providing rigid requirements that discourage such restoration?	Building Code			
REGIONALISM AND INTERGOVERNMENTAL RELATIONS				
Does the comprehensive plan place the community within the context of the region in which it is located?	Comprehensive Plan			
Does the comprehensive plan recommend intergovernmental agreements where needed to foster cooperation toward attaining mutual goals of community building?	Comprehensive Plan			
Do comprehensive plan policies reflect notions of social equity and environmental justice?	Comprehensive Plan			

Source: Jerry Weitz and Leora Susan Waldner, *Smart Growth Audits*, Planning Advisory Service Report No. 512 (Chicago: American Planning Association, November 2002), Appendix A.

- Are adequate resources allocated to implementation?
- Is a single agency responsible for overall implementation, and does it have the skill and commitment to implement the recommendations of the audit?
- In cases where more than one agency is responsible for implementation, are the appropriate mechanisms in place to coordinate their actions?
- How might socioeconomic conditions and future technologies affect implementation?

Depending upon local circumstances, carrying out a smart growth audit’s recommendations might involve an iterative process of implementation, refor-

mulation, then back to implementation. Before progress can be monitored, implementation must be well under way. Smart growth proponents should be realistic in establishing expectations for success.

An inventory of baseline conditions must be compiled so that changes from the existing conditions and progress toward smart growth principles can be measured over time. Communities already familiar with the technique of benchmarking might consider adapting this tool for use in smart growth monitoring programs. If the goal is to adopt new regulations, evaluation may simply be to note whether those regulations have been adopted. Regulations will need to be revisited after they are adopted to verify that the purposes and intentions of the regulations are being achieved.

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## **Model Comprehensive and Noncomprehensive Smart Growth Codes**



This chapter summarizes and evaluates a number of model codes and related materials produced by state agencies and nonprofit groups. The chapter is divided into three parts:

1. Comprehensive codes—materials organized or drafted in a code format that cover a wide variety of land-use regulation, including zoning and subdivision;
2. Noncomprehensive model codes that focus on single topics (e.g., affordable housing, street standards, impact fees, and street graphics) or combinations of those topics; and
3. Related materials that provide guidelines, like APA's *Growing Smart<sup>SM</sup> Legislative Guidebook*, whose model planning and zoning statutes contain minimum content requirements for a wide variety of land development regulations.

### SETTING A STRATEGY FOR CODE UPDATES

A complete code update work program may include the following items, as appropriate to your community:

- Public information and education about existing ordinances
- Information and graphics comparing the existing ordinances to proposed amendments
- Public meetings, workshops, open houses, and other opportunities for public input on proposed changes
- Coordination with other agencies (e.g., especially if the city contracts out plan review services)
- Public notification for code adoption hearings, including required notices under state law
- Updated fee schedules, application forms, and any informational handouts explaining the city's new codes and procedures for property owners
- Training (e.g., for city officials and planning commissioners)
- Changes to other related municipal codes (e.g., system development charges, nuisances, etc.)
- Minor modifications to the city's comprehensive plan (e.g., enabling policies and map revisions for new or renamed zoning districts).

Source: Oregon Transportation and Growth Management Program, *Model Development Code and User's Guide for Small Cities*, 2d ed., 2005. Available at [www.oregon.gov/LCD/TGM/docs/modelCode05/pdf/guide.pdf](http://www.oregon.gov/LCD/TGM/docs/modelCode05/pdf/guide.pdf).

### COMPREHENSIVE CODES

#### **Model Development Code and User's Guide for Small Cities, 2nd Edition (Oregon Transportation and Growth Management Program, prepared by Siegel Planning Services, 2005)**

Of all of the comprehensive model codes APA reviewed, this is one of the best. The code, which is aimed at small cities (populations under 10,000) in Oregon, although larger cities can use it as well, is divided into two volumes: a user's guide and the code itself. The user's guide describes the organization of the model code, the set of "smart" principles upon which the code was based, how to relate the code to the local comprehensive plan and state planning regulations, steps for getting started, and tips on how to adapt the model language to individual situations. Its advice for getting started includes forming an advisory committee, identifying objectives, reviewing the existing code against the backdrop of the model code, and setting a strategy for code updates and related revisions (see sidebar). See [www.oregon.gov/LCD/TGM/publications.shtml](http://www.oregon.gov/LCD/TGM/publications.shtml).

The model code itself is divided into five articles. Article 1 provides definitions for selected terms and information on the legal construct of the code. It also explains the city's authority to enforce the development code.

Every parcel, lot, and tract of land within the city's incorporated boundaries is also within a "land-use district." (Land-use districts are shown on the city's official zoning map.) Chapter 2 identifies the land uses permitted within each district and the standards that apply to each type of land use (e.g., lot standards, setbacks, and use-specific design standards). As required by Oregon law, the zones or land-use districts must conform to the comprehensive plan. The districts reserve land for planned land uses, provide compatibility between different uses, and implement planned housing densities.

Chapter 3 contains design standards that apply throughout the city. They are used in preparing development plans and reviewing applications. Their purpose is to ensure compliance with city standards for access, circulation, landscaping, parking, public facilities, surface water management, housing densities, and sensitive lands.

Chapter 4 provides all of the application requirements and procedures for obtaining permits required by the code. Four types of permit procedures are covered:

Type I: nondiscretionary, "ministerial" decision;

Type II: discretionary, "administrative" decision;

Type III: discretionary, administrative decision with public hearing; and

Type IV: "legislative" decision by the city council.

Chapter 5 provides standards and procedures for variances and nonconforming situations (i.e., existing uses or development that do not comply with the revised code).

Users of this code should be aware it complies with Oregon's planning statutes and administrative rules, and contains some language that would be inapplicable to local governments outside of that state. Nonetheless, this is a very well done model that deserves attention.

#### **Sustainable Community Development Code (Rocky Mountain Land Use Institute, 2008)**

The Rocky Mountain Land Use Institute, located at the University of Denver, is a nonpartisan public forum for land use and environmental issues in the Rocky Mountain West. The institute's Sustainable Community Development Code version 1.1 is available on line at <http://law.du.edu/documents/rmlui/sust-com-dev-code.pdf>.

The approach examines relevant obstacles, incentives, and regulations associated with more than 20 land use and sustainability topic areas (see sidebar). The institute's version 2.0 will contain additional content and policy refinements, as well as new topic areas.

In the current version, each topic is given an introduction, as well as a discussion of the implications of not addressing the issue, the role that land-use regulations can play in solving problems and mitigating negative environmental impacts. The code is presented as a matrix with three optional actions for each topic area: remove obstacles, provide incentives, or enact regulations. The three-part approach is designed to make the code useful to municipalities and counties that are at varying points on the spectrum of readiness to adopt a sustainability policy framework.

Obstacles are things in zoning codes that are hindering sustainability, such as prohibitions on solar panels. Incentives include tools such as allowing increased density in a multifamily development that installs a green roof or extra open space. Regulations are requirements that ensure progress in a particular area, such as mandatory water-conserving landscape standards. The model does not contain actual regulatory language; rather, it includes references to existing codes, reports, and other documents where the suggested approach is in use.

#### **Model Land Use Code (Colorado Office of Smart Growth, 2003)**

This CD-ROM includes a unified development code for zoning, subdivision, and annexation, although the materials are not actually drafted in an ordinance format. It also contains community design and development standards. Originally prepared by the Colorado Department of Local Affairs, Office of Smart Growth, and a team of planning consultants for the small but growing town of Frederick, Colorado, the work was then modified for use by all Colorado statutory cities (i.e., non-home rule jurisdictions, although the authors acknowledge that it can be used by home rule cities as well) with the intent of helping communities cope with growth pressure and preserve their small town and rural character.

Although billed as a model code, it is more akin to a manual for lay planning and zoning commissioners and citizens who are concerned about growth and protecting the character of small towns or rural communities. The regulations are very descriptive, with extensive language describing the intent of each provision and offering checklists for conducting site development review, granting variances, drafting a development agreement, and modifying the model regulations to conform to existing plans and to address local preferences and circumstances. See <http://dola.colorado.gov/dig/osg/modelcodes.htm>.

### **ROCKY MOUNTAIN LAND USE INSTITUTE SUSTAINABLE COMMUNITY DEVELOPMENT CODE, V1.1 MODEL CODE CONTENTS**

#### **Energy**

- Renewable Energy: Wind (small- and large-scale)
- Renewable Energy: Solar (including solar access)
- Renewable Energy: Small-Scale Hydropower
- Energy Efficiency and Conservation

#### **Healthy Neighborhoods, Housing, Food Systems**

- Community Health (including Crime Prevention Through Environmental Design)
- Affordable Housing
- Housing Diversity and Accessibility
- Food Production and Security
- Noise

#### **Environmental Health and Natural Resources**

- Climate Change
- Green Infrastructure
- Natural Resource Conservation/Sensitive Lands Protection (e.g., wildlife habitat, riparian/wetland areas)
- Water Conservation

#### **Mobility**

- Transit Oriented Development
- Mobility Systems (Complete streets, pedestrian systems, etc.)
- Parking

#### **Natural Hazards**

- Floodplain Management
- Wildland-Urban Interface/Wildfires
- Coastal Hazards
- Steep Slopes

#### **Urban Form/Community Character**

- Authentic Development Patterns
- Community Character and Aesthetics



**Innovative Land Use Planning Techniques: A Handbook for Sustainable Development (New Hampshire Department of Environmental Services, October 2008)**

This handbook was created by the New Hampshire Department of Environmental Services and several other agencies to give local governments guidance and technical assistance on implementing the state's Innovative Land Use Controls law (RSA 674:21). The document is divided into three sections: (1) Multidensity Zoning; (2) Environmental Characteristics Zoning; and (3) Site Level Design. Each section contains background information, references, and a model ordinance.

Section 1, on multidensity zoning, includes background information and ordinance language for nine approaches, including lot-size averaging, "feature-based density," agricultural incentives, and six other topics. Feature-based density is the handbook's term for transferring density from critical environmental areas to the developable portions of a site. The agricultural incentive model includes performance standards, most notably a recommended 50-foot buffer requirement between adjacent agricultural and nonagricultural land uses.

Section 2, the environmental protection section, includes nine model ordinances, including ones on steep slope and ridgeline protection and permanent "postconstruction" stormwater management techniques. An interesting provision in the stormwater runoff model ordinance is an "Effective Impervious Cover" limit of 10 percent of the lot area. To comply with this section, a site that creates 50 percent impervious cover must provide ample opportunities to capture and infiltrate stormwater to reduce the amount of stormwater leaving the site to the equivalent of that leaving a site that has just 10 percent impervious cover (i.e., the site has 10 percent effective impervious cover).

Section 3 covers site-level design and contains eight model ordinances, including a set of design standards to promote energy-efficient development. A dark skies (i.e., outdoor lighting) ordinance in this section is intended to preserve views of the night sky but also to avoid lighting that interferes with wildlife habitats. The energy chapter has multiple objectives, including recommending that buildings be oriented to maximize both passive and active solar power opportunities and requiring drought-resistant landscaping.

This collection of model ordinances and background information is comprehensive and reflects considerable depth in terms of the tools provided and the descriptions and commentaries that accompany each model.

**SmartCode (Duany Plater-Zyberk and Co./Municode, 2003, 2008)**

The SmartCode is an effort to translate New Urbanist concepts into code language. The code is available for use as a municipal document through a license granted by the Municipal Code Corporation (Municode). An "Intent" section contains a series of policies that are based on the Congress for the New Urbanism's Charter of the New Urbanism (see below). The policies promote specific development characteristics at the regional, community, and block and building level.

The SmartCode provides guidance in the preparation of regional plans, new community plans, infill community plans, and site and building plans. See [www.smartcodecentral.org](http://www.smartcodecentral.org).

The provisions for regional plans contemplate that a planning office or consultants will prepare such plans. The regional plan consists of four categories:

1. Rural tiers intended for open space conservation
2. New community tiers intended for development

3. Existing urban tiers intended for already developed areas including conventional suburban development, grayfields, and brownfields
4. Assigned districts that accommodate development “justified but not consistent with the Intent of this Code.” Examples of assigned districts include college campuses, entertainment and tourist districts, hospitals, and large-scale transportation facilities (e.g., airports and port facilities)

Within the new community tier, certain types of development are allowed by right: cluster development, traditional neighborhood development, and town center developments. The SmartCode describes in general terms new community plans that encourage such development and the steps in allocating density for housing units throughout various zones in the plans. It also specifies the general design of thoroughfare networks and the creation of civic spaces. Similarly, within the existing urban tier, planners may develop infill community plans to accommodate neighborhoods that are primarily residential, mixed use town centers, and assigned districts.

The SmartCode recommends that community plans be subdivided into a series of “context zones” of varying degrees of urbanization. These context zones are part of the “transect,” which is the central organizing theory of the SmartCode. The transect depicts a gradient of use areas from a rural or semi-rural state to more urbanized settings. There are seven context zones and two civic zones in the transect; the civic zones include areas for public space and public buildings. The idea of the transect is very similar to the concentric zone theory in urban geography, which describes a gradient of zones of increasing lesser intensity and density emanating from a central business district.

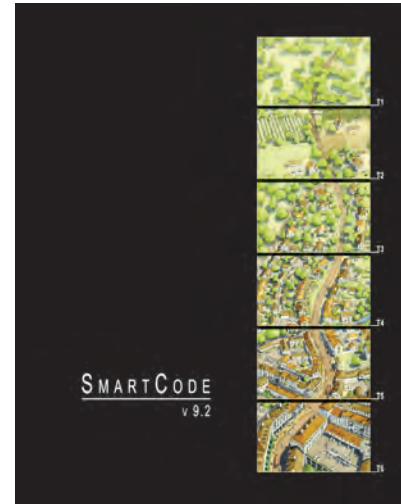
The SmartCode contains a hierarchy of street types with corresponding design specifications. Different context zones call for different street types or specifications. For example, in the most urban zones the maximum design speed is assumed to be moderate (20 to 35 miles per hour), and the inside turning radius therefore is a tight one (15 feet) in order to slow down traffic and to ensure pedestrian safety.

Specific use classifications for buildings appear in a series of tables that also contain parking standards. The building uses vary by where they are located in the transect. For example, an “estate house” (a term that is not defined) can be located only in a “T-2 Rural Reserve” context zone. There, a lot area must average 20 acres, and side, front, and rear yard setbacks must be 100 feet minimum. Such a building use requires three parking spaces.

By contrast, all types of industrial uses can be located only in “special districts” by the granting of a “warrant variance,” which permits a practice inconsistent with a specific provision of the code but justified by either the code’s intent or “hardship.” There are no standards for parking for industrial and similar uses; apparently, they would be set through the warrant-granting process. Where standards for parking do exist, the code also authorizes reduction of parking requirements for shared parking when uses are mixed through application of a “sharing factor,” which replaces the standard ratio for the individual use.

Densities under the SmartCode range from an average of 1 unit per 100 acres in the “T-1 Rural Reserve” to 24 units per net acre in the “T-6 Urban Core.” It should be noted that this latter density is on the upper end of suburban garden apartments and would not include high-rise development unless it were allowed in a special district under the SmartCode. Using transfer of development rights, however, the T-6 district’s density can be increased up to 92 units per net acre.

The SmartCode establishes detailed standards dealing with the position of buildings and structures (e.g., fences) on lots, the manner of access by



*Figure 3.1. The cover of the latest version of the SmartCode.*

vehicles, the shape of roofs, the type of landscaping, and the nature of the exterior building finish.

The SmartCode does not describe a detailed permit review process, and it does not assign a permit-issuing function to one individual or entity. It does require the legislative body to create an urban design center to advise in the use of the code and the buildings based on it. In addition, the planning office is charged with convening a consolidated review committee that includes representatives from the various regulatory agencies with permitting authority. The SmartCode implies that these agencies will jointly make a decision on an application. An applicant may appeal that decision of the committee to the local board of zoning appeals and then to the local legislative body, if necessary.

Extensive illustrations and tabular material accompany the SmartCode, in part to reinforce the transect concept and to graphically represent definitions.

#### **Alternatives to Conventional Zoning (Jerry Weitz, AICP, for the Georgia Department of Community Affairs, 2007)**

This is a set of independent but interrelated land development code models aimed at small to medium-size Georgia communities. The model code is organized into major sections that cover such topics as environmental protection, performance-based regulations, mapped approaches to land use regulation, special growth management techniques, and regulations to implement character areas. Within each section, individual modules address relevant subjects and areas of regulation. See [www.dca.state.ga.us/development/PlanningQualityGrowth/programs/modelcode.asp](http://www.dca.state.ga.us/development/PlanningQualityGrowth/programs/modelcode.asp).

A user guide is provided to assist communities in taking advantage of the very practical and useful material offered in the various modules. The user guide, along with commentary on each topic (as needed), explains how to avoid potential conflicts among different modules. While the entire model code is extremely thorough and well done, the model for “downtown specific plans” (section 9.1) deserves special mention. Such plans describe in more detail the type of development planned for a particular area than found in the comprehensive plan, combining the planning objectives for an area and the implementation techniques to achieve them. As the commentary notes, specific area plans, which are commonly used in California, typically focus on some unique feature of the geographic area they encompass and can relate to local conditions that cannot be fully addressed by conventional zoning. Although especially suited to application for large, undeveloped land areas, the specific plan may be used to guide the buildout of partially developed areas with potential for infill and redevelopment. In particular, the downtown specific plan model contains clear guidelines for building and storefront design to give the buildings a street orientation and to make the downtown area attractive to pedestrians through the provision of amenities (e.g., plazas, canopies, public art, and sitting areas).

#### **Performance Zoning (Lane Kendig et al./American Planning Association, 1980)**

Based on an idea developed in the 1950s by Dennis O’Harrow (executive director of the American Society of Planning Officials, a predecessor organization of APA) and originally confined to industrial uses, the ambitious *Performance Zoning* model ordinance represents the first full-scale application of performance standards to a zoning code. Performance zoning differs from Euclidean zoning inasmuch as it permits most uses by right, provided they are able to meet quantitative performance standards. Some standards are use-specific, others are district standards, and still others are site-specific. These standards are based on the impact the planning authority anticipates that a land use will have on neighboring uses and the community in general.

The standards vary according to the intensity of the use proposed, the comprehensive plan policies governing the time and location of development, and the capacity of the site. District performance standards include open space ratios, density factors, and floor area factors. Site-specific standards, for example, apply to areas of steep slopes, areas having erosion hazard, and areas with mature woodlands.

The districts zoned to permit most development are sized, located, or mapped to accommodate growth for a given period of time (approximately 25 years). The model provides a variety of districts. Three are intended to accommodate the bulk of development:

1. A development district intended to be the area that will accommodate most of the development necessitated by the jurisdiction's growth
2. An urban core district, which includes areas currently urbanized or expected and planned to become so
3. A heavy industrial district, intended to accommodate industrial areas that must be segregated because of major negative impacts that cannot be made compatible with other uses through the application of performance standards.

Once districts are established, the performance zoning ordinance creates a table to indicate where a use category is or is not permitted in each district. The ordinance permits a vast range of uses in the districts intended for development and a smaller number in other districts (e.g., agriculture and conservation).

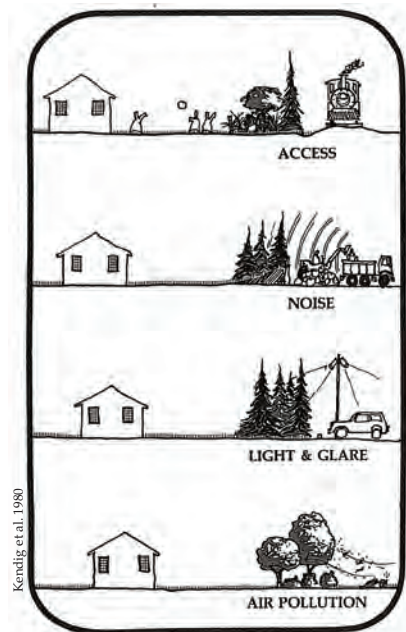
There are two distinguishing features in *Performance Zoning*. One is the use of a device called a "bufferyard," which consists of land containing a specified type and amount of planting. Any bufferyard required between land uses is a function of the land-use intensity class of the adjoining uses. For example, two adjacent uses of the same intensity class would require minimal bufferyards, while a relatively low-intensity apartment unit would require substantial buffering to protect it from the impacts of a high-intensity, adjoining fast-food drive-in restaurant. Depending on the potential impact of a proposed use, a bufferyard may vary in width and density of plant materials or requirements for structures or berms. It is possible to trade off bufferyard characteristics, for example, allowing a narrower bufferyard with more planting.

The second feature of the performance standards is their incorporation of procedures, including a worksheet, for calculating site capacity. The purpose of this calculation is to ensure that the site will not be developed beyond its carrying capacity, and it removes the guesswork from determining the buildable potential of the site for both the developer and the local government. The ordinance defines a number of natural resources and features in objective, measurable terms and gives a specific minimum open space ratio for each resource. For example, the requirements provide that floodways be 100 percent open space, no more than 50 percent of drainage ways be developed, and land areas with slopes of 12 to 30 percent be 50 percent open space.

### NONCOMPREHENSIVE SMART GROWTH CODES

#### Smart Growth/Smart Energy Toolkit (Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs)

This is an educational guide and reference tool that contains model bylaws, case studies, and PowerPoint presentations. See [www.mass.gov/envir/smart\\_growth\\_toolkit/pages/SG-bylaws.html](http://www.mass.gov/envir/smart_growth_toolkit/pages/SG-bylaws.html). Model regulations are provided for 15 smart growth regulatory areas:



*Figure 3.2. Bufferyards are a distinguishing feature of the Performance Zoning model ordinance.*

- Accessory Dwelling Units
- Agricultural Preservation
- Business Improvement Districts
- Chapter 40R (affordable housing requirement in smart growth zones)
- Form Based Codes
- Inclusionary Zoning
- Low Impact Development (LID)
- Mill Revitalization Districts
- Open Space Residential Design
- Smart Parking
- Tax Increment Financing
- Traditional Neighborhood Development (TND)
- Transfer of Development Rights
- Transit Oriented Development
- Wind Power

The *low-impact development model bylaw* is included to assist Massachusetts municipalities in complying with state and federal laws that require them to address the impacts of postdevelopment stormwater runoff quality and nonpoint-source pollution. The model includes site plan review guidelines and regulations for the postconstruction stormwater controls for both new and redevelopment projects.

The *traditional neighborhood development bylaw* contains two models. The first is a “master plan” approach that contains language for a planned unit development (PUD) TND district that would be implemented as either an overlay zone or a floating zone applied to a substantial-sized redevelopment parcel. The second constitutes an “incremental” approach in the form of a village center overlay district. The latter model was drafted to meet the needs of municipalities whose commercial districts are characterized by strip centers, nonconforming uses, and a multiplicity of landowners, none of which are easily managed using the master plan PUD model. Instead, the village overlay district is designed to allow gradual or piecemeal revitalization of existing centers that currently have little to no mixed use, limited walkable options for customers and residents, and small lots of different ownership.

There are three *model bylaws for wind power facilities*, two of which provide for utility-scale construction and operation of wind facilities. The third provides for small-scale operation of “stand-alone tower-mounted wind systems.” These models include a special permit process for the construction and operation of wind facilities and provide standards for their placement, design, construction, monitoring, modification, and removal. The objectives are to protect public safety, minimize impacts on scenic, natural, and historic resources, and provide adequate financial assurance for decommissioning.

#### **From Policy to Reality: Model Ordinances for Sustainable Development (Minnesota Planning and Biko Associates, 2000)**

These materials were developed in response to state legislation (Minn. Stat. Sec. 4A.07(3)) that directs the state agency to formulate a model ordinance for sustainable development. The models, which are largely drawn from existing regulations, are grouped into seven categories:



1. Citizen participation
2. Growth management
3. Managing community resources
4. Neighborhood design
5. Infrastructure
6. Resource-efficient buildings
7. Economic development

See [www.mnplan.state.mn.us/pdf/2000/eqb/ModelOrdWhole.pdf](http://www.mnplan.state.mn.us/pdf/2000/eqb/ModelOrdWhole.pdf).

Of this collection, several ordinances are notable, including a citizen participation ordinance (adapted from one developed by Glendale, Arizona), a town center ordinance, and an urban expansion district. The model transfer of development rights ordinance is discussed in Chapter 4 of this report.

The citizen participation ordinance mandates that every development requiring a public hearing be accompanied by a citizen participation plan implemented prior to the first public hearing. The plan must identify affected parties and methods of notification and explain how affected parties will have the opportunity to discuss the proposal. The plan must contain a schedule for completion and must indicate how the applicant will keep the planning department informed on the status of its citizen participation efforts. A written report on those efforts must be filed with the planning department before the notice of the public hearing and is to be attached to the planning department's public hearing report.

The model town center ordinance is intended to reinforce an existing town center and allow it to intensify where appropriate. A permitted use section limits stores and shops to building footprints of 10,000 square feet. Lot area may be a minimum of 2,500 square feet and a maximum of 25,000 square feet. Commentary to the model observes that some ordinances do not require a minimum lot size, allowing existing lot sizes to set the standard. The maximum lot size is intended to discourage out-of-scale buildings.

A "build-to" line of zero feet is established, although the setback may be increased to 15 feet if additional space is landscaped as a garden or outdoor seating area. Building entries may be recessed up to 10 feet. There is also a "build-up" line of two stories, and the first finished floor must be level with the sidewalk grade.

The ordinance does not require off-street parking for permitted uses, although the planning commission must review such facilities when provided. On-street parking, either diagonal or parallel, must be provided, although, as a practical matter, it is the local government and not the private land user who controls access to this space. Language in the model supports common off-site parking facilities but does not actually establish fee-in-lieu standards for them; this vagueness may be problematic.

The town extension district ordinance is a vehicle to allow expansion or extension of a small city that maintains its urban character or a planned unit development that follows similar neighborhood design characteristics. Its general requirements call for the preparation of a master development plan that includes interconnected streets, the development of a public square, and lot dimensions generally more deep than wide. The minimum area required for such an extension is 25 acres, although commentary to the code notes that a range of 15 to 30 acres is necessary for "critical mass." The mix of land uses must reflect the mix of uses within the existing town center, and no more than 20 percent of the district can be used for commercial purposes.

While the ordinance does include minimum and maximum lot dimensions, commentary recommends that lot dimensions be based on the lot sizes of the existing town and the requirements of the master plan for the community. The street system “shall act as a functional and visual link between neighborhoods, open space, civic, and commercial uses.”

To some degree, the architectural standards provisions of the model operate at cross-purposes. While, on the one hand, they indicate that new structures may be built in any architectural style, other language in the model discourages stylistic details from other regions of the country by requiring that any structures or buildings using Victorian, Craftsman or Bungalow, Prairie School, or colonial revival stylistic details must be based on an architectural inventory of the existing town center. And although the ordinance is not clear on this point, it would appear the developer is required to provide such details during the review of the master development plan for the area, not when a building permit is being requested, which is far past the point at which a major modification to the overall architectural scheme could be made.

#### **Urban Planning Tools for Quality Growth (Envision Utah, 2002)**

Formed in January 1997, Envision Utah is a public/private community partnership dedicated to studying the effects of long-term growth in the Greater Wasatch Area of northern Utah, a region surrounding the Salt Lake City area. This workbook contains guidelines for a variety of development strategies to enhance the livability of the region. These include protecting sensitive lands, meeting housing needs, water conservation, reuse and infill, urban forestry, energy conservation, walkable commercial and residential development, public safety, and residential street design. The workbook is accompanied by a set of model ordinances, the bulk of which concentrate on conservation-oriented design. For example, the models concerning environmentally sensitive areas provide development standards for floodplains, riparian reserve areas, areas with slope failure and erosion potential, and areas subject to wildfire. Also included is a model ordinance for a “performance standard subdivision,” which specifies an overall density for the subdivision and permits lot sizes to vary within the subdivision, thus creating a mix of compatible housing types or at least providing the opportunity for such housing types to exist. The subdivider may increase the density by the same proportion in which affordable housing is provided, up to a maximum density bonus of 25 percent.

The models include site design standards intended to ensure “walkable communities” and to be applied to subdivisions, apartments, and commercial developments. The site design standards must be linked to both a comprehensive plan that has determined the location of mixed use centers for the cores of new and existing walkable neighborhoods and a master street plan that guarantees street connectivity between parcels at a frequency of every 600 feet. Zoning districts, the model notes, must be modified to allow appropriate densities and use mixtures as well as a reduction of building setbacks to less than 10 feet. Supplementing the design standards are land-use standards for walkable neighborhoods (40 to 120 acres), rural clusters (more than 40 acres), and mixed use centers (20 to 120 acres). Finally, there are additional standards to ensure street connectivity.

Assuming a strong planning framework, a professional planning staff to review proposed developments, and consistent application of the design standards, the Envision Utah models are clearly written, easy to use, internally consistent, and well organized. See [www.envisionutah.org/process-toolbox.phtml](http://www.envisionutah.org/process-toolbox.phtml).

### **Model Ordinances to Protect Local Resources (U.S. EPA)**

The U.S. EPA has developed a series of model ordinances to protect local resources, which are on its website at <http://www.epa.gov/owow/nps/ordinance>. The model ordinances and the ordinances on which they are based are oriented toward environmental issues rather than design or use mixes. The models address aquatic buffers, erosion and sedimentation, stormwater control, illicit discharges, postconstruction controls, and water source protection. A set of miscellaneous ordinances includes a transfer of development rights code from Sarasota County, Florida. A model open space development ordinance is similar to the model conservation development ordinance formulated by the Wisconsin Agricultural Extension as part of that state's smart growth program.

The models are written in a standard format, with commentary throughout. The drafting is crisp and succinct, and the ordinances are notable for their clear definitions, their use of formulas to explain concepts, and their linkage to supporting documents (e.g., a design manual on stormwater) in order to facilitate administration. For example, the open space development ordinance employs a formula to calculate the total number of dwelling units in such a development and contains links to a model land trust agreement elsewhere on the website.

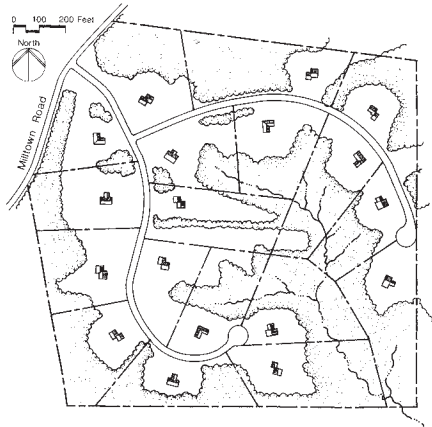
### **Conservation Design Resource Manual: Language and Guidelines for Updating Local Ordinances (Northern Illinois Planning Commission and Chicago Wilderness, 2003)**

Conservation design, according to the manual, is defined as "a design system that takes into account the natural landscape and ecology of a development site and facilitates development while maintaining the most valuable natural features and functions of the site." See [www.nipc.org/environment/sustainable/conservationdesign/Conservation Design Resource Manual/Conservation Design Resource Manual.pdf](http://www.nipc.org/environment/sustainable/conservationdesign/Conservation%20Design%20Resource%20Manual/Conservation%20Design%20Resource%20Manual.pdf). The manual offers to the following four principles:

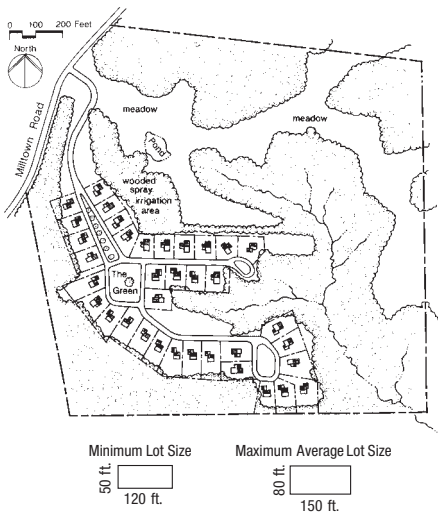
1. Develop flexible lot size and design standards
2. Protect and create natural landscape drainage systems
3. Reduce impervious surface area
4. Implement sustainable stormwater management techniques

The manual includes model ordinance language for 13 conservation practices, organized according to the four principles. Regarding flexible lot design, model ordinance language for lot size, density, open space location, building orientation, and setbacks is provided. On the topic of impervious surface reduction, model language is included for roadway, driveway, and parking lot design, as well as for walkways, roof runoff management, and vegetated swales.

The model language provided was adapted for use by Illinois jurisdictions from numerous sources, most extensively from the *Conservation Development Resource Manual* (2000) prepared by the Countryside Program (a project of the Western Reserve Resources Council of Northeast Ohio). It also draws on Randall Arendt's writings and various model ordinances, specifically *Growing Greener: Putting Conservation into Local Plans and Ordinances* (1999). And it refers to ordinances enacted by Lake, Kane, and Will counties in Illinois, as well as other model language prepared by the Center for Watershed Protection in Ellicott City, Maryland, and the University of Wisconsin Extension Service.



*Figure 3.3. A once conventional two-acre-zoning plan like this one is no longer permissible under Pennsylvania's Growing Greener program.*



*Figure 3.4. Clustering residential development can allow for the protection of sensitive features and open space; in this design, 70 percent of the site remains as permanent open space.*

Pennsylvania Department of Conservation and Natural Resources

In addition to the models, each of the techniques is accompanied by a description of its benefits to developers, the community, and homeowners. The manual also describes the economic benefits of conservation design and a range of approaches jurisdictions may use to incorporate the techniques into comprehensive plans and ordinances.

### **Growing Greener Ordinance Language: Visually Enhanced Zoning and Subdivision Models (Natural Lands Trust, Pa., 2001)**

The material on this CD-ROM is an enhanced, interactive version of the model zoning, subdivision, resource conservation, and conservation design ordinances that originally appeared in an appendix to Randall Arendt's *Growing Greener* (1999). The model regulations include a conservation design overlay zoning district and extensive, detailed submission requirements for preliminary and final plats as well as procedures for review of plats. It also includes video commentary from Arendt on many of the code provisions.

### **PennSCAPes: Pennsylvania Strategies, Codes, and People Environments (Pennsylvania State University, 2003)**

PennSCAPes is a collection of model ordinances, design guidelines, and other supporting information prepared by the Hamer Center for Community Design Assistance at the Pennsylvania State University School of Architecture and Landscape Architecture. Its aim is to help Pennsylvania communities implement a 2000 state law that enables and encourages local governments to enact traditional neighborhood development ordinances. See [www.pennscapes.psu.edu](http://www.pennscapes.psu.edu).

The approach PennSCAPes offers is based on nine principles for conservation-based rural neighborhood residential development and supported by multilayered model ordinance provisions and residential design guidelines. The principles emphasize neighborhood designs that protect the natural environment and natural systems (particularly groundwater), conserve energy, ensure economic viability, and contain connected streets and open spaces.

The model code language is grouped into three categories: rural residential, clustered residential, and mixed use. Perhaps the strongest aspect of the PennSCAPes material is the detailed design and dimensional standards for lots, houses, streets, driveways, landscaping, open space, and stormwater management. It also contains guidance on how best to adapt and adopt the model codes, suggesting that Pennsylvania communities either (1) adopt all of the provisions, (2) use only a portion of the provisions, or (3) adopt the provisions as special zoning overlay.

### **Smart Growth: Creating Communities for People (Citizens for a Better Environment, 2001)**

Citizens for a Better Environment, a Milwaukee-based smart growth and public interest advocacy group, prepared this document with a grant from the Wisconsin Department of Transportation. It is targeted at citizen advocates of smart growth as well as planning and zoning commissioners, developers, and practicing planners.

The guidebook, which is available on CD-ROM, contains extensive text describing the background, definitions, typical components, and the benefits to a community of nine smart growth principles. It also describes the benefits (and in some cases the detriments) of each implementation mechanism associated with each principle. The guidebook is heavily illustrated with photos, quotations, and sidebars containing pertinent facts, examples, and ideas. Chapters focus on smart growth design principles such as density, mixed use, public space, streetscapes, road design, transit, and parking. Excerpts from zoning

ordinances are provided at the end of each chapter. Most of the excerpts are derived from model ordinances promulgated by Tri-Met, the regional transportation agency in Portland, Oregon, which is chiefly responsible for route planning and station area design of that region's light-rail system.

A resource section at the end of the book contains a substantial bibliography, along with the full text of model code for a transit development district and a village district, as well as traditional neighborhood district ordinances. It also includes a model Request for Proposal (RFP) and a smart growth checklist.

**Creating Transit-Supportive Land-Use Regulations, APA Planning Advisory Service Report No. 468 (1996)**

This report is organized into chapters covering four categories of implementation measures to encourage transit-supportive development: site design requirements, parking, mixed use development, and density requirements and incentives. Each chapter presents an array of implementation issues along with sample code language addressing different circumstances and regulatory styles. An appendix includes citations to the actual ordinances from which excerpts are included. It is especially useful for fine-tuning ordinances to address smart growth principles by the addition of new ordinance language.

**Comprehensive Planning Law Model Ordinances (State of Wisconsin, Brian Ohm et al. (2000, 2001)**

Section 66.1027 of Wisconsin's 1999 comprehensive planning law requires that the University of Wisconsin Extension Service prepare two model ordinances for traditional neighborhood development. A state legislative committee approved the first ordinance. Cities, villages, and towns with populations greater than 12,500 were required by state law to have adopted such an ordinance (although not this specific state model) not later than January 1, 2002. The ordinance is not required to be mapped. See [www.dnr.state.wi.us/org/es/science/landuse/tools/house.htm](http://www.dnr.state.wi.us/org/es/science/landuse/tools/house.htm).

The drafters clearly understand how to incorporate traditional neighborhood development principles into conventional land development regulations. The model ordinance is written in a format similar to planned development district and planned unit development regulations. It includes provisions intended to achieve compact development, mixed uses, multiple modes of transportation through an interconnected network, and enhancement of the cultural and environmental features of the site.

The model ordinance calls for a three-step approval process:

1. An initial pre-application conference
2. Development of a general implementation plan and corresponding zoning map amendment
3. A specific implementation plan

The general implementation plan establishes the intent, density, and intensity of the proposed development. It includes a conceptual site plan, identification of architectural styles, a site inventory or analysis, and other features that are part of conventional planned developments. The local legislative body approves the general implementation plan, along with a zoning map amendment. The specific implementation plan is similar but more detailed, including elevations of all proposed commercial buildings and typical elevations of residential buildings. The legislative body approves this plan as well, but the planning department may, under certain conditions, approve minor changes.



The key part of the ordinance is its design standards, which are fairly concrete and easy to follow. For example, the model calls for a broad range of residential types to occur “anywhere in the traditional neighborhood development.” Large commercial structures are prohibited, with a suggested maximum area of 6,000 square feet. The ordinance includes a series of density ranges: five to eight-plus dwelling units per net acre for single-family attached and detached units, and 15 to 40 dwelling units per net acre for multifamily units. The ordinance proposes perimeter blocks that range from 200 to 400 feet deep by 400 to 800 feet long, and lot sizes are to be diverse, rather than uniform, to encourage housing mix. Sidewalks of three to five feet in width are mandated. The ordinance also specifies the features of entries and building façades. For example, the front façade of any building must face onto a public street and not be oriented directly toward a parking lot, which eliminates parking lots in front of buildings. The model also gets into subtle details like radii, used to slow down traffic at intersections; corner radii are limited to 15 feet for local streets and 20 feet for intersections involving local streets.

The model includes incentives. For example, for each affordable housing unit provided in areas devoted to mixed residential uses, one additional dwelling unit shall be permitted, up to a maximum 15 percent increase in dwelling units. To encourage mixed use areas, the number of single-family and multifamily dwelling units are calculated on the basis of densities in residential areas, but an additional number of units not to exceed 10 percent of the amount so calculated is allowed.

While Section 66.1027 of the Wisconsin statutes initially required cities, villages, and towns with a population of at least 12,500 to adopt “an ordinance for conservation subdivision,” an amendment to the statutes later lifted the requirement. Nonetheless, the extension service developed this model for educational purposes for Wisconsin’s communities.

As defined in Section 66.1027(1)(a), a “conservation subdivision” is “a housing development in a rural area that is characterized by compact lots and common open space, and where the natural features of land are maintained to the greatest extent possible.” The well-organized model ordinance contains a three-part process for development of the conservation subdivision: an initial application (which is preceded by a conference), a preliminary plat, and a final plat. Under the initial application step, the subdivider devises a “preliminary yield analysis” that shows the maximum number of dwelling units permitted on a parcel under the applicable zoning ordinance. This analysis, according to commentary in the model, is used to ensure that conservation subdivisions are “development-neutral”; that is, the number of units developed is the same as would be permitted under conventional development. The exception, of course, is that under a conservation subdivision, lots are clustered and the common open space is held for public or private common use.

The base development yield may be increased if the development complies with one or more of four criteria. Each criterion provides a suggested development yield bonus of 5 percent. The recommended maximum bonus permitted is 20 percent. Meeting any of the following criteria will qualify the development for a bonus:

- Creating an endowment, the principal of which would generate sufficient annual interest to cover the conservation easement holder’s yearly costs for taxes, insurance, maintenance, and other expenditures.
- Providing for access by the general public to trails, parks, or other recreational facilities, excluding golf courses

- Providing affordable housing, including a minimum of 25 percent of all units, and using the U.S. Department of Housing and Urban Development's standard for moderate-income households
- Reusing historical buildings and structures, including those buildings inventoried by the Wisconsin State Historical Society

As a practical matter, a 5 percent density bonus per criterion may be insufficient to compensate for the additional costs. It is likely that a developer, before pursuing any one of them, would conduct an economic analysis to determine whether complying with one or more would equal the value of the incentive.

Moreover, despite the bonus provisions, a further difficulty with the yield plan is the manner in which the yield is calculated. To determine the total number of dwelling units, the subdivider must deduct land that is "undevelopable" because of other laws that prohibit development in certain areas (e.g., floodplains, steep slopes, and drainageways). Consequently, the total yield is reduced by omitting land area that could be otherwise counted in determining the maximum number of dwelling units, even though the omitted land area could not be built upon in any case because of inherent limitations. In this regard, the ordinance effectively penalizes a developer who develops on environmentally sensitive terrain.

The model ordinance contains a set of clear performance standards to guide the design of the subdivision. For example, the subdivider must identify a "conservation theme or themes," which may include forest stewardship, water quality preservation, farmland preservation, or viewshed preservation, among others. The model suggests lot requirements and recommends standards for clustering (including maximum and minimum numbers of lots that should be clustered), streets, and water and sewer facilities. The model ordinance provides a range of right-of-way and roadway dimensions, depending on expected levels of daily traffic, with the objective being to minimize roadway width.

#### **Model Municipal Impact Fee Ordinance (Martin J. Leitner and Eric J. Strauss, 1989)**

Leitner and Strauss's Model Municipal Impact Fee ordinance appears as Chapter 12 in *Development Impact Fees: Policy Rationale, Practice, Theory, and Issues* (Chicago: APA Planners Press, 1989), edited by Arthur C. Nelson. According to its authors, the ordinance is based on the experience of fast-growing communities in California, Florida, Texas, and the Kansas City, Missouri, suburbs.

The ordinance is designed for communities with a mayor-council or commission manager form of government but can be modified for use with counties. The authors have drawn the ordinance broadly to go beyond the typical impact fee designed to help solve road, sewer, water supply, and drainage problems. They note, however, that some governments may not want to impose certain types of fees because of either a lack of authority to solve those problems or a lack of financial powers (e.g., the ability to sell bonds based on impact fee revenues).

The model ordinance includes definitions, procedures for the calculation and assessment of the impact fee, provisions for establishing a development subareas map, adoption of a capital improvements program by subarea, bonding, refunds, appeals of fees or refunds, variances and exceptions, and credits. Commentary accompanies the ordinance provisions.

#### **Model Density Bonus Ordinance (California Department of Housing and Community Development, Division of Housing Policy Development, 1996)**

California Government Code Section 56915 requires all cities and counties to adopt density bonus ordinances in order to facilitate the economic feasibil-

ity of affordable housing. The statute requires that local governments shall grant density bonuses of at least 25 percent, plus an additional incentive(s) or equivalent financial incentives, to housing developers who agree to meet affordable housing quotas. See [www.hcd.ca.gov/hpd/hrc/bonus.pdf](http://www.hcd.ca.gov/hpd/hrc/bonus.pdf).

This model, developed by the state department of housing and community development, is very well drawn. In particular, its definitions and structure anticipate the kinds of routine questions that arise in the administration of such an ordinance. There are clear definitions of “affordable rent,” “affordable sales price,” “density bonus” (“a minimum density increase of at least 25 percent over the ‘maximum residential density’”), “maximum residential density” (which means the maximum number of residential units permitted by the city or county’s general plan and zoning ordinance at the time of application or, if in a planned development overlay zone, to be determined on the basis of the plan and the *underlying* zone), and “lower or very low income households” (households at 60 and 50 percent, respectively, of the area median income for the county).

Under the model, the city or county must grant either a density bonus or density bonus with “additional incentives” or “equivalent financial incentives” to an applicant or developer of a housing development who agrees to provide at least one of the following:

- At least 20 percent of the total units of the housing development as target units for lower-income households
- At least 10 percent of the total units of the housing development as target units affordable to very low income households
- Senior citizen housing

“Additional incentives” means a series of regulatory concessions including the reduction of site development standards or zoning code requirements, direct financial assistance, approval of mixed use zoning in conjunction with the development, or any other regulatory incentive that would result in identifiable cost avoidance or reductions that are offered in addition to the required density bonus. “Equivalent financial incentives” means a monetary contribution, based upon a land cost per dwelling unit equal to either a density bonus and additional incentives, or a density bonus where an additional incentive is not requested or determined to be unnecessary. A “qualifying resident” means a senior citizen or other person eligible to reside in senior citizen housing.

Under the model, target units are dwelling units within the housing development reserved for sale or rent to low- and very low-income households or qualifying residents. In most cases, target units must remain restricted and affordable to the designated group for a period of 30 years. Under certain circumstances, target units can be provided off-site.

The model ordinance contains a comprehensive set of development incentives, noting that the need for incentives will vary depending on the development. In any case, the development incentives granted must “contribute significantly to the economic feasibility of providing the [t]arget [u]nits.”

Applicants or developers requesting a density bonus must agree to enter into a density bonus agreement with the city or county. The planning director reviews and revises the draft agreement as appropriate and formulates a recommendation to the local planning commission, which has final approval.

Perhaps the only limitation of this ordinance is its emphasis on low- and very low-income homes, to the exclusion of moderate-income housing (i.e., households at 80 percent of the area median). If an objective of the ordinance is not only to produce affordable housing for target groups but also to stimulate the production of housing for groups under the median household income in order to encourage filtering, including a broader definition of

what constitutes “affordable housing” would seem to be necessary. This is especially true for California, where the problem is production of housing to meet the needs of all income groups.

**Inclusionary Housing Bylaw/Ordinance for Towns in Barnstable County, Massachusetts (Horsley & Witten, Consultants, and Robinson and Cole, Attorneys, for the Cape Cod Commission)**

This ordinance provides towns in Barnstable County, Massachusetts, that are part of the Cape Cod Commission (a regional planning commission) with a vehicle to comply with the Massachusetts Low and Moderate Income Housing Act, Chapter 40B of the Massachusetts General Laws, enacted in 1969. See [www.capecodcommission.org/bylaws/affordhous.html](http://www.capecodcommission.org/bylaws/affordhous.html).

Chapter 40B establishes a streamlined procedure for developers of state or federally subsidized housing to obtain a single development permit for a local zoning board of appeals. This “comprehensive permit” is in lieu of separate application to various local boards. Applicants may appeal a ZBA decision to a state-level three-member Housing Appeals Committee, which may reverse denials of comprehensive permits or may modify or reject conditions that, when imposed, make an affordable housing project infeasible. Local governments whose affordable housing stock is in excess of 10 percent of the housing in the city or town are immune from appeals.

This model creates a local housing fund for the purpose of creating affordable housing as defined in the ordinance. These purposes include use by the town housing authority for the purchase of land or units, the development of new dwelling units for affordable housing occupants or the rehabilitation of existing dwelling units, or a housing trust or community development corporation.

Two actions activate the ordinance: (1) the division of land into 10 or more units, or (2) the construction of 10 or more multidwelling units. Both actions require a special use permit. At least 10 percent of the units in a division of land or a multiunit development subject to the ordinance must be affordable units. The law offers several alternatives to the actual construction or rehabilitation of units. These alternatives include payment of fees-in-lieu or the donation of off-site, fee-simple land suitable for the construction of the affordable units. Applicants must submit a marketing plan to be approved by the town stating how it will market the affordable units to potential homebuyers or tenants. This plan must include a description of the lottery or other process the town will use to select buyers or tenants.

The ordinance requires that all affordable units constructed within a larger development must be situated in the development “so as not to be in less desirable locations than market-rate units . . . and shall, on the average, be no less accessible to public amenities, such as open space, as the market-rate units.” Affordable units shall also be compatible with other units in design, appearance, construction, and quality.

A schedule establishing the timing of affordable units coincident with market-rate units is also included in the ordinance to ensure that affordable units are built at about the same rate as the market-rate units.

The fee-in-lieu provision allows the developer to pay \$40,000 per unit in cash that goes into the affordable housing trust fund (although the amount of the fee will need to be altered over time). In addition, the ordinance establishes a process for certifying income for purchasers of for-sale units in order to confirm eligibility as a low- or moderate-income household. Furthermore, for-sale affordable units must be subject to a deed restriction governing the amount for which it can be subsequently sold, and these resale controls must be in force for a period of 40 years. The restrictions on resale, according to commentary accompanying the model, encourage the homeowner to maintain and improve the property while, at the same time,

enjoying the same discount between sale price and appraised value. The model does not state, however, the period for which affordable rental units must be restricted.

The Cape Cod Commission model does not include any language for specific incentives (e.g., density bonuses), although it does identify a section of the ordinance where such bonus language would be appropriately placed. The implication is that new affordable development will not be different in any way from the market-rate units that make up the other parts of the development.

#### **Model Bylaws and Regulations Project (Cape Cod Commission, Mass., 2009)**

The Cape Cod Commission in Massachusetts has developed a set of 11 model bylaws to provide the 15 towns on the Cape with examples of regulations that have a proven track record in other communities. See [www.capecodcommission.org/bylaws](http://www.capecodcommission.org/bylaws). In the following list, the boldface model bylaw titles are those that directly address smart growth objectives. Those that do not address smart growth are listed here for reference purposes only.

#### **Model Development Rate Limitation Bylaw**

This model sets forth an approach for towns seeking to limit the number of building permits issued annually. The bylaw ties annual building-permit issuance to capital facilities planning so that new growth and development will not outstrip the town's ability to pay for it. It is similar to an adequate public facilities requirement.

#### **Open Space Residential Development (i.e., Cluster) Bylaw**

The model includes provisions common to typical cluster regulations (e.g., lot configuration and open space set-aside) but also includes several less common provisions, including mandatory cluster requirements, restrictions on reuse of common open space, and integration of the subdivision and special permit review process to reduce permitting timeframes.

#### **Model Land Clearing, Grading and Protection of Specimen Trees Bylaw**

This model provides two procedural options for local governments seeking to minimize the loss of natural vegetation, topography, specimen trees, significant forest types, and valuable wildlife habitat that can occur when a site is prepared for development. The first option imposes a special use permit requirement on any clearing and grading activities for projects that exceed a certain size. The second option involves adding site clearing and grading requirements to a town's existing site plan review requirement.

#### **Model Floodplain Development Bylaw**

This model is intended to complement floodplain regulations currently in place in most Cape Cod towns but goes farther than some in including a prohibition on all future development except recreational uses, conservation and habitat areas, and agriculture and forestry. All other lawful uses in place at the time the ordinance is passed would be allowed to remain.

#### **Other smart growth-related model bylaws:**

Model Village Style Development Bylaw  
Model Transfer of Development Rights Bylaw  
Model Wetlands and Wildlife Habitat Bylaw  
Model Aquifer Protection Overlay District Bylaw

#### **Non-smart growth bylaws that are included in the set:**

Model Access Management Bylaw  
Model Personal Wireless Service Facilities Bylaw  
Model Hazardous Waste Bylaw



### **Model Code Provisions for Urban Streets and Subdivisions (Washington State Community Trade and Economic Development, 1998)**

The Washington State model code provisions for streets and subdivisions are one of several prepared by the State Department of Community, Trade, and Economic Development as technical assistance to Washington cities and counties in the implementation of the state's Growth Management Act. See [www.wsdot.wa.gov/walk/PDF/CTED.pdf](http://www.wsdot.wa.gov/walk/PDF/CTED.pdf).

This set of models address three statewide goals:

1. Directing development to areas where adequate public services are in place
2. Creating an efficient transportation system
3. Providing a variety of housing types and densities for all income levels.

The model provisions contain detailed cross-sectional diagrams with specific recommended measurements for each element in the right-of-way, including sidewalks, planting strips, parking lanes, and the roadway.

### **Crossroads, Hamlet, Village, Town: Design Characteristics of Traditional Neighborhoods, Old and New, Revised Edition, Randall Arendt. APA Planning Advisory Service Report No. 523/524 (2004)**

This report is an analysis of the characteristics of villages, in both the United States and Great Britain. It begins with a historical overview and follows with a discussion of design principles of villages. Among these principles are retaining and designing around natural features, limiting block length to vary the length and duration of walking and to connect residential areas on parallel streets more easily, and providing multiple small greens and commons to increase the perception of open space where lots are small.

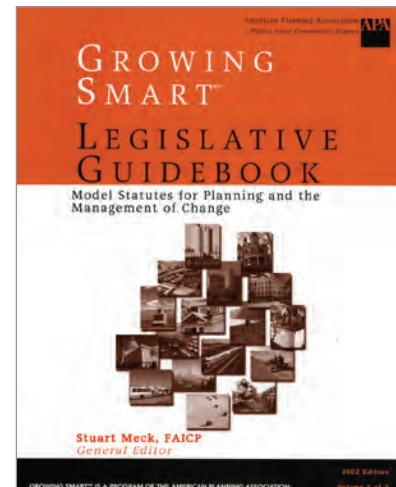
The report includes two model ordinances, one addressing subdivision design of villages and the other providing a zoning overlay for villages (also included on a CD-ROM, accompanied by an audio commentary). The basic approach taken by the ordinances is that of a planned unit development, with a four-step process for analyzing and laying out the development plan for the site. The model ordinances contain development standards for different parts of the village as well as standards for greenways. Several types of density bonuses are described, among them a basic density bonus for undertaking village-type development and a bonus linked to public land dedication and the establishment of an endowment for maintaining conservation land.

### **RELEVANT MODELS AND GUIDELINES**

#### **Growing Smart Legislative Guidebook: Model Statutes for Planning and the Management of Change, Chapters 8, 9, 10 (Stuart Meck, FAICP, General Editor. American Planning Association, 2002)**

The *Legislative Guidebook* is APA's collection of model statutes intended to replace the *Standard City Planning and Zoning Enabling Acts* of the 1920s, which were drafted by an advisory committee of the U.S. Department of Commerce under Commerce Secretary Herbert Hoover. The guidebook is divided into 15 chapters that span the full spectrum of planning issues. Three chapters deal with regulatory matters and contain model statutes that provide a basis for ordinance drafting with smart growth objectives: Chapter 8 on local land development regulation; Chapter 9 on special and environmental development regulations and land-use incentives, and Chapter 10 on administrative and judicial review of land-use decisions. See [www.planning.org/growingsmart/index.htm](http://www.planning.org/growingsmart/index.htm).

The model statutes on regulations and related devices do not contain ordinances themselves but do specify minimum content requirements for



ordinances. Several of them have a strong relationship to smart growth principles. These include:

- *Planned Unit Development; Traditional Neighborhood Development.* The model statute in Section 8-303 authorizes planned unit development, a regulatory device that merges elements of zoning and subdivision control, allowing developers to mix land uses, housing types, and densities, and to get development approval on large developments that will be built in phases over a number of years. APA's PUD model incorporates a set of site planning standards to encourage traditional neighborhood development and permits the adoption of a manual of graphic and written design guidelines to assist applicants. These site-planning standards may be placed in a PUD ordinance. The guidebook does provide an alternative to the use of traditional neighborhood development as the product of a PUD process; the model statute authorizing a zoning ordinance, Section 8-201, contains a paragraph that allows TND to be formulated through the imposition of a zoning district or overlay.
- *Concurrency; Adequate Public Facilities.* This model statute, in Section 8-603, authorizes local governments, with guidance from the state, to adopt a "concurrency management" ordinance to ensure adequate public facilities for future developments in five areas: potable water supply and distribution, wastewater treatment and sanitary sewage, stormwater drainage, solid waste, and roads. Under the concurrency model, adequate public facilities must be in place when the impacts of the development occur, or the local government agency or developer must have made a financial commitment at the time of approval of the development so that the facilities are completed within two years of the impact of the development. The state is responsible for defining the level-of-service standards for the different types of facilities. This eliminates the need for local governments to undertake a series of separate, costly, but identical studies to define what such standards should be.
- *Transfer of Development Rights.* Section 9-401 is a model statute authorizing the transfer of development rights, which can be used for protecting environmentally sensitive land or preserving farmland or property on which historic structures are located. It specifies the minimum contents of a TDR ordinance, which include:
  - statement of consistency with the local comprehensive plan
  - a description of both the sending and receiving districts, as well as their designation on the zoning map of the local government
  - a description of the development rights to be transferred in reasonable detail, preferably in quantifiable terms such as area, building coverage ratio, density, floor area ratio, height, or other forms of measurement
  - record-keeping requirements, including a filing with the local recorder of a conservation easement on the sending property and approval of the local planning agency of the transfer to the receiving property.

In addition, the model statute authorizes the establishment of a development rights bank that can acquire, sell, or convey development rights. Under the model, two local governments can enter into an agreement in which they allow development rights to be transferred across jurisdiction boundaries (e.g., a county transfer of development rights from an unincorporated area to a municipality).

- *Land-Use Incentives for Affordable Housing, Community Design, and Open Space Dedication.* Section 9-501 requires local governments to grant density bonuses of at least 25 percent, plus an additional incentive(s) or equivalent

financial incentives to developers of affordable housing. The developer is required to enter into a development agreement with the local government to formalize the manner in which the affordable housing is to be kept affordable and other administrative details relating to the project. The model statute also authorizes development incentives for increased nonresidential floor area for provision of “public benefit amenities” (e.g., plazas, parks, and open space; access to transit stations; overhead weather protection, and street arcades). A public benefit amenity may also include provision of affordable housing as part of a nonresidential development, in which case a density bonus may be granted. A local government may also adopt a “uniform incentives ordinance” to address the provision of affordable housing, dedication of open space, and the provision of community design amenities.

- *Unified Development Permit Review Process.* In order to ensure that the development permit review process functions as efficiently as possible, the legislative guidebook requires the establishment of a uniform development permit review process for all decisions concerning development permits that are subject to an administrative review or record hearing. Part of the permit review process is the adoption of a uniform development permit review ordinance under Section 10-201 that consolidates all permit approval requirements in one place. Such an ordinance must include:
  - a citation to the land development regulations, statute, rule, or other legal authority under which the development permit is required;
  - the category of development to which it applies;
  - the stage or sequence of the development process at which it must be obtained;
  - the designation of the officer or body of the local government responsible for reviewing and granting the development permit and the subsequent certificate of compliance;
  - a designation of whether a record hearing—a hearing in which a written record is created—is required;
  - the approximate time necessary for review and grant of such a development permit; and
  - the time limit for granting, granting subject to conditions, or denying such a development permit.

The ordinance establishing a unified development permit review process may provide for no more than one record hearing for each development permit and one record appeal. The ordinance may also authorize the administrative review of development permit applications—the routine granting of a permit—without a hearing and one appeal for each development permit reviewed in such a fashion through a record hearing.

The intent here is to examine and consolidate the steps for all the permits necessary for development to commence and to set deadlines for various decisions as well as clarify which bodies must approve permits and which bodies hear appeals from the denial of permits or from conditions imposed on such permits.

**Traditional Neighborhood Development Street Design Guidelines (Transportation Planning Council Committee 5P-8, Institute of Transportation Engineers (ITE), 1999)**

These ITE street design guidelines are intended for traditional neighborhood development (TND) neighborhoods with both attached and freestanding buildings, with mixed residential and commercial uses. See <http://ite.org/bookstore/RP036.pdf>. Individual lot densities may range from one to 40 or

more dwelling units to an acre, with overall project density averaging six to 10 dwelling units per acre.

The guidelines are based on a series of design principles and could be redrafted as ordinance language and incorporated into codes. Several guidelines deserve special mention:

- *Specificity.* The ITE manual stresses that TND street design is very specific for the street at hand and even segments of a street. Consequently, all of guidelines must be understood before they are applied. The manual also points out that the streets in a TND are not intended to carry large volumes of through traffic and that an adequate, separate system of arterial roadways is necessary to serve high volumes and long distance traffic.
- *“Lanes” and Shared Space.* The guidelines emphasize that the designer should not think in terms of separate lanes of traffic or parking. Streets may not be striped and the function of through movement may be shared with on-street parking. Occasionally, it may be necessary for a driver to slow down or pull over to let an oncoming vehicle, such as a truck, pass before proceeding.
- *Bicycling.* Bicycling is encouraged in TND street design, but the guidelines recognize the conflict inherent in doing so. In particular, bicycling lanes adjacent to parked cars must be designed to avoid conflicts between bicycles and opening car doors.
- *Interconnectivity.* TND streets are interconnected, the guidelines say, and cul-de-sacs and similar dead-end streets are not permitted, except in extreme conditions—steep slopes or wetlands—that preclude connections.
- *Discouragement of Through Traffic.* TND streets are designed to permit multiple paths through the neighborhood but to discourage through traffic. The street design does this through extensive use of three-leg or “T” intersections as well as one-way traffic routing.
- *Pedestrian Networks.* TND streets are shared with pedestrians, and the street designs are intended to be pedestrian friendly. Because of this, great attention is paid to the contiguity of pedestrian networks as well as curb-return radii at intersections. The emphasis on smaller radii in most cases is to protect pedestrians by slowing right-turn movements.
- *Street Trees.* Street trees are provided to create human scale at the edge of streets, creating “outdoor rooms” to enhance the nonmotorist environment.
- *Conflict Resolution.* Perhaps the most important element of the guidelines is the dictum that, when an irreconcilable conflict exists between the vehicular and nonvehicle users of a TND, the design or policymaker should resolve them in the favor of the nonvehicle users.

The manual includes some geometric design standards for street elements, including minimum centerline radii for different design speeds, curb return radii (and their relation to pedestrian crossing times and distances), and stopping sight distances. However, it refrains from specifying street widths, noting that a street should not exceed the minimum width necessary to serve typical traffic flow, which may be as narrow as 10 or 12 feet. On balance, the guidelines suggest a more careful, holistic approach to designing street systems in TND developments, rather than the mechanical application of standards characteristic of much contemporary subdivision and development design.

**Getting to Smart Growth: 100 Policies for Implementation (International City/County Management Association for U.S. EPA, 2002)**

This monograph is a collection of concrete recommendations on how to achieve smart growth in a community, based on actual examples from local governments throughout the country. See [www.smartgrowth.org/pdf/gettosg.pdf](http://www.smartgrowth.org/pdf/gettosg.pdf). The recommendations are organized under the 10 smart growth principles developed by the Smart Growth Network, a coalition of private sector, public sector, and nongovernmental organizations in the United States (see above). Each smart growth principle is discussed. Ten specific policies are highlighted for each principle, supplemented by a series of “practice tips” that either illustrate their application in a community or identify additional resources to aid communities in implementation. There are two appendices: a matrix showing the most likely level of government to achieve the policy, and a bibliography.

For example, under the principle of “creating walkable communities,” the primer recommends that local governments adopt design standards for sidewalks to be a minimum width of 10 feet, with buffers to shield users from traffic or edges to clearly mark pedestrian zones. A “practice tip” under the principle of “creating a range of housing opportunities and choices” points to the Cary, North Carolina, zoning code that allows all single-family homes to include accessory units but requires them to be attached to the main building and occupied by a relative of the owner.

**Getting to Smart Growth II: 100 Policies for Implementation (International City/County Management Association for U.S. EPA, 2002)**

This is the second of two volumes of recommendations and examples of how smart growth can and has been achieved by communities throughout the country. Both volumes describe actions aimed at the public sector, while the second volume also highlights steps that the private sector can take to promote more livable communities. The second volume discusses individual programs (occasionally specific applications of broader ideas presented in the first volume) and emphasizes case studies to show where the various policies, programs, and projects have been successfully implemented. The first volume included “Practice Tips;” the second includes “Finance Tips” that illustrate important financial aspects of getting smart growth projects on the ground. These tips address an important fact about development: what gets financed is what gets built.

**Charter of the New Urbanism (Congress for the New Urbanism, 1996)**

The Congress for the New Urbanism (CNU) developed and adopted the Charter of the New Urbanism. The charter contains a series of principles to guide public policy, development practice, urban planning, and design. The principles are organized around three levels of scale: the region; the neighborhood, the district, and the corridor; and the block, the street, and the building. The charter’s principles can be used to stimulate discussion about development code objectives, although the charter itself is not written as an ordinance. The charter is on the CNU website, [www.cnu.org](http://www.cnu.org).





## **Model Mixed Use Zoning District Ordinance**



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Mix land uses
- Take advantage of compact building design

The following model zoning district provisions represent a commercial zoning classification that permits, rather than mandates, a vertical mix of commercial and residential uses within the same building. The district is intended to accommodate a physical pattern of development often found along village main streets and in neighborhood commercial areas of older cities.

**101. Purpose**

The purposes of the Neighborhood Commercial, Mixed Use District (CX1) are to:

- (1) Accommodate mixed use buildings with neighborhood-serving retail, service, and other uses on the ground floor and residential units above the nonresidential space;
- (2) Encourage development that exhibits the physical design characteristics of pedestrian-oriented, storefront-style shopping streets; and
- (3) Promote the health and well-being of residents by encouraging physical activity, alternative transportation, and greater social interaction.

**102. Definitions**

As used in this ordinance, the following words and terms shall have the meanings specified herein:

**Floor area ratio.** The ratio of a building’s gross floor area to the area of the lot on which the building is located.

**Gross floor area.** The sum of the gross horizontal areas of all floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings. Gross floor area does not include basements when at least one half the floor-to-ceiling height is below grade, accessory parking (i.e., parking that is available on- or off-site that is not part of the use’s minimum parking standard), attic space having a floor-to-ceiling height less than seven feet, exterior balconies, uncovered steps, or inner courts.

**Mixed use building.** A structure that contains at least one floor devoted to allowed nonresidential uses and at least one devoted to allowed residential uses.

**103. Allowed Uses**

Uses are allowed in “CX1” zoning districts in accordance with the use table of this section.

*Comment: This use table should be refined to reflect local characteristics and planning objectives. The range of uses allowed should be kept as broad as possible in order to ensure that the district is economically viable. Note that this model allows, as a conditional use, drive-through facilities. Drive-through facilities may be appropriate in such areas in connection with banks and pharmacies. Whether to allow them is a policy choice, no different than other policy choices in selecting permitted uses. Also keep in mind that in buildings with residential units, commercial use issues will be largely self-policing because owner associations and builder/developers will ensure that commercial uses in mixed use buildings will be compatible with upper-story residential uses.*



*Figure 4.1.1. Belmont Dairy, a mixed use development in Portland, OR, combines neighborhood-serving retail, services, and other uses on the ground floor with residential uses above.*

**TABLE 4.1.1. USES ALLOWED IN CX1 ZONING DISTRICTS**

Use Category (Specific Use Type)	CX1 Zoning District
<b>Residential:</b>	
Household Living	
• Artist Live/Work Space, above ground floor	P
• Artist Live/Work Space, ground floor	C
• Dwelling Units, above ground floor	P
• Detached House	C
• Multiunit (3+ units) Residential	C
• Single-Room Occupancy	C
• Town House	C
• Two-Flat	C
Group Living	
• Assisted Living	C
• Group Home	P
• Nursing Home	C
• Temporary Overnight Shelter	C
• Transitional Residences	C
• Transitional Shelters	C

(continued)

**TABLE 4.1.1. USES ALLOWED IN CXI ZONING DISTRICTS** (continued)

<b>Use Category (Specific Use Type)</b>	<b>CXI Zoning District</b>
<b>Public and Civic:</b>	
Colleges and Universities	P
Cultural Exhibits and Libraries	P
Day Care	P
Hospital	N
Lodge or Private Club	N
Parks and Recreation	P
Postal Service	P
Public Safety Services	P
Religious Assembly	P
School	C
Utilities and Services, minor	P
Utilities and Services, major	C
<b>Commercial:</b>	
Adult Use	N
Animal Services	
• Shelter/Boarding Kennel	N
• Sales and Grooming	P
• Veterinary	P
Artist Work or Sales Space	P
Drive-Through Facility [see comment]	C
Eating and Drinking Establishments	
• Restaurant	P
• Tavern	C
Entertainment and Spectator Sports	
• Small (1-149 seats)	P
• Medium (150-999 seats)	N
• Large (1,000+ seats)	N
Financial Services	P
Food and Beverage Retail Sales	P
Gas Stations	N
Lodging	
• Small (1-16) guest rooms	P
• Large (17+ guest rooms)	C
Medical Service	P
Office	P
Parking, Commercial (nonaccessory)	C
Personal Service (including health clubs and gyms)	P
Repair Service, Consumer (including bicycles)	P
Residential Storage Warehouse	N
Retail Sales, General	P
Vehicle Sales, Service, and Repair	N
<b>Industrial:</b>	
Manufacturing, Production, and Industrial Services	N
• Artisan (hand tools only; e.g., jewelry or ceramics)	C
<b>Other:</b>	
Wireless Communication Facilities	
• Colocated	P
• Freestanding (towers)	C

P = permitted by right; C = conditional use; N = not allowed

**104. Commercial Establishment Size Limits**

The gross floor area of commercial establishments in the CX1 district shall not exceed [15,000] square feet.

*Comment: Floor area limits are proposed in the model ordinance to help ensure that allowed commercial uses would be geared toward a neighborhood market area. Some local ordinances impose much more restrictive floor area limits in neighborhood-oriented districts. The limit proposed in this model would accommodate a modern drugstore. If floor area limits are employed, the standards should not be so restrictive as to hamper the economic viability of the district.*

**105. Indoor/Outdoor Operations**

All permitted uses in the CX1 district must be conducted within completely enclosed buildings unless otherwise expressly authorized. This requirement does not apply to off-street parking or loading areas, automated teller machines, or outdoor seating areas.

**106. Floor-to-Floor Heights and Floor Area of Ground-Floor Space**

(1) All commercial floor space provided on the ground floor of a mixed use building must have a minimum floor-to-ceiling height of [11] feet.

(2) All commercial floor space provided on the ground floor of a mixed use building must contain the following minimum floor area:

(a) At least [800] square feet or [25] percent of the lot area (whichever is greater) on lots with street frontage of less than [50] feet; or

(b) at least [20] percent of the lot area on lots with [50] feet of street frontage or more.

*Comment: In areas with strong residential real estate markets, ground-floor space is sometimes viewed as an afterthought, particularly when developed by those new to mixed use development. These types of provisions can help ensure that ground-floor space will meet the needs of future retailers and not sit vacant for years after upper-floor residential units have been leased or sold.*

**107. Lot Area per Unit (Density)**

The minimum lot area per dwelling unit shall be [1,000] square feet for mixed use buildings and [1,500] square feet for all other buildings.

*Comment: If mixed use buildings are desired, such buildings should be rewarded with more flexible development standards. The model ordinance allows higher residential densities in mixed use buildings than it does in single-use buildings.*

**108. Floor Area Ratio**

The maximum FAR shall be [2.0] for mixed use buildings and [1.25] for all other buildings.

*Comment: To encourage mixed use buildings, the model ordinance allows higher FARs for mixed use projects.*

**109. Setbacks**

(1) The entire building façade must abut front and street side property lines or be located within [10] feet of such property lines.

*Comment: Rather than mandating a zero-foot "build-to" line for all properties in CX1 zoning districts, this model offers flexibility to accommodate shallow building setbacks that are sometimes necessary to accommodate features such as outdoor seating/display areas, stoops, and sidewalk widening. Alternately, it is possible for the ordinance to establish a formula to determine setbacks based on the average setback of buildings in a block face. For an example of this, see section 108 of the Model Town Center Ordinance (below).*

(2) The minimum rear setback is [0–30] percent of the lot depth.

*Comment: The appropriate minimum building setback will depend on lot and development patterns in the area. When alleys abut the rear of CX1 lots, no rear setback may be necessary, except perhaps for upper floors. On the other hand, when CX1-zoned lots will abut the rear property line of residential lots, buildings in the CX1 district should be set back from rear property lines in order to protect the privacy and open feeling expected within residential rear yards.*

(3) No interior side setbacks are required in the CX1 district, except when CX1-zoned property abuts R-zoned property, in which case the minimum side setback required in the CX1 district shall be the same as required for a residential use on the abutting R-zoned lot.

*Comment: Most pedestrian-oriented shopping streets are lined with buildings that span the entire width of the lot. The standard proposed here will help reinforce that pattern, while also ensuring that if a CX1 district abuts a residential zoning district, a "typical" residential side yard will be provided.*



### 110. Building Height

The maximum building height shall be [38–50] feet for mixed use buildings and [35–47] feet for all other buildings.

*Comment: Some communities will want to regulate height by stories rather than feet above grade, since stories will allow for greater flexibility in building design. The standards proposed allow greater height for mixed-use buildings than for single-use buildings because mixed-use buildings are required to have taller floor-to-ceiling heights on the ground floor. The proposed standards will accommodate three- or four-story buildings.*

### 111. Off-Street Parking

(1) [Insert off-street parking standards]

(2) No off-street parking is required for nonresidential uses in CX1 districts unless such uses exceed [3,000] square feet of gross floor area, in which case off-street parking must be provided for the floor area in excess of [3,000] square feet.

*Comment: Paragraph (2) may be incorporated into paragraph (1). Exempting small retail businesses from compliance with off-street parking requirements will help promote pedestrian-oriented character and encourage use/reuse of storefront retail space. Communities should also examine off-street parking ratios with an eye toward reducing the amount of off-street parking required overall and encouraging shared and off-site parking arrangements.*

(3) Off-street parking spaces must be located to the rear of the principal building or otherwise screened so as to not be visible from public right-of-way or residential zoning districts.

### 112. Transparency

(1) A minimum of [60–75] percent of the street-facing building façade between two feet and eight feet in height must comprise clear windows that allow views of indoor space or product display areas.

(2) The bottom of any window or product display window used to satisfy the transparency standard of paragraph (1) above may not be more than [3–4.5] feet above the adjacent sidewalk.

(3) Product display windows used to satisfy these requirements must have a minimum height of [4] feet and be internally lighted.

### 113. Doors and Entrances

(1) Buildings must have a primary entrance door facing a public sidewalk. Entrances at building corners may be used to satisfy this requirement.

(2) Building entrances may include doors to individual shops or businesses, lobby entrances, entrances to pedestrian-oriented plazas, or courtyard entrances to a cluster of shops or businesses.

*Comment: Requiring ground-floor windows and sidewalk-facing entrances help make for a more pleasing pedestrian environment.*

### 114. Vehicle and Driveway Access

No curb cuts are allowed for lots that abut alleys.

*Comment: Driveways that cross sidewalks disrupt pedestrian movements and pose safety threats. They should be the rare exception in neighborhood-oriented mixed use districts.*

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*Figure 4.1.2. Mixed use zoning encourages pedestrian-oriented, storefront-style shopping streets that encourage physical activity and greater social interaction.*



## Model Live/Work Ordinance

The notion of residents living and working on a single premises may seem novel in the context of modern urban life, but it was the norm until the early decades of the twentieth century. Storekeepers, tradespeople, doctors, lawyers, and others commonly lived upstairs from or adjacent to their shops or offices. A wide range of economic, societal, and political factors resulted in such arrangements becoming uncommon and even outlawed. Rapid suburbanization, increased car dependence, continued adoption of Euclidean zoning codes that called for separating land uses by category, a burgeoning middle class, and a desire on the part of urbanites for relief from overcrowding and urban pollution all contributed to such change.



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Mix land uses
- Provide a range of housing choices



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*Figure 4.2.1. With the emergence of live-work units in the 1970s, many former warehousing and manufacturing districts have become viable locations for residences, employment, and nightlife.*

Live/work units emerged in the 1970s as manufacturers moved out of large industrial buildings and warehouses in downtown areas and artists began to occupy and use these spaces. By the late 1980s, a number of cities, including New York, Boston, Chicago, and San Francisco, began to legalize the live/work concept by adapting building and zoning regulations to accommodate it. This era of loft and warehouse conversions coincided with significant private investment in adaptive reuse of the structures for all manner of uses. Soon the artists were joined by small businesses, restaurants, personal and professional service businesses, coffee shops, galleries, and other sole proprietors who wanted to live near where they worked. In the 25 or more years since this trend began, many warehouse and manufacturing districts, including Printer’s Row in Chicago, Larimer Square in Denver, and the South of Market district in San Francisco have become some of the most pricey and sought-after residential and employment locations and entertainment destinations.

Communities today are once again embracing many features of traditional town planning, including allowing a mix of land uses both within a district and within a building. The modern iteration of the live/work option exists in two distinct forms: (1) home occupations and (2) live/work units. A home occupation ordinance is intended to allow modest, low-impact business or commercial uses within a residence in a residential zone. (See Chapter 4.16.) In contrast, a live/work ordinance may allow incidental residential uses within commercial, office, or industrial buildings and zones.

Where such uses are allowed does depend on what the city’s objective is for allowing such uses at all. Mark Troxel of the Seattle Planning Department says that the live/work concept—as applied through the Seattle zoning ordinance—would be more aptly named a “work/live” ordinance because the emphasis is on maintaining the commercial or industrial character of the district while allowing some residences. Seattle also prohibits live/work units in industrial zones in adherence with the city’s policy to preserve industrial lands for industrial uses. At the same time the city recognizes that entrepreneurs and creative professionals in new media and more traditional businesses are seeking ways to integrate their home life and work life, and improved technology has allowed workers to telecommute from home. To help foster live/work units, the city allows them in all commercial districts (Troxel 2004).

The strategy of wanting to retain industrial land for industrial uses is understandable, especially where there is a strong demand for residential uses. Alternatively, live/work ordinances do help older cities with a surplus of underused or industrial land to revitalize such areas by providing development alternatives.

#### 101. Definitions

As used in this ordinance:

**Live/work unit or Live/work space.** A building or space within a building used jointly for commercial and residential purposes where the residential use of the space is secondary or accessory to the primary use as a place of work.

[or]

**Live/work unit.** A structure or portion of a structure:

- (a) That combines a commercial or manufacturing activity allowed in the zone with a residential living space for the owner of the commercial or manufacturing business, or the owner’s employee, and that person’s household;
- (b) Where the resident owner or employee of the business is responsible for the commercial or manufacturing activity performed; and
- (c) Where the commercial or manufacturing activity conducted takes place subject to a valid business license associated with the premises.

**102. Purposes**

The purposes of this ordinance are to:

- (a) Provide for the appropriate development of units that incorporate both living and working space;
- (b) Provide flexibility for the development of live/work units, particularly within existing buildings;
- (c) Provide locations where appropriate new businesses can start up;
- (d) Provide opportunities for people to live in mixed use industrial and commercial areas when it is compatible with existing uses;
- (e) Protect existing and potential industrial uses and nearby residential uses from conflicts with one another; and
- (f) Ensure that the exterior design of live/work buildings is compatible with the exterior design of commercial, industrial, and residential buildings in the area, while remaining consistent with the predominant workspace character of live/work buildings.

**103. Where Live/Work Units Are Permitted**

(1) Live/work units are permitted in all commercial [and manufacturing] zones.

*Comment: This provision allows the option of allowing live/work units in manufacturing or industrial zones. The City of Oakland authorizes this; Seattle does not. Seattle's decision to limit such uses to commercial districts reflects a city policy of protecting manufacturing districts from encroachment and displacement from residential or other uses. Seattle does, however, conditionally permit artist's studio/dwellings—which are regulated separately from general live/work units—in manufacturing zones.*

(2) Any commercial use permitted in the zoning district applicable to the property is permitted in the live/work unit.

(3) Live/work units at street level are prohibited where single-purpose residential structures are prohibited.

(4) Where permitted, live/work units located at street level are subject to the development standards for ground-floor retail or commercial establishments as follows, and to any additional standards for ground-floor commercial establishments provided in the [zoning ordinance]:

*Comment: The purpose of the following provisions is to allow live/work units in neighborhood commercial districts without compromising the districts' vibrant commercial environment. Seattle has several neighborhood commercial streets wherein single-purpose residential buildings are prohibited. In those areas, street-level live/work units are prohibited but are allowed in the rear or on upper floors. Seattle's ordinance also contains provisions for the appearance and function of street-level live/work units adapted for this model.*

(a) A minimum of [80] percent of a structure's street front façade at street level shall be occupied by nonresidential uses.

(b) A minimum of [51] percent of the portion of a structure's street front façade that contains required nonresidential use shall be at or above sidewalk grade.

(c) In districts where live/work units are permitted at street level, the live/work unit shall have a minimum floor-to-floor height of [13] feet.

(d) In districts where live/work units are permitted at street level, parking for live/work units on neighborhood commercial streets and in mixed use zones is prohibited in front of the building.

(e) Live/work units that exceed [2,000] square feet must have at least two exits.

[(f) Within each live/work unit, the living area shall not exceed [one third] of the total floor area of the unit]

*Comment: Not every live/work ordinance contains a required living area/working area ratio or proportion. Oakland requires a ratio of one-to-three living-to-working area. In an effort to provide flexibility, Seattle opted not to set proportion standards.*

**104. Business License Required**

At least one resident in each live/work unit shall maintain a valid business license and [zoning permit] for a business on the premises.



*Comment: Not all businesses may require a valid business license. For example, an artist may not be required to have one.*

#### **105. Parking**

For live/work units of fewer than [2,500] square feet, one parking space is required for each unit. For live/work units greater than [2,500] square feet, required parking will be based on the applicable parking standard for the nonresidential use or the closest similar use as determined by the [zoning administrator].

*Comment: The relatively nonstringent parking standards provided here reflect the fact that a person occupying a relatively small live/work unit may have less use for a car given that he or she works on the premises. Larger units may have additional residents as well as employees and thus must provide more parking.*

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## Model Town Center Zoning Ordinance

The following ordinance model establishes a town center (TC) that serves as a high-density, high-intensity, mixed use employment center. Three types of subdistricts are authorized (see section 102, below).

The model ordinance describes, in section 104, a set of permitted uses, which are slightly different for each use district. While every community may not want to establish and map all three different types of districts, this table offers guidance for the types of uses that might be allowed if the community opts for the three-district alternative.

Note that drive-in facilities are not allowed uses in the TC districts because of the potential of interfering with the desired pedestrian orientation of the land-use mix. Similarly, the TC districts also require a certain level of transparency for ground-floor retail to give buildings a human scale (see section 112). In core areas such as town centers, setbacks are critical; this model allows setback averaging up to a maximum of 12 feet to reflect the context of adjoining buildings (see section 108).



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Mix land uses
- Create walkable neighborhoods
- Foster distinctive and attractive places



*Figure 4.3.1. Town center districts promote compact, pedestrian-oriented development with a diverse mix of residential, business, commercial, entertainment, and other uses for workers, visitors, and residents.*

### 101. Purpose

The purposes of a town center (TC) district are to:

- (a) Promote development of a compact, pedestrian-oriented town center consisting of a high-intensity employment center, vibrant and dynamic mixed use areas, and residential living environments that provide a broad range of housing types for an array of housing needs;
- (b) Promote a diverse mix of residential, business, commercial, office, institutional, educational, cultural, and entertainment activities for workers, visitors, and residents;
- (c) Encourage pedestrian-oriented development within walking distance of transit opportunities at densities and intensities that will help to support transit usage and town center businesses;
- (d) Promote the health and well-being of residents by encouraging physical activity, alternative transportation, and greater social interaction;
- (e) Create a place that represents a unique, attractive, and memorable destination for visitors and residents; and
- (f) Enhance the community's character through the promotion of high-quality urban design.

*Comment: These "generic" purpose statements reflect the intent of typical town center-style districts. Actual purpose statements should reflect the objectives of the plans that the code is intended to implement.*

### 102. Subdistricts

The TC district consists of three mapped subdistricts that reflect the existing and desired places within the town center area. They are:

- (a) TC-1, Town Center Core Subdistrict. The TC-1 subdistrict is primarily intended to encourage and enhance the high-intensity office and employment center function of the town center's core area. The TC-1 subdistrict regulations support the town center's role as a hub of regional importance for business, communications, office, government, retail, culture, education, visitor accommodations, and entertainment. The district regulations support a mix of large-scale office, commercial, public, recreation, and entertainment uses. The TC-1 district also accommodates mixed use and residential projects as important components of the area's vitality.
- (b) TC-2, Town Center Mixed-Use Subdistrict. This subdistrict is primarily intended to support mixed-use (residential/nonresidential) projects with active ground-floor uses within one-quarter of a mile of the TC-1 district.
- (c) TC-3, Town Center Residential Subdistrict. This subdistrict is primarily intended to accommodate moderate- to high-density residential development and small-scale ground-floor commercial uses with residential units above. The district also accommodates low-intensity office development compatible with the residential character of the TC-3 district.

*Comment: This model suggests a basic framework consisting of three districts. The number of districts needed to implement town-center planning objectives will vary from community to community, reflecting the types of places and activities that exist within the area as well as the community's agreed-upon vision for its town center area. Note that, if desired, the TC-2 and TC-3 subdistricts can be combined if the distinctions between them are perceived as too fine for regulation or are simply not needed in a particular community.*

### 103. Definitions

As used in this ordinance, the following words and terms have the meanings specified below:

**Floor area ratio.** The ratio of a building's gross floor area to the area of the lot on which the building is located.

**Gross floor area.** The sum of the gross horizontal areas of several floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings. Gross floor area does not include basements when at least one half the floor-to-ceiling height is below grade. Gross floor area does not include accessory parking, attic space having a floor-to-ceiling height less than seven feet, exterior balconies, uncovered steps, or inner courts.

**Mixed use building.** A building that contains at least one floor devoted to allowed nonresidential uses and at least one devoted to allowed residential uses.

**Setback.** The open, unobstructed area required to be provided between the furthestmost projection of a building and the adjacent property line.

TABLE 4.3.1. "TC" ZONING DISTRICTS USE TABLE

Specific Use Type	Subdistrict		
	TC-1	TC-2	TC-3
<i>Residential</i>			
Household Living			
• Artist Live/Work Space, above ground floor	P	P	P
• Artist Live/Work Space, ground floor	N	C	P
• Dwelling Units, above ground floor	P	P	P
• Dwelling Units, ground floor	N	C	P
Group Living			
• Assisted Living	C	C	C
• Group Home	C	C	C
• Nursing Home	C	C	C
• Temporary Overnight Shelter	C	C	C
• Transitional Residences	C	C	C
• Transitional Shelters	C	C	C
<i>Public and Civic</i>			
Colleges and Universities	C	C	N
Cultural Exhibits and Libraries	P	P	C
Day Care	P	P	P
Hospital	C	C	C
Lodge or Private Club	P	P	N
Parks and Recreation	P	P	P
Postal Service	P	P	N
Public Safety Services	P	P	P
Religious Assembly	P	P	P
School	C	C	C
Utilities and Services, minor	P	P	P
Utilities and Services, major	C	C	C
<i>Commercial</i>			
Animal Services			
• Shelter/Boarding Kennel	N	N	N
• Sales and Grooming	P	P	N
• Veterinary	P	P	P
Artist Work or Sales Space	P	P	P
Eating and Drinking Establishments			
• Restaurant	P	P	P[1]
• Tavern	P	P	C[1]
Entertainment and Spectator Sports			
• Small (1–149 seats)	P	P	N
• Medium (150–999)	P	P	N
• Large (1,000+)	P	C	N
Financial Services	P	P	P[1]
Food and Beverage Retail Sales	P	P	P[1]
Gas Stations	N	N	N
Lodging			
• Small (1–16 guest rooms)	P	P	P
• Large (17+)	P	P	N
Medical Service	P	P	P[1]
Office	P	P	P[1]
Parking, Commercial (nonaccessory)	C	C	C
Personal Service (including health clubs and gyms)	P	P	P[1]
Repair Service, Consumer (including bicycles)	P	P	P[1]
Residential Storage Warehouse	N	N	N
Retail Sales, General	P	P	P[1]
Vehicle Sales, Service, and Repair	N	N	N
<i>Industrial</i>			
Manufacturing, Production and Industrial Services			
• Artisan (hand tools only; e.g., jewelry or ceramics)	C	C	N
<i>Other</i>			
Wireless Communication Facilities			
• Colocated	P	P	P
• Freestanding (towers)	C	C	C

P = permitted by right; C = conditional use; N = not allowed

[1] Allowed only in buildings containing more than 50 dwelling units and may only be located on the first or second floor. Individual business establishments are limited to a maximum of 5,000 square feet in area. Larger establishments or expansions beyond 5,000 square feet require conditional use approval.

**104. Allowed Uses**

Uses are allowed in “TC” zoning districts in accordance with the use table of this section.

*Comment: This use table should be refined to reflect local characteristics and planning objectives.*

**105. Floor Area Ratio**

All development in TC districts is subject to the following maximum FAR standards:

**TABLE 4.3.2. DISTRICT MAXIMUM  
FLOOR AREA RATIO**

TC-1	[varies: 3.0–7.0]
TC-2	[varies: 3.0–5.0]
TC-3	[varies: 2.0–3.0]

*Comment: Table 4.3.2 suggests a typical range of FAR standards that may be appropriate for buildings within the boundaries of a TC district. In establishing proposed standards, communities will want to survey existing development to ascertain typical FAR ranges within the various areas to be covered by the district. Care should be taken to ensure that allowed FAR levels are high enough to encourage moderate- to high-intensity buildings, while not setting the allowed levels so high that new buildings would be out of scale with the surrounding areas. In underdeveloped town center areas, communities may want to consider increasing the maximum allowable FAR to accommodate larger buildings.*

**106. Lot Area per Unit (Density)**

All residential development in TC districts is subject to the following standards for lot area per dwelling unit:

**TABLE 4.3.3. DISTRICT MAXIMUM  
LOT AREA PER DWELLING UNIT**

TC-1	[varies: 200–400 square feet]
TC-2	[varies: 200–400 square feet]
TC-3	[varies: 300–700+ square feet]

*Comment: Within the types of urban and semiurban settings where a TC district is likely to be applied, it is fairly common to regulate residential density in terms of the amount of lot area required per dwelling unit. It should be noted that some jurisdictions—notably Seattle—have chosen to abandon residential density standards in village center and mixed use commercial areas. The thinking behind such an approach is that density is already indirectly regulated by many other controls, such as building codes, parking requirements, FARs, maximum height limits, and setback controls. If the community wants to encourage residential development, the logic goes, why not remove the sometimes-arbitrary control that density limits represent.*

**107. Building Height**

All development in TC districts is subject to the following maximum building height standards:

**TABLE 4.3.4. DISTRICT MAXIMUM  
BUILDING HEIGHT**

TC-1	[varies: 5 stories to unlimited]
TC-2	[varies: 4–7 stories]
TC-3	[varies: 3–5 stories]

*Comment: Communities that want to promote building forms compatible with the physical context of the existing area will want to establish maximum building heights. Height limits can also play an important role in protecting neighborhoods on the periphery of the town center area. Building step-backs (skyplane) standards should be used to soften the height transition between town center–style districts and lower-intensity neighborhood districts.*

*When height limits are used, they should be calibrated to reflect FAR and building coverage limits. To calculate the number of building stories required to make full use of the allowed FAR, divide FAR by the maximum building coverage. If, for example, the maximum FAR allowed is 2.0 and the maximum building coverage allowed is 66 percent, it will require a building of three or more stories to achieve the full FAR ( $2.0 \div$*



0.66 = 3.03). When no building coverage limits apply, maximum building height limits (in stories) should be established at no less than 1.5 to 2.5 times the allowed FAR (e.g., three to five stories in a district that allows an FAR of 2.0). In mid- and high-rise districts, the rule of thumb is typically three to four stories for each additional 1.0 FAR.

**108. Setbacks**

- (1) No minimum front or streetside building setback is required.
- (2) The maximum front and streetside building setback may not exceed the average front yard depth of the nearest two lots on either side of the subject lot or 12 feet, whichever is less. (See Figure 4.3.3.)

(a) If one or more of the lots required to be included in the averaging calculation are vacant, such vacant lots will be deemed to have a yard depth of zero feet.

(b) Lots fronting a different street than the subject lot or separated from the subject lot by a street or alley may not be used in computing the average.

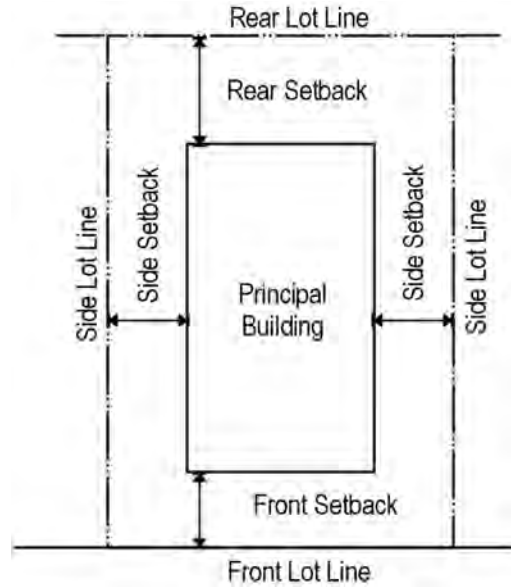
(c) When the subject lot is a corner lot, the average setback will be computed on the basis of the two adjacent lots that front on the same street as the subject lot.

(d) When the subject lot abuts a corner lot and the nearest two lots that front on the same street as the subject lot.

- (3) The following exceptions to the maximum front and street side building setbacks apply:

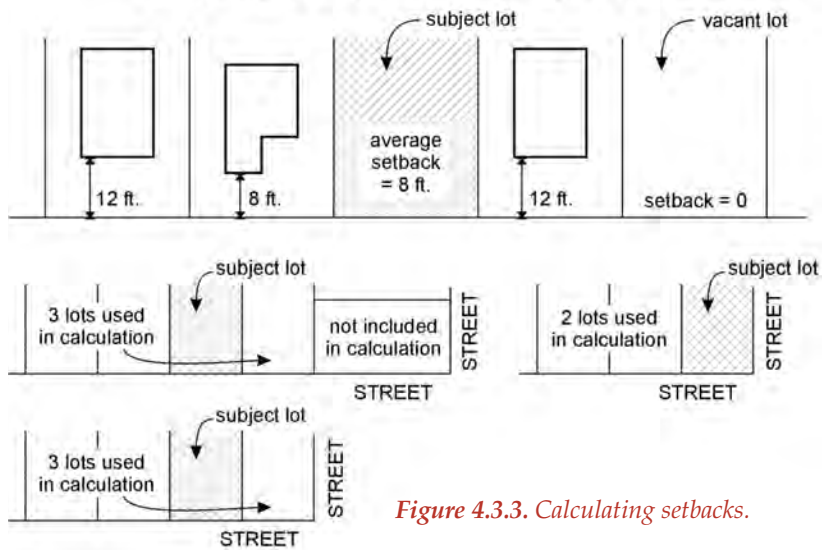
(a) A portion of the building may be set back from the maximum setback line in order to provide an articulated façade or accommodate a building entrance feature, provided that the total area of the space created must not exceed one square foot for every linear foot of building frontage.

(b) A building may be set back farther than the maximum setback in order to accommodate an outdoor eating area. In order to preserve the continuity of the streetwall, the building may be set back no more than 12 feet from the front or streetside property line, or at least 40 percent of the building façade must be located at the maximum setback line. The total area of an outdoor eating area that is located between a public sidewalk and the building façade may not exceed 12 times the building’s street frontage in linear feet. (See Figure 4.3.3.)



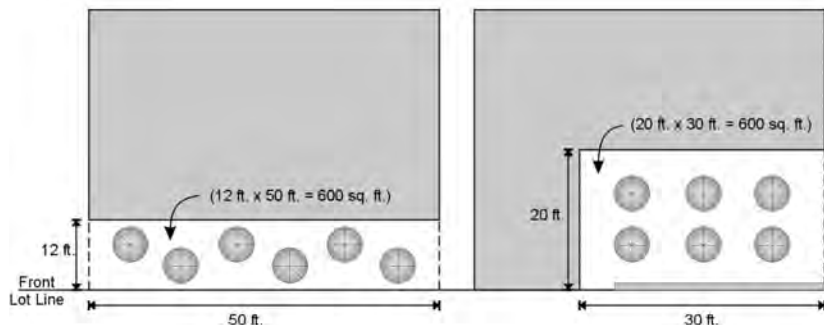
*Figure 4.3.2. Location of lot lines and setbacks.*

**Example: (12 ft. + 8 ft. + 12 ft. + 0 ft.) / 4 = 8 ft.**



*Figure 4.3.3. Calculating setbacks.*

*Figure 4.3.4. Exceptions to minimum front and streetside setbacks.*



*Comment:* Rather than mandating a zero-foot “build-to” line for all properties in TC zoning districts, this model offers flexibility to accommodate contextual setbacks, reflecting the setbacks of adjacent buildings. Paragraph (2) allows buildings to be set back to reflect the building setbacks of neighboring buildings. Special provisions are also included to accommodate building recesses and setbacks for building entries and outdoor seating areas.

(4) The minimum rear setback must be [0–30] percent of the lot depth.

*Comment:* The appropriate minimum building setback will depend on lot and development patterns in the area. When alleys abut the rear of lots, no rear setback may be necessary, except perhaps for upper floors. On the other hand, when TC-zoned lots will abut the rear property line of low- to moderate-density residential lots, buildings in TC districts should be set back from rear property lines in order to protect the privacy and open feeling expected within residential rear yards.

(5) No interior side setbacks are required in the TC district, except when TC-zoned property abuts R-zoned property, in which case the minimum side-yard setback required in the TC district must be the same as required for a residential use on the abutting R-zoned lot.

*Comment:* Streets within town center areas are often lined with buildings that span the entire width of the lot. The standard proposed here will help reinforce that pattern, while also ensuring that a “typical” residential side yard will be provided in areas abutting neighborhood residential zoning districts.

### **109. Off-Street Parking**

(1) One off-street parking space must be provided for each dwelling unit.

(2) No off-street parking is required for nonresidential uses in TC-1 district unless the gross floor area of such uses exceeds twice the area of the lot, in which case off-street parking must be provided at a minimum ratio of [one or two] spaces per each 1,000 square feet of gross floor area in excess of twice the lot area.

(3) No off-street parking is required for nonresidential uses in TC-2 district unless the gross floor area of such uses exceeds the area of the lot, in which case off-street parking must be provided at a minimum ratio of [one or two] spaces per each 1,000 square feet of gross floor area in excess of twice the lot area.

(4) No off-street parking is required for nonresidential uses in TC-3 district unless the gross floor area of such uses exceeds 5,000 square feet of gross floor area, in which case off-street parking must be provided at a minimum ratio of [one or two] spaces per each 1,000 square feet of gross floor area in excess of 5,000 square feet.

(5) All off-street parking spaces must be located to the rear of the principal building or otherwise screened so as to not be visible from public right-of-way or residential zoning districts.

*Comment:* Although many ordinances require 1.5 or two parking spaces per dwelling unit, the nature of most TC-style districts warrants consideration of lower residential parking ratios, such as one space per unit (lower perhaps for affordable units, elderly housing, and areas with excellent transit accessibility). Exempting certain sizes of nonresidential uses from compliance with off-street parking requirements will help promote pedestrian-oriented character and encourage use/reuse of storefront retail space.

### **110. Indoor/Outdoor Operations**

All permitted uses in the TC districts must be conducted within buildings unless otherwise expressly authorized. This requirement does not apply to off-street parking or loading areas, automated teller machines, or outdoor seating areas, alone or in connection with restaurants.

### **111. Floor-to-Floor Heights and Floor Area of Ground-Floor Space**

(1) All nonresidential floor space provided on the ground floor of a mixed use building must have a minimum floor-to-ceiling height of 11 feet.

(2) All nonresidential floor space provided on the ground floor of a mixed use building must contain the following minimum floor area:

- (a) At least 800 square feet or 25 percent of the lot area (whichever is greater) on lots with street frontage of less than 50 feet; or
- (b) At least 20 percent of the lot area on lots with 50 feet of street frontage or more.

*Comment:* In areas with strong residential real estate markets, ground-floor space is sometimes viewed as an afterthought or an incidental area, particularly when developed by those with a poor understanding of mixed use development. In other words, if profit margins are

high enough on the residential units, inexperienced developers may have no incentive to make ground-floor commercial space attractive and actually usable for retail activities. These types of provisions can help ensure that ground-floor space will meet the needs of future retailers and not sit vacant for years after upper-floor residential units have been leased or sold.

### 112. Transparency

(1) A minimum of [60–75] percent of the street-facing building façade between two feet and eight feet in height must comprise clear windows that allow views of indoor nonresidential space or product display areas.

(2) The bottom edge of any window or product display window used to satisfy the transparency standard of paragraph (1) above may not be more than [3–4.5] feet above the adjacent sidewalk.

(3) Product display windows used to satisfy these requirements must have a minimum height of four feet and be internally lighted.

*Comment:* There is always a possibility that merchants will choose to block required windows with display shelves, signs, and other visual obstructions, either because they view windows as a security concern or because they desire to maximize product display area. This ordinance does not expressly prohibit this practice because of the difficulty of enforcing such prohibitions. Moreover, the most important objective is that buildings be designed to include such pedestrian-oriented features rather than later having to retrofit existing storefront designs.

### 113. Doors and Entrances

(1) Buildings must have a primary entrance door facing a public sidewalk. Entrances at building corners may be used to satisfy this requirement.

(2) Building entrances may include doors to individual shops or businesses, lobby entrances, entrances to pedestrian-oriented plazas, or courtyard entrances to a cluster of shops or businesses.

*Comment:* Requiring ground-floor windows and sidewalk-facing entrances help make for a more pleasing pedestrian environment. People are attracted to spaces with interesting pedestrian-scale views and visually appealing elements, such as window displays. Identifiable and accessible building entrances make it easier for pedestrians to navigate the area and thus encourage them to spend time there.

### 114. Vehicle and Driveway Access

No curb cuts are allowed for lots that abut alleys.

*Comment:* Driveways that cross sidewalks disrupt pedestrian movements and pose safety threats. They should be the rare exception in neighborhood-oriented mixed use districts.

### 115. Drive-through Facilities

Drive-through facilities for vehicles are prohibited in all TC districts.

*Comment:* Some communities may elect to treat businesses with drive-through facilities as a conditional use, requiring case-by-case approval. When that approach is used, standards should be included requiring that drive-through windows be located behind the building and that pedestrian circulation routes be protected from auto traffic. Note that this prohibition does not apply to service windows, such as a service window for an ice cream parlor.



*Figure 4.3.5. Transparency requirements of street-facing building facades and primary entrance doors facing public sidewalks help make for a more pleasing pedestrian environment.*

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## Model Affordable Housing Density Bonus Ordinance

Many communities today are adopting inclusionary zoning ordinances with the intent of increasing the supply of affordable housing. These ordinances either require or encourage the provision of affordable housing in market-rate development, typically by the provision of density bonuses and other incentives. The ordinances include:



PRIMARY SMART GROWTH  
PRINCIPLE ADDRESSED:

- Create a range of housing choices

- Definitions, including those defining “affordable housing” and “low- and moderate-income households”;
- Procedures for the review of affordable housing developments;
- A requirement that the developer of housing enter into development agreements that ensure that the affordable housing, whether for sale or for rent, remains affordable;
- Designation of an officer or body to review and approve applications for developments that include affordable housing; and
- Provisions for enforcement.





*Figure 4.4.1. The mandatory alternative for affordable housing requires some amount of affordable housing in every residential development. Griggs Farm in Princeton, New Jersey, contains half affordable housing and half market-rate housing.*

Some communities with such ordinances have made a political commitment to such housing, recognizing that, in some real estate markets, affordable housing would not be produced without governmental intervention. Others have adopted such ordinances to respond to state-established housing goals. In addition, such ordinances ensure that critical governmental service workers (e.g., teachers, firefighters, and police officers) can afford to live in communities where they work despite their low pay. Numerous monographs and studies have described the operation and success of such programs in both suburban areas and central cities. For a good overview, see Morris (2000), Ross (2003), and Brunick (2004a and 2004b).

The following model ordinance for affordable housing provides two alternatives: (1) a mandatory alternative in which affordable housing is required, in some manner, in all development that produces new residential units, either through new construction or through rehabilitation and conversion of existing units or commercial space; (2) an incentive-based approach in which a density bonus of one market-rate unit for each affordable unit is offered as of right. In either case, the affordable housing density bonus is offered for all types of residential construction. The model ordinance uses the U.S. Department of Housing and Urban Development definitions of low and moderate income to establish eligibility criteria for purchase or rental of affordable units.

An applicant for an affordable housing development would be required to submit an affordable housing development plan and enter into a development agreement with the local government. The development agreement would fix the responsibilities of the respective parties with regard to the provision of affordable housing. Under this model, affordable housing units need not only be those subsidized by the federal or state government. Rather, they can be subject to private deed restrictions to ensure they remain affordable for a period of time, typically for 30 years. In the case of for-sale affordable units, purchasers would have to be income-qualified, and appreciation of the dwelling unit would be calculated on the basis of certain listed factors to ensure that the unit remains affordable in the case of resale. In the case of for-rent affordable units, the development agreement would establish an income-qualification process to ensure that the affordable units are rented to eligible households. The model ordinance also describes the creation of an affordable housing trust fund that can be used for a variety of purposes, including waivers of permit and tap-in fees.

#### 101. Purpose

The purposes of this ordinance are to:

- (a) Require the construction of affordable housing [or payment of fees-in-lieu] as a portion of new development within the community;
- [or]
- (a) Create incentives for the provision of affordable housing as a portion of certain new development within the community;
- (b) Implement the affordable housing goals, policies, and objectives contained in the comprehensive plan;
- (c) Ensure the opportunity of affordable housing for employees of businesses that are located or will be located in the community; [and]
- (d) Maintain a balanced community that provides housing for people of all income levels; and
- (e) Implement planning for affordable housing as required by [cite to applicable state statutes].

#### 102. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

**Affordable housing.** Housing with a sales price or rental amount within the means of a household that may occupy moderate- and low-income housing. In

the case of dwelling units for sale, affordable means housing in which mortgage, amortization, taxes, insurance, and condominium or association fees, if any, constitute no more than [30] percent of such gross annual household income for a household of the size that may occupy the unit in question. In the case of dwelling units for rent, affordable means housing for which the rent and utilities constitute no more than [30] percent of such gross annual household income for a household of the size that may occupy the unit in question.

**Affordable housing development.** Housing subsidized by the federal or state government, or any housing development in which at least [20] percent of the housing units are affordable dwelling units.

**Affordable housing development agreement.** A written agreement between an applicant for a development and the [city or county] containing specific requirements to ensure the continuing affordability of housing included in the development.

**Affordable housing development plan.** A plan prepared by an applicant for an affordable housing development under this ordinance that outlines and specifies the development's compliance with the applicable requirements of this ordinance.

**Affordable housing dwelling unit.** A dwelling unit subject to covenants or restrictions requiring such dwelling units to be sold or rented at prices preserving them as affordable housing for a period of at least [30] years.

**Affordable housing trust fund.** A pool of money created by the [city or county] pursuant to Section 109 of this ordinance.

**Affordable housing unit.** A dwelling unit subsidized by the federal or state government or an affordable dwelling unit.

*Comment:* Note that an "Affordable Housing Unit" can be either federally or state subsidized or subject to covenants and deed restrictions that ensure its continued affordability.

**Conversion.** A change of a residential rental development or a mixed use development that includes rental dwelling units to a development that contains only owner-occupied individual dwelling units, or a change of a development that contains owner-occupied individual units to a residential rental development or mixed use development.

**Density bonus.** An increase in the number of market-rate units permitted on a site, provided as an incentive for the construction of affordable housing pursuant to this ordinance.

**Development.** One or more dwelling units on a particular lot or contiguous lots including, without limitation, a planned unit development, site plan, or subdivision.

**Lot.** The basic development unit for determination of a parcel's area, width, depth, and other dimensional variations; or, a parcel of land whose boundaries have been established by some legal instrument, such as a recorded deed or recorded map, and that is recognized as a separate legal entity for purposes of transfer of title.

**Low-income housing.** According to the U.S. Department of Housing and Urban Development, housing that is affordable, for either home ownership or rental, and that is occupied, reserved, or marketed for occupancy by households with a gross household income that does not exceed 50 percent of the median gross household income for households of the same size within the [region or county] in which the housing is located.

**Median gross household income.** The median income level for the [region or county], as established and defined in the annual schedule published by the secretary of the U.S. Department of Housing and Urban Development, adjusted for household size.

**Moderate-income housing.** According to the U.S. Department of Housing and Urban Development, housing that is affordable, for either home ownership or rental, and that is occupied, reserved, or marketed for occupancy by households with a gross household income that is greater than 50 percent but does not exceed 80 percent of the median gross household income for households of the same size within the [region or county] in which the housing is located.

**Renovation.** A physical improvement that adds to the value of real property but that excludes painting, ordinary repairs, and normal maintenance.

### 103. Scope of Application; Density Bonus

[Alternative 1: Mandatory Affordable Units]

(1) All of the following developments that result in or contain five or more residential dwelling units shall include sufficient numbers of affordable housing units in order to constitute an affordable housing development as determined by the calculation in paragraph (2), below:

- (a) New residential construction, regardless of the type of dwelling unit
- (b) New mixed use development with a residential component
- (c) Renovation of a multiple-family residential structure that increases the number of residential units from the number of units in the original structure
- (d) Conversion of an existing single-family residential structure to a multiple-family residential structure
- (e) Development that will change the use of an existing building from nonresidential to residential
- (f) Development that includes the conversion of rental residential property to condominium property

Developments subject to this paragraph include projects undertaken in phases, stages, or otherwise developed in distinct sections.

(2) To calculate the minimum number of affordable housing units required in any development listed in paragraph (1) above, the total number of proposed units shall be multiplied by 20 percent. If the product includes a fraction, a fraction of 0.5 or more shall be rounded up to the next higher whole number, and a fraction of less than 0.5 shall be rounded down to the next lower whole number.

(3) Any development providing affordable housing pursuant to paragraph (1) above shall receive a density bonus of one market-rate unit for each affordable housing unit provided. All market-rate units shall be provided on-site, except that in a development undertaken in phases, stages, or otherwise developed in distinct sections, such units may be located in other phases, stages, or sections, subject to the terms of the affordable housing development plan.

(4) Any development containing four dwelling units or fewer shall comply with the requirement to include at least 20 percent of all units in a development as affordable housing by:

- (a) Including one additional affordable housing dwelling unit in the development, which shall constitute a density bonus;
- (b) Providing one affordable housing dwelling unit off-site; or
- (c) Providing a cash-in-lieu payment to the [city's or county's] affordable housing trust fund proportional to the number of market-rate dwelling units proposed.

*Comment: Under (4)(c), the proportion of the in-lieu fee would be computed as follows. Assume an affordable unit in-lieu fee of \$120,000. In a four-unit development, the fee would be four-fifths of the \$120,000, or \$96,000; in a three-unit development, the fee would be three-fifths, or \$72,000, and so on.*

[Alternative 2: Incentives for Affordable Units]

Any affordable housing development or any development that otherwise includes one affordable housing dwelling unit for each four market-rate dwelling units shall receive a density bonus of one market-rate unit for each affordable housing dwelling unit provided on-site.

### 104. Cash Payment in Lieu of Housing Units

*Comment: This section would be required only under a mandatory affordable housing alternative.*

(1) The applicant may make a cash payment in lieu of constructing some or all of the required housing units only if the development is a single-family detached development that has no more than [10] dwelling units. In the case of an in-lieu payment, the applicant shall not be entitled to a density bonus.

(2) The [legislative body] shall establish the in-lieu per-unit cash payment on written recommendation by the [planning director or city or county manager] and adopt it as part of the [local government's] schedule of fees. The per-unit amount shall be based on an estimate of the actual cost of providing an affordable housing unit using actual construction-cost data from current developments within the [local government] and from adjoining jurisdictions.

At least once every three years, the [legislative body] shall, with the written recommendation of the [planning director or city or county manager], review the per-unit payment and amend the schedule of fees.

(3) All in-lieu cash payments received pursuant to this ordinance shall be deposited directly into the affordable housing trust fund established by Section 109 below.

(4) For the purposes of determining the total in-lieu payment, the per-unit amount established by the [legislative body] pursuant to paragraph (2) above shall be multiplied by 20 percent of the number of units proposed in the development. For the purposes of such calculation, if 20 percent of the number of proposed units results in a fraction, the fraction shall not be rounded up or down. If the cash payment is in lieu of providing one or more of the required units, the calculation shall be prorated as appropriate.

#### 105. Application and Affordable Housing Development Plan

(1) For all developments [in which affordable housing is required to be provided *or* in which the applicant proposes to include affordable housing], the applicant shall complete and file an application on a form required by the [local government] with the [city or county department responsible for reviewing applications]. The application shall require, and the applicant shall provide, among other things, general information on the nature and the scope of the development as the [local government] may determine is necessary to properly evaluate the proposed development.

(2) As part of the application required under paragraph (1) above, the applicant shall provide to the [local government] an affordable housing development plan. The plan shall be subject to approval by the [local government] and shall be incorporated into the affordable housing development agreement pursuant to Section 106 below. An affordable housing development plan is not required for developments in which the affordable housing obligation is satisfied by a cash payment in lieu of construction of affordable housing units. The affordable housing development plan shall contain, at a minimum, the following information concerning the development:

- (a) A general description of the development, including whether the development will contain units for rent or for sale;
- (b) The total number of market-rate units and affordable housing units;
- (c) The number of bedrooms in each market-rate unit and each affordable unit;
- (d) The square footage of each market-rate unit and of each affordable unit measured from the interior walls of the unit and including heated and unheated areas;
- (e) The location in the development of each market-rate and affordable housing unit;
- (f) If construction of dwelling units is to be phased, a phasing plan stating the number of market-rate and affordable housing units in each phase;
- (g) The estimated sale price or monthly rent of each market-rate unit and each affordable housing unit;
- (h) Documentation and plans regarding the exterior appearances, materials, and finishes of the affordable housing development and each of its individual units; and
- (i) A proposed marketing plan to promote the sale or rental of the affordable units within the development to eligible households.

#### 106. Criteria for Location, Integration, Character of Affordable Housing Units

An affordable housing development shall comply with the following criteria:

- (a) Affordable housing units in an affordable housing development shall be mixed with, and not clustered together or segregated in any way from, market-rate units.
- (b) If the affordable housing development plan contains a phasing plan, the phasing plan shall provide for the development of affordable housing units concurrently with the market-rate units. No phasing plan shall provide that the affordable housing units built are the last units in an affordable housing development.
- (c) The exterior appearance of affordable housing units in an affordable housing development shall be made similar to market-rate units by the



Alan Mallich

*Figure 4.4.2. Affordable housing units should not be differentiated from market rate units by exterior appearance; in the upscale suburban community of Cranbury, New Jersey, affordable multifamily units are designed to look like large, single-family homes.*



provision of exterior building materials and finishes substantially the same in type and quality.

*Comment: Some of the affordable housing ordinances reviewed by APA contained minimum-square-footage requirements for dwelling units or suggested that there be a mix of units with different numbers of bedrooms, especially for for-rent projects contain sufficient numbers of bedrooms for larger families. While minimum-square-footage requirements, especially for bedroom sizes, are customarily found in housing codes, rather than zoning codes, it is possible to amend this model to include such minimums.*

#### **107. Affordable Housing Development Agreement**

*Comment: A development agreement between the local government and the developer of the affordable housing project is necessary to officially record the commitments of both parties, thus eliminating ambiguity over what is required regarding maintaining the affordability of the units and establishing and monitoring the eligibility of those who purchase or rent them.*

(1) Prior to the issuance of a building permit for any units in an affordable housing development or any development in which an affordable unit is required, the applicant shall have entered into an affordable housing development agreement with the [city or county]. The development agreement shall set forth the commitments and obligations of the [city or county] and the applicant, including, as necessary, cash in-lieu payments, and shall incorporate, among other things, the affordable housing plan.

(2) The applicant shall execute any and all documents deemed necessary by the [city or county] in a form to be established by the [law director], including, without limitation, restrictive covenants, deed restrictions, and related instruments (including requirements for income qualification for tenants of for-rent units) to ensure the continued affordability of the affordable housing units in accordance with this ordinance.

(3) Restrictive covenants or deed restrictions required for affordable units shall specify that the title to the subject property shall be transferred only with prior written approval by the [city or county].

#### **108. Enforcement of Affordable Housing Development Agreement; Affordability Controls**

(1) The [planning director] shall promulgate rules as necessary to implement this ordinance. On an annual basis, the director shall publish or make available copies of the U.S. Department of Housing and Urban Development household income limits and rental limits applicable to affordable units within the local government's jurisdiction, and determine an inflation factor to establish a resale price of an affordable unit.

(2) The resale price of any affordable unit shall not exceed the purchase price paid by the owner of that unit with the following exceptions:

- (a) Customary closing costs and costs of sale;
- (b) Costs of real estate commissions paid by the seller if a licensed real estate salesperson is employed;
- (c) Consideration of permanent capital improvements installed by the seller; or
- (d) An inflation factor to be applied to the original sale price of a for-sale unit pursuant to rules established pursuant to paragraph (1) above.

(3) The applicant or his or her agent shall manage and operate affordable units and shall submit an annual report to the [city or county] identifying which units are affordable units in an affordable housing development, the monthly rent for each unit, vacancy information for each year for the prior year, monthly income for tenants of each affordable unit, and other information as required by the [city or county], while ensuring the privacy of the tenants. The annual report shall contain information sufficient to determine whether tenants of for-rent units qualify as low- or moderate-income households.

(4) For all sales of for-sale affordable housing units, the parties to the transaction shall execute and record such documentation as required by the affordable housing development agreement. Such documentation shall include the provisions of this ordinance and shall provide, at a minimum, each of the following:

- (a) The affordable housing unit shall be sold to and occupied by eligible households for a period of 30 years from the date of the initial certificate of occupancy.



- (b) The affordable housing unit shall be conveyed subject to restrictions that shall maintain the affordability of such affordable housing units for eligible households.
- (5) In the case of for-rent affordable housing units, the owner of the affordable housing development shall execute and record such document as required by the affordable housing development agreement. Such documentation shall include the provisions of this ordinance and shall provide, at a minimum, each of the following:
- (a) The affordable housing units shall be leased to and occupied by eligible households.
  - (b) The affordable housing units shall be leased at rent levels affordable to eligible households for a period of 30 years from the date of the initial certificate of occupancy.
  - (c) Subleasing of affordable housing units shall not be permitted without the express written consent of the [planning director].

#### 109. Affordable Housing Trust Fund

*Comment: This section establishes a housing trust fund into which monies from cash in-lieu payments and other sources of revenues will be deposited. Because of the variation in how such funds could be established and the differences in state law, no model language is provided.*

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## Model Unified Development Permit Review Process Ordinance



PRIMARY SMART GROWTH  
PRINCIPLE ADDRESSED:

- Make predictable and cost-effective development decisions

This model ordinance establishes a unified development permit review process. It brings together the various types of development permissions and related approvals under a single procedural umbrella while retaining the authority of permit-approving officers and bodies. The model also groups in one place the application requirements, the schedule for action, and decision-making criteria for different types of land-use decisions. The ordinance draws on statutory models contained in the American Planning Association's *Growing Smart Legislative Guidebook* (2002 edition), Sections 10-201 to 10-211, as well as the *State of Oregon's Model Development Code and User's Guide for Small Cities* (September 1999), Section 4 (Applications and Review Procedures).

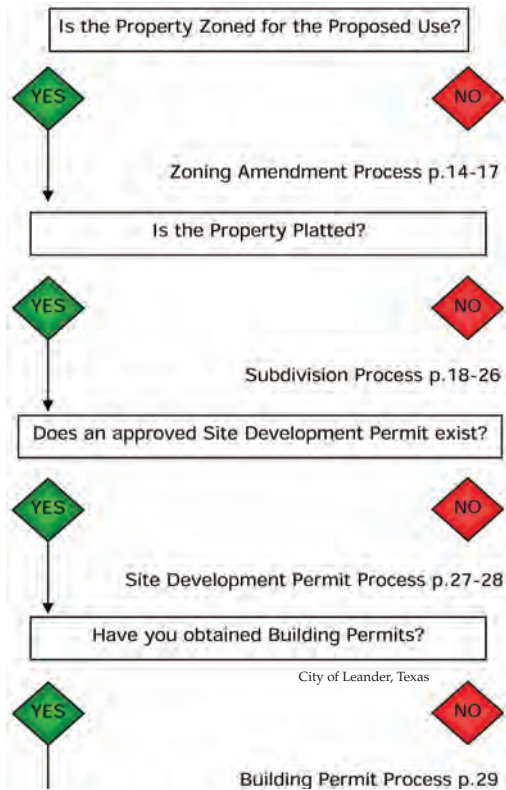


Figure 4.5.1. City of Leander Development Guide

The unified development permit review process applies to all land-use decisions, whether by the legislative body, the planning commission, a hearing officer, or a specialized body (e.g., a historic preservation commission). The permit review process has three elements: (a) a completeness review for applications; (b) action on the development application itself; and (c) an appeal process.

Under the model, an applicant for a development permit, a preliminary approval (such as that for a preliminary subdivision), or a zoning-district map amendment applies to the local government for approval. The local government, through the appropriate official, determines within a certain period of time whether the application is complete (i.e., whether all the mechanical requirements for submitting an application are present). If the application is complete, the local government issues a completeness determination and processes the application according to the standards in the land development regulations. If the local government determines the application is not complete, the applicant has a certain period of time in which to respond with the needed information. If the applicant does not respond, the application is automatically rejected, unless provisions for an extension are secured. If the local government fails to conduct a completeness review in the time established by the ordinance, the application is deemed complete.

Action on the development application takes two forms. The first is an administrative review, which is the traditional review for routine building and zoning permits, where no hearing is required and an administrative officer makes the decision. The second type of review requires a record hearing before the approving authority (e.g., for a conditional use permit). In such a hearing, a complete record, including a transcript of the hearing, is created. After such a hearing, the approving authority makes a written decision. With both application types, a decision must occur within certain time limits or the application is deemed approved (although extensions are possible).

Any person aggrieved by the land-use decision may appeal to an appeals board, which is the board of zoning appeals in most communities, although it could be a hearing officer. For a land-use decision that was the result of a record hearing, the appeals board reviews only the written record and does not hold another hearing. For a land-use decision that is the result of an administrative review, the appeals board must hold a record hearing.

Not all land-use decisions are subject to appeal, however. For example, a city council's refusal to amend the text of the zoning ordinance, which is a legislative action, could not be appealed. Similarly, a preliminary subdivision denial could not be appealed because the decision is not a final one. Denial of a final subdivision plat, however, could be appealed.

The model also creates a consolidated permit review process for development projects that require multiple permits. The zoning administrator or another designated official serves as the permit review coordinator and has discretion in scheduling hearings. Hearings may be combined in order to reduce their number. Under the consolidated permit review process, the zoning permit, which serves as the master permit, is the last permit issued, and it signifies that the developer has obtained all subordinate development permissions.

The consolidated permit review process applies only to development projects for which the local government issues permits. It

would not apply, for example, to projects that require state and local approval under separate application procedures (i.e., a project needing both building and zoning permits from the local government and a wetland permit for a state department). While it is possible to tailor a review process that would combine state and local approvals, such a process would of necessity call for action from both levels of government.

The model authorizes the permit review coordinator to establish a technical review committee of local government officials and officials from other governmental agencies (e.g., health departments or the local soil and water conservation district) and nongovernmental agencies (e.g., the local utility company). Finally, Section 116 of the model establishes a procedure for the rendering of written interpretations of the land development regulations upon request.

#### 101. Purpose

The purposes of this ordinance are to:

- (a) Provide for the timely consideration of development permit review applications;
- (b) State the requirements for applying for and receiving a development permit;
- (c) Authorize a consolidated permit review process for land-use decisions; and
- (d) State the manner for the appeal of land-use decisions.

#### 102. Authority

This ordinance is enacted pursuant to the authority granted by [cite to state statute or local government charter or similar law].

#### 103. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

**Administrative review.** A review of an application for a development permit based on documents, materials, and reports, with no testimony or submission of evidence as would be allowed at a record hearing.

**Aggrieved.** A person, neighborhood planning council, neighborhood or community organization, or governmental unit who has been harmed or injured or is expected to be harmed or injured by a land-use decision [in a manner that is distinct from any harm or injury caused to the public generally] and whose asserted interests are among those the local government is required to consider when it makes the land-use decision.

*Comment: The definition of "aggrieved" determines who can be party to a hearing, who can submit information in an administrative review, who has standing in an appeal, who can appeal decisions to hearing officers, and who can bring judicial appeals. The "aggrieved" test has two elements: (1) harm or injury, and (2) an interest that the local government was required to consider in making its decision. Inclusion of the bracketed language requires persons claiming standing to demonstrate they have suffered harm distinct from the harm to the general public. Removing the bracketed language still requires a showing of harm or injury but not a demonstration that the harm is in some way special or unique. In most states, the local government is required to consider the interest of abutting and confronting property owners when making certain types of land-use decisions. In others, they may consider the interests of neighborhood associations, which do not own property.*

**Appeals board.** Any officer or body designated by the legislative body to hear appeals from land-use decisions.

*Comment: The appeals board could be a single hearing examiner or the board of zoning appeals.*

**Approving authority.** The officer or body with the authority to make a land-use decision.

**Certificate of appropriateness.** The written decision by a local historic preservation or design review board that a proposed development is in compliance with a historic preservation or design review ordinance.

**Chief building official.** The local government official responsible for administering and enforcing the building code, including the issuance of building permits.



**Code interpretation.** A written decision issued by the permit review coordinator or other designated administrative official regarding the interpretation of any provision set forth in the land development regulations.

**Completeness determination.** A written finding by a local government official that a development permit application contains all required information so that it can be reviewed for compliance with land development regulations and a land-use decision can be made.

**Conditional use.** A land use or category of land uses authorized, but not permitted as of right, in designated zoning districts by a local government's land development regulations.

**Development permit.** Any written approval or decision by a local government under its land development regulations that gives authorization to undertake some category of development, including, but not limited to, a building permit, zoning permit, final subdivision plat, minor subdivision, resubdivision, conditional use, variance, appeal decision, planned unit development, site plan, [and] certificate of appropriateness[.], [and zoning district map amendment(s) by the legislative body]. "Development permit" does not mean the adoption or amendment of a local comprehensive plan or any subplan, the adoption or amendment of the text of land development regulations, or a liquor license or other type of business license.

*Comment:* In some states, a parcel-specific rezoning decision is an administrative or policy decision and can therefore be treated as a development permit. In most states, however, a rezoning is a legislative decision and, for this reason, the phrase is placed in brackets. Individuals adapting this model should consult with an attorney licensed in their state to determine the status of zoning map amendments.

**Land development regulations.** Any building, zoning, subdivision, impact fee, site plan, floodplain, or stormwater regulations or other governmental controls that affect the use of land or the density or intensity of that use.

**Land use.** The conduct of any activity on land, including, but not limited to, the continuation of any activity, the commencement of which is defined herein as "development."

**Land-use decision.** A decision made by an approving authority on a development permit application, including decisions made following a record hearing or record appeal, and preliminary approvals and amendments to the zoning map and text. A "completeness decision," "development permit," and "master permit" are "land-use decisions" for the purposes of this ordinance.

**Master permit.** A permit issued by a local government under its land development regulations and any other applicable ordinances, rules, and statutes that incorporates all development permits together as a single permit and that allows development to commence.

*Comment:* The master permit is the unification of all development permits necessary for a land development. For example, in order to build a single-family home in a subdivision that has been platted, it may be necessary to obtain only a building permit (approving the plans for the residence itself) and a zoning permit (indicating that the use is allowed and the structure meets zoning standards. If the two permits are granted, the master permit would automatically be issued, allowing development to commence.

**Permit review coordinator.** The [zoning administrator or other designated administrative official] who is responsible for administering the consolidated permit review process and for issuing a master permit.

**Preliminary approval.** An approval by the local government that is a prerequisite for the approval of a development permit but does not by itself allow development to commence.

**Record.** The written decision on a development permit application and any documents identified in the written decision as having been considered as the basis for the decision.

**Record appeal.** An appeal to a local government officer or body from a record hearing on a development permit application.

**Record hearing.** A hearing, conducted by the approving authority that creates the local government's record through testimony and submission of evidence and information, under the procedures required by this ordinance. "Record hearing" also means a record hearing held in an appeal, when no record hearing was held on the development permit application.

**Rezoning.** An amendment that changes the zoning district map.

**Variance.** A minor deviation from any of the numerical dimensional requirements of the land development regulations.

**Zoning administrator.** The local government official responsible for administering and enforcing the zoning code and land development regulations, including the issuance of zoning permits and master permits.

**Zoning permit.** The development permit signed by the zoning administrator that is a prerequisite for the commencement of a use or the construction, reconstruction, restoration, alteration, conversion, or installation of a structure or a building, which confirms that such use, structure, or building complies with the zoning code and which also serves as the master permit in the consolidated permit review process.

#### **104. Schedule for Decisions on Development Permits and Preliminary Approvals; Application Requirements; Preapplication Meetings**

(1) The purpose of this section is to identify the types of development permits issued by the [city or county], which is responsible for determining whether applications are complete, whether an application can be approved, whether a record hearing is required, and the maximum number of days allowed after the completeness determination for a decision on the application.

(2) Decisions on development permit applications, preliminary approvals, and amendments to the zoning map and the text of the land development regulations shall be made according to the following schedule. (See Table 4.5.1 on page 96.)

*Comment: This table lists the typical types of development permits and approvals granted by a local government. The times shown are typical but may vary. A building permit is necessary when new construction takes place. A zoning permit is issued when new construction changes a building's exterior dimensions or where there is a change of use. If a conditional use permit for a specific use is granted, a zoning permit is nonetheless required as the final determination that all zoning requirements are satisfied. While approval of a preliminary plan of a subdivision does not by itself authorize development, it is a condition precedent to the review of a final subdivision plat. Consequently, it is included in this table as a "preliminary approval."*

*The table treats a rezoning as a legislative action not requiring a record hearing because the only route of appeal is directly to the courts. Nonetheless, some local governments may treat rezonings as if they were administrative and compile a record, including a transcript of the proceedings. In some states, like Oregon, zoning map changes are considered administrative or quasi-judicial and require more formal hearings. Because a sign permit is a ministerial action involving no discretion, the time limit on approval is proposed to be 15 days.*

(3) In computing any period of time prescribed or allowed by this ordinance, the day of the act or event from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included, unless it is a Saturday, Sunday, or legal holiday, in which event the period runs until the end of the next day that is not a Saturday, Sunday, or a legal holiday.

(4) The permit review coordinator shall prepare and issue a standard form requiring information common to all applications, including:

- (a) Name, address, telephone number, and electronic mail address (if available) of applicant;
- (b) Address or legal description of the location of the property for which the development permit, preliminary approval, or zoning map amendment is sought;
- (c) Area in square feet or acres of property described in (4)(b) above;
- (d) Zoning district designation for property described in (4)(b) above;
- (e) Type of development permit, preliminary approval, or zoning map or text amendment being sought;
- (f) For new construction or additions to an existing building or structure, a site plan, drawn to a scale of [insert scale], showing the distances of the new construction or addition to lot lines and the dimensions of the lot; and
- (g) Fee schedule and location on application form for calculation of the total fee to be charged.

In addition, the coordinator shall prepare forms for specific additional information required for development permits, preliminary approvals, zon-

TABLE 4.5.1. SCHEDULE FOR DECISIONS ON DEVELOPMENT PERMITS AND PRELIMINARY APPROVALS

Type of Development Permit, Preliminary Approval (P.A.), or Legislative Action (L.A.)	Citation to Authorizing Section	Approving Authority	Responsibility for Completeness Determination	Record Hearing Required	Maximum Review Time in Days for Land-Use Decision after Completeness Determination
Building permit	[Insert citation]	Chief Building Official	Chief Building Official	No	30
Zoning permit	[Insert citation]	Zoning Administrator	Zoning Administrator	No	30
Sign permit	[Insert citation]	Zoning Administrator	Zoning Administrator	No	15
Conditional use permit	[Insert citation]	Planning Commission	Zoning Administrator	Yes	45
Variance	[Insert citation]	Board of Zoning Appeals	Zoning Administrator	Yes	45
Planned unit development preliminary development plan (P.A.)	[Insert citation]	Legislative Body	Zoning Administrator	No	60
Planned unit development final development plan	[Insert citation]	Legislative Body	Zoning Administrator	Yes	60
Subdivision preliminary plan (P.A.)	[Insert citation]	Planning Commission	Zoning Administrator	No	60
Subdivision final plat	[Insert citation]	Planning Commission	Zoning Administrator	Yes	60
Lot split, minor subdivision, resubdivision	[Insert citation]	Planning Commission	Zoning Administrator	Yes	30
Certificate of appropriateness	[Insert citation]	Historic and Architectural Preservation Commission (or similarly named body)	Zoning Administrator	Yes	45
Zoning district map amendment (L.A.)	[Insert citation]	Legislative Body	Zoning Administrator	[Depends on whether rezoning is legislative or administrative in nature]	60
Text amendment to land development regulations (L.A.)	[Insert citation]	Legislative Body	Law Director	No	90
Master permit for building permit and zoning permit	[Insert citation]	Chief Building Official and Zoning Administrator	Chief Building Official, Zoning Administrator as Permit Review Coordinator	No	30
Master permit for building permit, zoning permit, conditional use, or variance, or certificate of appropriateness	[Insert citation]	Chief Building Official, Zoning Administrator, Planning Commission, Board of Zoning Appeals, or Historic and Architectural Preservation Commission	Chief Building Official, Zoning Administrator as Permit Review Coordinator	Yes	60
[Insert other combinations of development permits, as appropriate, for master permits]	[Insert citation]	[Insert name of officer or body]	Chief Building Official, Zoning Administrator as Permit Review Coordinator	[Insert as necessary]	[Insert as necessary]

ing map amendments, and amendments to the text of the land development regulations.

**Comment:** *Types of information typically required include:*

- *Special information for the different type of developments, such as a subdivision or a conditional use;*
- *Names and addresses of property owners within a certain radius of the property;*
- *Submission of certain drawings in certain formats, such as electronic or on certain drafting media, or at certain scales;*
- *Engineering calculations, including runoff calculations;*
- *Descriptions, in written and graphic form, of mitigation measures; and*
- *Statements explaining how the application satisfies each and all of the relevant criteria and standards in sufficient detail for review and decision making.*

(5) In order to be determined complete, an application for a development permit or preliminary approval, a zoning map amendment, or amendment to the text of the land development regulations shall contain the following information:

**Comment:** *The purpose of this section is to list all of the application requirements for each type of development permit or similar action. Each of the following types of development permits, preliminary approvals, or applications for zoning map or text amendments requires different types of information, although no attempt has been made to list all of them. Common to each would be: (1) completion of an application form; (2) a scale drawing of the proposed building on the site in relation to lot lines; and (3) payment of the required fee. Building permit application requirements would be governed by the applicable building code, which is often based on a national model. In addition, applications for subdivisions and planned unit developments would require maps drawn in a manner required by the local government and containing particular information.*

*Other information may be required for applications. In some cases, the land development regulations will require a narrative statement describing how the applicant believes the proposal will satisfy the decision-making criteria. For applications that require a record hearing, providing the names and addresses of all owners of record of real property within a certain radius of the site is necessary in order to give notice. Sometimes, technical information will be required. An application for a final plat of a subdivision would be accompanied by engineering plans and calculations for runoff. In the case of a certificate of appropriateness for changes to a historic structure, the applicant would need to submit drawings of building elevations and, in some cases, examples of proposed materials or colors. A zoning map amendment would require a legal description of the property proposed to be rezoned and the name of the specific zoning district classification. In some cases, the legal description would need to be prepared by a registered surveyor to ensure its accuracy.*

- (a) Building permit  
[Insert information requirements]
- (b) Zoning permit  
[Insert information requirements]
- (c) Sign permit  
[Insert information requirements]
- (d) Conditional use permit  
[Insert information requirements]
- (e) Variance  
[Insert information requirements]
- (f) Planned unit development preliminary plan  
[Insert information requirements]
- (g) Planned unit development final plan  
[Insert information requirements]
- (h) Subdivision preliminary plan  
[Insert information requirements]
- (i) Subdivision final plat  
[Insert information requirements]
- (j) Certificate of appropriateness  
[Insert information requirements]
- (k) Lot split, minor subdivision, or resubdivision  
[Insert information requirements]

- (l) Zoning map amendment  
[Insert information requirements]
- (m) Amendment to text of land development regulations  
[Insert information requirements]

(6) The permit review coordinator shall be responsible for convening, at the request of an applicant, a preapplication meeting with officials of the local government and other governmental and nongovernmental organizations who are involved in reviewing and acting on a development, whether or not the applicant is applying for a consolidated permit, provided that no official who is responsible for a land-use decision made on the basis of a record hearing shall participate in the preapplication meeting. At such a meeting, the permit review coordinator shall:

- (a) Identify the comprehensive plan policies and plan map designations applicable to the proposal;
- (b) Identify relevant ordinance provisions, including substantive and procedural requirements, applicable to the proposal;
- (c) Provide available technical data that will aid the applicant;
- (d) Identify other governmental policies and regulations that relate to the proposal; and
- (e) Identify any other reasonable opportunities or constraints concerning the application.

Failure of the permit review coordinator to provide any of the information in (a) to (e) above shall not constitute a waiver of any criteria or requirements for the application.

**Comment:** Paragraph (6) allows the permit review coordinator to convene meetings for the applicant that would include local government officials, the local public health department, and the local utility company. All would be involved, for example, in the review of a subdivision. Such a committee could also include officials from adjoining local governments when a development would be located partly in another jurisdiction.

One advantage of such a meeting is that, early in the design process, the applicant is given information that clarifies how the land development regulations collectively apply to the property. This will prevent problems arising from applicants misunderstanding development regulations and then spending time and money to have plans prepared that may violate those regulations. In addition, it allows an applicant to determine if variances, which are minor departures from the strict and literal interpretation of the zoning ordinance, are in fact needed for the project, or if good design alternatives are available that lessen or eliminate the need for variances.

The limitation on the participation of certain officials in the preapplication meeting is to ensure that officials who must make a decision based on a record created at a hearing are not involved in *ex parte* contacts with applicants or others. For example, if a development involved a variance from the board of zoning appeals, a member of the board of zoning appeals could not participate. On the other hand, a preapplication meeting could involve the local government's engineer, building official, and planning director.

(7) The permit review coordinator may establish a technical advisory committee of the local government and other governmental and nongovernmental organizations that would be involved in reviewing and acting on a development to coordinate action on applications for development permits and preliminary approvals. A technical advisory committee, however, shall have no authority to approve, approve with conditions, or deny applications.

**Comment:** Paragraph (7) describes the type of technical advisory committee typically established within a local government to review certain types of development involving multiple decision makers (e.g., subdivisions and PUDs). It is important, for example, that the views of the health department in terms of minimum lot size for a septic tank or friendliness to pedestrians and bicyclists be taken into consideration by the planning department in the review of a subdivision. Similarly, the parks and recreation department may have an opinion on the location of a proposed park in a new subdivision or PUD.

#### **105. Consolidated Permit Review Process; Permit Coordinator**

(1) The purpose of this section is to establish a process by which an applicant may apply at one time for a master permit for all development permits, preliminary approvals, and zoning map amendments needed for a development and to have the application considered by approving authorities in a timely manner that minimizes the number of record hearings.



- (2) An applicant for a master permit shall apply to the permit review coordinator on forms provided by the local government.
- (3) The permit review coordinator shall be responsible for:
- (a) Serving as the single point of contact with the applicant and other officials, boards, commissions, and the public in the consolidated permit review process;
  - (b) Distributing permit application material to the officials and the boards and commissions responsible for determining the completeness of the application, approving individual development permits, and taking other actions listed in Section 104, above;
  - (c) Scheduling record hearings;
  - (d) Issuing a completeness determination for those permits listed in Section 104 other than building permits and amendments to the text of the land development regulations (in the case of master permits, the permit coordinator shall be responsible for coordinating completeness reviews on behalf of the local government and providing the applicant with copies of all completeness determinations by all local government officials, as applicable); and
  - (e) Issuing the master permit.
- (4) The permit review coordinator shall have the discretion to schedule a single record hearing for all types of development permits or to schedule multiple record hearings in phases before approving authorities. These hearings are to be limited to reviewing the specific type of development permit that is the subject of the hearing, so that the review of the application may be completed within the time limit set for a master permit. If more than one approval authority is required to decide on applications, the decision shall be made by the approving authority having original jurisdiction over one of the applications in the following order of preference:
- (a) [Legislative body]
  - (b) Planning commission
  - (c) Board of zoning appeals
  - (d) [Zoning hearing examiner, if applicable]
  - (e) [Historic and architectural preservation commission, if applicable]
  - (f) [Local health department, if applicable]
  - (g) Chief building official
  - (h) [Other local government official]
  - (i) Zoning administrator

*Comment: It is possible to structure a record hearing in which all decision-making officials and bodies attend and participate in the hearing but then make their decisions separately on the record. Rather than requiring this, the ordinance gives the local government the flexibility to decide whether one record hearing or multiple record hearings on different aspects of the development permit is appropriate.*

- (5) The permit review coordinator shall issue the master permit immediately if all subordinate permits have been approved. The zoning permit shall also serve as the master permit.

#### **106. Completeness Review of Application; Application Is Deemed Complete**

- (1) The purpose of this section is to establish a process by which the local government determines whether an application for a development permit, preliminary approval, or a zoning map amendment or amendment to the text of the land development regulations is complete before making a decision on the application—and, if it is not complete, identifies for the applicant the information necessary to make it complete.
- (2) When an application for a development permit, an application for preliminary approval, or a zoning map amendment or amendment to the text of the land development regulations is received by the [city or county], the approving authority shall immediately determine whether the following items are present:
- (a) Required forms
  - (b) Required fee
  - (c) Signature of the applicant on the required form and signed written authorization of the property owner of record, if the applicant is not the owner

If items (a) through (c) are not present, the approving authority shall not accept the application and shall immediately return it to the applicant.

(3) Within [30] days after receiving a application for a development permit, preliminary approval, or a zoning map amendment or amendment to the text of the land development regulations, the approving authority shall make a written determination to the applicant stating that the application is complete or that the application is incomplete, precisely identifying what information is necessary to make the application complete.

(4) If the approving authority determines that the application is incomplete, the approving authority shall identify in its determination the parts of the application that are incomplete and shall indicate the manner in which they can be made complete, including a list and specific description of the additional information needed to complete the application. The applicant shall then submit this additional information to the approving authority within [30] days of the determination pursuant to paragraph (2) above. If the applicant fails to submit the additional information to the approving authority within [30] days of the determination pursuant to paragraph (3), the application shall be deemed incomplete and shall be denied unless the approving authority agrees in writing to a longer period.

(5) The approving authority shall determine in writing whether an application is complete within [30] days after receipt of the additional information indicated in the list and description provided to the applicant under paragraph (4) above.

(6) A development permit application is deemed complete under this section if the local government does not provide a written determination to the applicant that the application is incomplete within [30] days of the receipt of an application under paragraph (3) above or within [30] days of the receipt of any additional information submitted under paragraph (4) above.

(7) A development permit application is complete for purposes of this section when it meets the completeness requirements of, or is deemed complete under, this section, even though additional information may be required or modifications in the development may occur subsequently. The completeness determination does not preclude the local government from requesting additional information or studies either at the time of the notice of completeness or subsequently if new information is required or substantial changes in the proposed development occur.

(8) Once an application is complete for the purposes of this section or is deemed complete under this section, and the applicant submits additional documents or other information, the approving authority shall determine whether the new documents or other information significantly changes the application. If the approving authority determines that the new documents or other information significantly changes the application, the decision maker shall include as part of the decision a written determination that a significant change has occurred. Alternatively, the decision maker may inform the applicant in writing that such changes may constitute a significant change and allow the applicant to withdraw the new materials or information submitted in order to avoid a determination of significant change. If the applicant's new documents or information are determined to constitute a significant change in an application that was previously determined or deemed complete, the local government decision maker shall take one of the following actions, at the option of the applicant:

(a) Continue to process the existing application and allow the applicant to submit a second new application with the proposed significant changes. The old and new applications will both proceed through the review process, but each will be determined or deemed complete on different dates and therefore may be subject to different criteria and different decision dates.

(b) Suspend consideration of the existing application upon the written request of the applicant and allow the applicant to submit a new application with the proposed significant changes that will be subject to a new completeness review.

(c) Reject the new documents or other information determined to constitute a significant change and continue processing the existing application without considering the materials that would constitute a significant change.

#### **107. Decision-Making Criteria**

In making a decision for the following types of development permits, preliminary approvals, zoning district map amendments, and amendments to

text of the land development regulations, the approving authority shall apply the following criteria, provided that approval, denial, or approval with conditions shall be based on the criteria applicable at the time the application was first accepted:

*Comment: The criteria the local government approving authority uses to make the particular land-use decision should be set forth under each of the following headings. Because each set of land development regulations contains unique criteria for different types of land-use decisions or because statutes might establish the criteria independent of local regulations (as in the case of a variance), this model does not attempt to describe all of them. Examples of the language to be used are under the headings of a building permit, a zoning permit, and a zoning-district map amendment. If this section is drafted using an internal citation style rather than the style setting forth the complete criteria, the internal citation should be as specific as possible. For example, if the criteria for approving a conditional use permit appear in Article 12 of the zoning code, but the precise language is in Section 12-103(2), the internal citation should refer to that section, including paragraph (2). Doing so will eliminate confusion as to what parts of a code actually constitute "criteria."*

(a) Building permit

The chief building official shall approve an application for a building permit if the official finds that the application complies with the relevant provisions of the building code.

(b) Zoning permit

The zoning administrator shall approve an application for a zoning permit:

1. If the administrator finds that the application complies with the relevant provisions of the zoning code; and
2. If the application requires an additional development permit, the approving authority for such development permit has either approved the application or has approved it with conditions, which shall be incorporated as conditions of the zoning permit.

A zoning permit shall not be required for any construction that does not alter the exterior dimensions of a building or structure.

(c) Sign permit

The zoning administrator shall approve an application for a sign permit if the administrator finds that the application complies with the relevant provisions of the sign code.

(d) Conditional use permit

[Insert decision-making criteria]

(e) Variance

[Insert decision-making criteria]

(f) Planned unit development preliminary plan

[Insert decision-making criteria]

(g) Planned unit development final plan

[Insert decision-making criteria]

(h) Subdivision preliminary plan

[Insert decision-making criteria]

(i) Subdivision final plat

[Insert decision-making criteria]

(j) Certificate of appropriateness

[Insert decision-making criteria]

(k) Lot split, minor subdivision, and resubdivision

[Insert decision-making criteria]

(l) Zoning map amendment

A proposed amendment to the zoning district map shall be consistent with the local comprehensive plan. The legislative body shall find that the proposed amendment to the zoning map is consistent with the local comprehensive plan when the amendment:

1. Furthers, or at least does not interfere with, the goals and policies contained in the local comprehensive plan;
2. Is compatible with the proposed future land uses, densities, and intensities contained in the local comprehensive plan; and

3. Carries out, as applicable, any specific proposals for community facilities, including transportation facilities, other specific public actions, or actions proposed by nonprofit and for-profit organizations that are contained in the local comprehensive plan.

In determining whether the proposed amendment to the zoning map satisfies the requirements of subparagraph (1)1 above, the legislative body may take into account any relevant guidelines contained in the local comprehensive plan.

- (m) Amendment to the text of land development regulations  
[Insert decision-making criteria]

#### **108. Administrative Review; Responsibility for Completeness Review**

(1) Building permits and zoning permits are subject to administrative review.

*Comment: In some communities, lot splits, minor subdivisions (subdivisions of three to four lots and not involving any public improvements or dedication), and resubdivisions (redrawing of lot boundaries without creating new lots) are subject to an administrative review, bypassing a planning commission, and could be included in paragraph (1). In such a case, a record hearing would not be required, and Section 104 would need to be changed to eliminate it.*

(2) An applicant for a building or zoning permit shall submit an application to the chief building official or zoning administrator, respectively, on forms provided by the local government. An applicant for a master permit that incorporates a building permit and a zoning permit shall submit the application to the permit coordinator.

(3) Any decision on a building or zoning permit or master permit that incorporates a building permit and a zoning permit shall be accompanied by a checklist stating applicable codes or regulations that the chief building official or zoning administrator applied in making the decision.

(4) In the event the chief building official or zoning administrator denies a building permit or a zoning permit, the official or administrator shall state in writing the reasons for denial and the code sections relied upon in making the decision.

#### **109. Applications Involving More than Administrative Reviews**

For any development permit application that requires a record hearing as specified in section 104, the applicant shall apply to the zoning administrator on forms provided by the local government.

#### **110. Record Hearing; Notice Requirements**

(1) If an approving authority holds a record hearing on a development permit application, it shall provide notice of the date of the record hearing within [15] days of a completeness determination on the application under sections 106(3) to 106(5) above, or within [15] days from the date an application is deemed complete under Section 106(7) above. Notice of the record hearing shall be mailed at least [20] days before the record hearing, and the record hearing must be held no longer than [30] days following the date that notice of the record hearing is mailed. A local government may hold a record hearing at a later date but no more than [60] days following the date that notice of the record hearing was mailed if state agencies or other local governments must approve or review the development application or if the applicant for a development permit requests an extension of the time at which the record hearing will be held.

(2) The notice of the record hearing shall:

- (a) State the date, time, and location of the record hearing and the body or officer that will hold the hearing;
- (b) Explain the nature of the application and the proposed use or uses that could be authorized;
- (c) List the land development regulations and any goals, policies, and guidelines of the local comprehensive plan that apply to the application;
- (d) Set forth the street address or other easily understood geographical reference to the subject property;
- (e) State that a failure to raise an issue at a record hearing, in person or by letter, or the failure to provide statements or evidence sufficient to afford the local government an opportunity to respond to the issue, precludes an appeal to the appeals board based on that issue, unless the issue could not have been reasonably known by any party to the record hearing at the time of the record hearing;

- (f) State that a copy of the application, all documents and evidence submitted by or on behalf of the applicant, and any applicable land development regulations or goals, policies, and guidelines of the local comprehensive plan are available for inspection at no cost and will be provided at reasonable cost;
- (g) State that a copy of any staff reports on the application will be available for inspection at no cost at least [7] days prior to the record hearing and will be provided at actual cost;
- (h) State that a record hearing will be held and include a general explanation of the requirements for the conduct of the record hearing; and
- (i) Identify, to the extent known by the local government, any other governmental units with jurisdiction over an aspect of the application.

#### **111. Record Hearing; Methods of Giving Notice**

*Comment: This section should specify the manner in which the local government gives notice for the record hearing. Requirements for notice may be given in state statutes, or the local government may have latitude to establish its own methods. For that reason, no ordinance language has been provided. Alternatives for notice include:*

- Conspicuous posting of the notice on the property for site-specific development proposals;
- Publishing the notice, including at least the development location, description, type of permit(s) required, and location where the complete application may be reviewed in a newspaper of general circulation in the jurisdiction of the local government and giving notice by publication on the Internet;
- Posting the notice on a bulletin board in a conspicuous location in the principal offices of the local government;
- Making certain the manner of publication or posting of the notice takes into account the culture of the affected community by, for example, writing the notice in Spanish for a Hispanic area;
- Mailing the notice to all adjacent local governments and to all state agencies with jurisdiction over the development application; and
- Mailing the notice to abutting and confronting property owners or property owners within a certain radius of the site.

*This section should also indicate how far in advance of the record hearing notice must be given, either through publication, posting, or mailing. If the request is for a consolidated permit procedure, the notice must identify each application to be decided as a consequence of the record hearing. Finally, the section should indicate how the information is to be presented so that a layperson can understand where the property in question is located, who owns or has control of it, which is the applicant, and what the matter to be decided is.*

#### **112. Record Hearing; Conduct of Hearing**

- (1) This section applies when a local government holds a record hearing on a development permit application as required by section 104 above.
- (2) The applicant or any person who will be a party to or will testify or would like to testify in any record hearing shall submit all documents or evidence on which he or she intends to rely to the local government, which shall make them available to the public at least [7] days prior to the record hearing.
- (3) The local government shall make any staff report it intends to use at the record hearing available to the public at least [7] days prior to the record hearing.
- (4) Any governmental unit with jurisdiction over the development application and any abutting or confronting owner or occupant may be a party to a record hearing held under this section. Any other party or governmental unit may be a party to any record hearing held under this section if it would be aggrieved by a land-use decision on the development permit application.
- (5) The following procedures apply to the conduct of the record hearing:
  - (a) The officer presiding at a record hearing or such person as he or she may designate [shall or may] have the power to conduct discovery and to administer oaths and issue subpoenas to compel the attendance of witnesses and the production of relevant evidence, including witnesses and documents presented by the parties. The presiding officer may call any person as a witness whether or not he or she is a party.
  - (b) The presiding officer shall take the testimony of all witnesses relating to a development permit application under oath or affirmation and shall



permit the right of cross-examination to all parties through their attorneys, if represented, or directly, if not represented, subject to the discretion of the presiding officer and to reasonable limitations on the time and number of witnesses.

(c) Technical rules of evidence do not apply to the record hearing, but the presiding officer may exclude irrelevant, immaterial, or unduly repetitious evidence.

(d) If a party to the record hearing provides additional documents or evidence, the presiding officer may allow a continuance of the record hearing or leave the record open to allow other parties a reasonable opportunity to respond.

(e) The local government shall provide for the verbatim recording and written transcription of the record hearing and shall furnish a copy of the recording and transcription, on request, to any interested person at the requestor's expense, provided that the cost does not exceed the actual cost of making the recording and transcription.

(6) Any decision-making officer or member of an approving authority who has a direct or indirect financial interest in property that is the subject of a record hearing, who is related by blood, adoption, or marriage to the owner of property that is the subject of a record hearing or to a party to the record hearing, or who resides or owns property within [500] feet of property that is the subject of a record hearing shall recuse himself or herself from the matter before the commencement of the record hearing and shall state the reasons for such recusal.

*Comment:* State laws may establish stricter rules governing conflict of interest than those in paragraph (6).

### **113. Record Hearing; Findings, Decision, and Notice**

(1) Where a development permit application requires a record hearing pursuant to section 104, the approving authority may approve or deny a development permit application or may approve an application subject to conditions.

(2) Any decision on a development permit application shall be based on and accompanied by a written statement by the approving authority that:

(a) states the land development regulations, goals, policies, and guidelines of the local comprehensive plan relevant to the decision;

(b) states the facts relied upon in making the decision;

(c) explains how the decision is based on the land development regulations, the goals, policies, and guidelines of the local comprehensive plan (including the future land-use plan map), and the facts set forth in the written statement of the comprehensive plan;

(d) responds to all relevant issues raised by the parties to the record hearing; and

(e) states the conditions that apply to the development permit, must be satisfied before a certificate of compliance can be issued, and are continuing requirements and apply after a certificate of compliance is issued.

Where the application involves the issuance of a master permit, the approving authorities shall make separate written statements on each application for a development permit.

(3) The approving authority shall give written notice of its decision to all parties to the proceeding [and shall publish its decision in a newspaper of general circulation and on its Internet site].

(4) Within [30] days of a request for clarification of findings, decisions, and conditions specifically included in the written notice of decision pursuant to paragraph (2) above, the approving authority shall issue a written clarification concerning those specific findings and decisions. Notice of the clarification shall be given in the same manner as the notice of decision pursuant to paragraph (3), above.

### **114. Time Limits on Decisions**

(1) If the approving authority for a development permit fails to approve, conditionally approve, or disapprove a development permit application within the time period stated in section 104 after it makes a written determination that a development permit application is complete, or from the time a development application is deemed complete, the failure to act shall be deemed an approval.

- (2) The approving authority and the applicant for a development permit may mutually agree to an extension of the time limits for a decision specified in paragraph (1) above for a period not in excess of [90] days.
- (3) If an application for a development permit is deemed approved under this section, the approving authority shall send by mail written notice that the permit has been deemed approved to:
- (a) all parties to the record hearing, and
  - (b) all persons and governmental units that submitted documents and materials to the administrative review.
- (4) The time limits for the decision specified in this section do not run during any period:
- (a) of less than [30] days during which a local government requests additional studies or information concerning a development permit application; or
  - (b) in which the local government is unable to act upon development permit applications due to circumstances beyond the local government's control, including a reasonable period for resubmission of development permit applications and related materials destroyed, damaged, or otherwise rendered unusable.

### 115. Appeals

*Comment: This section describes an appeals procedure concerning land-use decisions. It gives the authority to an appeals board to hear appeals. The appeals board can hear appeals: (a) on the record, which occurs where there has already been a record hearing (e.g., when there has been a hearing on a conditional use permit); and (b) subject to a record hearing held by the appeals board, which would occur in the case of an administrative decision (e.g., the decision on a zoning permit). An appeals board could not, however, hear appeals it had previously heard. One situation needs special attention: If there is an existing board of zoning appeals and it is charged with serving as the appeals board, an alternate body must be designated as the appeals board in the case of record appeals on variances. A good alternative is to assign the job of conducting the review to a hearings officer.*

- (1) The appeals board shall have the authority to hear and decide appeals where it is alleged there is error in a land-use decision made by an approving authority. An appeal of a land-use decision may be taken to the appeals board within [30] days after the decision is issued or within [30] days after the date the application is deemed approved under section 114:
- (a) by the applicant for the development permit and any party to the record hearing if there has been a record hearing; or
  - (b) if there has been an administrative review:
    1. by the applicant for the development permit; or
    2. by any person or governmental unit aggrieved by the land-use decision.

There shall be no more than one record appeal on an application for a master permit.

*Comment: The authority of the appeals board extends only to appeals that are administrative in nature. Consequently, the appeals board cannot hear decisions that are not final (e.g., preliminary approvals of subdivisions or decisions on zoning map amendments and amendments to the land development regulations).*

- (2) The party appealing must file a notice of appeal specifying the grounds for the appeal with both the approving authority that made the decision that led to the appeal and with the appeals board. The approving authority that made the decision that led to the appeal shall transmit to the appeals board the record for the land-use decision that the party is appealing.
- (3) The appeals board may dismiss an appeal if it determines the notice of appeal is legally insufficient on its face.

*Comment: If a record hearing has been held on a development permit application, any person who could be aggrieved has the opportunity to become a party to the hearing, so this section limits appeals to persons who became parties. If there has been an administrative review without a hearing, there has been no opportunity to establish party status, so the applicant and any person aggrieved may appeal.*

- (4) An appeal that is not dismissed shall stay any and all proceedings to enforce, execute, or implement the land-use decision being appealed or any

development authorized by said land-use decision, unless the approving authority that made the decision that led to the appeal certifies in writing to the appeals board that a stay in the decision or development thereunder would cause immediate and irreparable harm to the appellant.

(5) The appeals board shall set the time and place at which it will consider the appeal, which shall be no more than [20] days from the time the appeal was filed. The appeals board shall give at least [10] days' notice of the appeal hearing to the approving authority that made the decision that led to the appeal and to the parties to the appeal.

(6) The appeals board shall hold a hearing on the record in a record appeal. The appeals board may take supplementary evidence in record appeals only in those limited cases in which it makes a written finding that evidence proffered by any party was improperly excluded from the record hearing. If the appeals board decides to take supplementary evidence, it shall provide mailed notice of this decision to all parties to the record hearing that was appealed and shall hold a record hearing as required by the local government's unified development review process.

(7) An appeals board shall issue a written decision after the record hearing, in which it may reverse or affirm, wholly or in part, or may modify a land-use decision that has been appealed, and it shall have the authority in making such a decision to exercise all the powers of the approving authority that made the decision that led to the appeal, insofar as they concern the issues stated in the appeal. A tie vote is an affirmation of the decision that was appealed.

(8) The appeals board shall not make findings of fact unless the board has taken evidence supplementing the record on appeal, in which case it shall make findings of fact based on this evidence and shall make a decision based on such findings.

(9) In an appeal from an administrative review, the appeals board shall hold a record hearing and make a decision as provided in sections 110 to 114, above.

(10) The appeals board shall mail a notice of any decision to the parties to the appeal and to the [local planning agency *or* code enforcement officer] of the local government within [30] days of the commencement of the hearing.

(11) The appeals board shall keep written minutes of its proceedings, showing the vote of each member upon each appeal—or, if absent or failing to vote, indicating that fact—and shall keep records of its official actions in its office.

(12) The [name of legislative body] shall adopt rules of procedure for the appeals board.

#### **116. Code Interpretations; Index of Interpretations**

(1) Any person(s) may submit a written request for a code interpretation to the [permit review coordinator] or any other designated administrative official regarding any applicable title or any subsequent amendment thereto.

(2) The [permit review coordinator] or other designated administrative official shall render only one interpretation per issue. In the event an interpretation is requested on an issue previously addressed, the [permit review coordinator] or other designated administrative official shall provide a copy of the previous interpretation.

(3) At a minimum, the request for code interpretation shall include:  
(a) the section of land development regulations that is allegedly ambiguous or needing clarification;  
(b) the subject matter or nature of the request; and  
(c) facts relevant to the nature of the request.

(4) The [permit review coordinator] or other designated administrative official may deny or reject the request if there is no ambiguity or need for the clarification demonstrated by the requestor.

(5) [The permit review coordinator] or other designated administrative official shall provide a quarterly report to the [legislative body] on code interpretations rendered. The report shall include, if necessary, any recommendations for amendments.

(6) All code interpretations shall be numbered consecutively in order of their issuance. The [permit review coordinator] shall maintain such interpretations for public access and review in hard copy and on its Internet site until such

time as the applicable section of the land development regulations is amended to provide the necessary clarification and to establish an index that refers to the applicable section of the land development regulations and the number of code interpretations.

#### REFERENCES

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- Pierce (Wash.), County of. 2007. *County Code*. Title 1, Chapter 1.22, "Hearing Examiner Code," and Title 18, "Development Regulations, General Provisions." Available at [www.co.pierce.wa.us/pc/services/home/property/pals/regs/regs.htm](http://www.co.pierce.wa.us/pc/services/home/property/pals/regs/regs.htm).
- Siegel Planning Services. 2005. *Model Development Code and User's Guide for Small Cities*. 2nd ed. Salem, Ore.: Oregon Transportation and Growth Management Program. Available at [www.oregon.gov/LCD/TGM/docs/modelCode05/pdf/guide.pdf](http://www.oregon.gov/LCD/TGM/docs/modelCode05/pdf/guide.pdf).





## **Model Transfer of Development Rights (TDR) Ordinance**



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

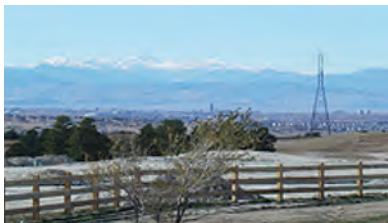
- Preserve open space and farmland
- Direct development toward existing communities

This model ordinance establishes a general framework for severing development rights involving net density and intensity (through FARs) from a sending parcel and transferring them to a receiving parcel. Section 101 of the ordinance authorizes a transfer of development rights (TDR) for a variety of purposes, including environmental protection, open space preservation, and historic preservation, which are the most typical.

Under section 104, the local government has two options in setting up the TDR program. The first involves the use of overlay districts, which would zone specific areas as sending and receiving parcels. The second involves identifying which zoning districts would be sending and receiving districts in the text of the ordinance itself, rather than through a separate amendment to the zoning ordinance. In both cases, the designations must be consistent with the comprehensive plan. Section 105 of the ordinance contains a table that shows, by use district, the permitted maximum increases in density and FAR that can be brought about through TDR.

Section 106 outlines a process by which the zoning administrator would determine the specific number of development rights for a sending parcel in terms of dwelling units per net acre or square feet of nonresidential floor area (for commercial and industrial parcels) and issue a certificate to the transferor. Sections 107 and 108 describe the instruments by which the development rights are legally severed from the sending parcel through instruments of transfer and attached to the receiving parcel. Section 107 describes how the applicant for a subdivision or other type of development permit would formally seek the use of development rights in a development project (e.g., a subdivision). Note that the transfer would apply not to rezonings but only to specific projects where a development permit is going to be issued in order that development may commence.

Commentary to the ordinance describes, in section 109, a development rights bank, a mechanism by which the local government purchases development rights before they are applied to receiving parcels, retains them permanently in order to prevent development, or sells them as appropriate in order to make a profit or direct development of a certain character to a specific area. Whether this is an appropriate role for local government or should be left to nonprofit organizations (e.g., land trusts) is matter for local discussion and debate. No ordinance language is provided, although the description in the commentary should be sufficient for local government officials to draft language establishing the bank.



Ric Stephens

*Figure 4.6.1. Transfer of development rights can be used to preserve open space, scenic views, critical and sensitive areas, and natural hazard areas.*

#### 101. Purposes

The purposes of this ordinance are to:

- (a) preserve open space, scenic views, critical and sensitive areas, and natural hazard areas;
- (b) conserve agriculture and forestry uses of land;
- (c) protect lands and structures of aesthetic, architectural, and historic significance;
- (d) retain open areas in which healthful outdoor recreation can occur;
- (e) implement the comprehensive plan;
- (f) ensure that the owners of preserved, conserved, or protected land may make reasonable use of their property rights by transferring their right to develop to eligible zones;
- (g) provide a mechanism whereby development rights may be reliably transferred; and
- (h) ensure that development rights are transferred to properties in areas or districts that have adequate community facilities, including transportation, to accommodate additional development.

*Comment:* The local government may tailor this list of purposes to its particular planning goals and objectives or leave it with a wide range of purposes and implement the ordinance to achieve specific goals and objectives.

#### 102. Authority

This ordinance is enacted pursuant to the authority granted by [cite to state statute or local government charter or similar law].

*Comment:* It is important to determine whether the local government has legal authority to enact a TDR program because not all local governments in all states have identical powers. In addition, enabling legislation for TDR may require that the transfers be done in a manner other than is described in this model.

### 103. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

**Density or Net density.** The result of multiplying the net area in acres times 43,560 square feet and then dividing the product by the required minimum number of square feet per dwelling unit required by the zoning ordinance for a specific use district. "Density" or "Net density" is expressed as dwelling units per acre or per net acre.

**Development rights.** The rights of the owner of a parcel of land, under land development regulations, to configure that parcel and the structures thereon to a particular density for residential uses or floor area ratio for nonresidential uses. Development rights exclude the rights to the area or height of a sign.

*Comment: Unless sign area and height are excluded from the definition of "development rights," it is possible to transfer them to another parcel, resulting in larger or taller signs. In some cases, development rights might extend to impervious surface coverage, and a transfer of such rights would allow more extensive lot coverage.*

**Floor area.** The gross horizontal area of a floor of a building or structure measured from the exterior walls or from the centerline of party walls. "Floor area" includes the floor area of accessory buildings and structures.

**Floor area ratio.** The maximum amount of floor area on a lot or parcel expressed as a proportion of the net area of the lot or parcel.

**Net area.** The total area of a site for residential or nonresidential development, excluding street rights-of-way and other publicly dedicated improvements—such as parks, open space, and stormwater detention and retention facilities—and easements, covenants, or deed restrictions that prohibit the construction of building on any part of the site. "Net area" is expressed in either acres or square feet.

[**Overlay district.** A district superimposed over one or more zoning districts or parts of districts that imposes additional requirements to those applicable for the underlying zone.]

*Comment: This definition is necessary only if the TDR designation is accomplished via an overlay district.*

**Receiving district.** One or more districts in which the development rights of parcels in the sending district may be used.

**Receiving parcel.** A parcel of land in the receiving district that is the subject of a transfer of development rights, where the owner of the parcel is receiving development rights, directly or by intermediate transfers, from a sending parcel and on which increased density or intensity is allowed by reason of the transfer of development rights.

**Sending district.** One or more districts in which the development rights of parcels in the district may be designated for use in one or more receiving districts.

**Sending parcel.** A parcel of land in the sending district that is the subject of a transfer of development rights, where the owner of the parcel is conveying development rights of the parcel and on which those rights so conveyed are extinguished and may not be used by reason of the transfer of development rights.

**Transfer of development rights.** The procedure prescribed by this ordinance whereby the owner of a parcel in the sending district may convey development rights to the owner of a parcel in the receiving district or other person or entity, whereby the development rights so conveyed are extinguished on the sending parcel and may be exercised on the receiving parcel in addition to the development rights already existing regarding that parcel or that may be held by the receiving person or entity.

*Comment: This definition recognizes that development rights may be sold to an entity (e.g., the local government or a nonprofit organization) that will hold them indefinitely.*

**Transferee.** The person or legal entity, including a person or legal entity that owns property in a receiving district, that purchases the development rights.

**Transferor.** The landowner of a parcel in a sending district.

**104. Establishment of Sending and Receiving Districts**

[Alternative 1: Amend the zoning map using overlays]

(1) The [local legislative body] may establish sending and receiving districts as overlays to the zoning district map by ordinance in the manner of zoning district amendments. The [planning director] shall cause the official zoning district map to be amended by overlay districts to the affected properties. The designation “TDR-S” shall be the title of the overlay for a sending district, and the designation “TDR-R” shall be the title of the overlay for a receiving district.

*Comment: When a zoning map is amended, one practice is to list the ordinance number and the enactment date in a box on the map, along with the signatures of the planning director and the clerk of the local legislative body (e.g., the clerk of council). This allows for an easy reference if there should be any later questions about whether the map amendment accurately reflects the legal description in the ordinance.*

(2) Sending and receiving districts established pursuant to Paragraph (1) shall be consistent with the local comprehensive plan.

[Alternative 2: Specify zoning districts that can serve as sending and receiving districts]

(1) The following zoning districts shall be sending districts for the purposes of the transfer of development rights program:  
[list districts]

(2) The following zoning districts shall be receiving districts for the purposes of the transfer of development rights program:  
[list districts]

*Comment: Since the sending and receiving districts are being established as part of the ordinance rather than through separate overlays, the local government would need to make a declaration of consistency with the comprehensive plan for such districts as part of the enactment of these two paragraphs.*

**105. Authority to Transfer Development Rights**

(1) Each transferor shall have the authority to sever all or a portion of the rights to develop from the parcel in a sending district and to sell, trade, or barter all or a portion of those rights to a transferee consistent with the purposes of section 101, above.

(2) The transferee may retire the rights, resell them, or apply them to property in a receiving district in order to obtain approval for development at a density or intensity of use greater than would otherwise be allowed on the land, up to the maximum density or intensity indicated in Table 4.6.1.

**TABLE 4.6.1. MAXIMUM DENSITY AND INTENSITY ALLOWED IN ZONING DISTRICTS THROUGH TRANSFER OF DEVELOPMENT RIGHTS (TDR)**

Zoning District Title	Maximum Density in DU/Net Acre	Maximum Intensity in Floor Area Ratio	Maximum Density with TDR	Maximum Intensity in Floor Area Ratio with TDR
R-1	4		8	
R-2	8		16	
R-3	16		32	
C-1		0.2		0.4
C-2		1.0		2.0
C-3		2.0		4.0
C-4		4.0		8.0
I-1		0.75		1.5

Note: District names, densities, and intensities are hypothetical examples only.

(3) Any transfer of development rights pursuant to this ordinance authorizes only an increase in maximum density or maximum floor area ratio and shall not alter or waive the development standards of the receiving district, including standards for floodplains, wetlands, and [other environmentally sensitive areas]. Nor shall it allow a use otherwise prohibited in a receiving district.

*Comment: In some cases, it may be desirable to allow the transfer of the right to additional impervious surface coverage on a site. For example, if a certain zoning district limits the amount of surface parking by a maximum impervious surface parking ratio and additional parking is needed, Table 4.6.1 should be amended to authorize this.*

**106. Determination of Development Rights; Issuance of Certificate**

- (1) The [zoning administrator] shall be responsible for:
  - (a) determining, upon application by a transferor, the development rights that may be transferred from a property in a sending district to a property in a receiving district and issuing a transfer of development rights certificate upon application by the transferor.
  - (b) maintaining permanent records of all certificates issued, deed restrictions and covenants recorded, and development rights retired or otherwise extinguished and transferred to specific properties; and
  - (c) making available forms on which to apply for a transfer of development rights certificate.
- (2) An application for a transfer of development rights certificate shall contain:
  - (a) a certificate of title for the sending parcel prepared by an attorney licensed to practice law in the state of [name of state];
  - (b) [5] copies of a plat of the proposed sending parcel and a legal description of the sending parcel prepared by [licensed or registered] land surveyor;
  - (c) a statement of the type and number of development rights in terms of density or FAR being transferred from the sending parcel and calculations showing their determination.
  - (d) applicable fees; and
  - (e) such additional information required by the [zoning administrator] as necessary to determine the number of development rights that qualify for transfer.

*Comment: A local government should consult with its law director or other legal counsel to determine the requirements for an application for a TDR. Consequently, this paragraph as well as other sections of the ordinance may need to be revised to reflect state-specific issues concerning real property law and local conditions.*

- (3) A transfer of development rights certificate shall identify:
  - (a) the transferor;
  - (b) the transferee, if known;
  - (c) a legal description of the sending parcel on which the calculation of development rights is based;
  - (d) a statement of the number of development rights in either dwelling units per net acre or square feet of nonresidential floor area eligible for transfer;
  - (e) if only a portion of the total development rights are being transferred from the sending property, a statement of the number of remaining development rights in either dwelling units per net acre or square feet of nonresidential floor space;
  - (f) the date of issuance;
  - (g) the signature of the [zoning administrator]; and
  - (h) a serial number assigned by the [zoning administrator].
- (4) No transfer of development rights under this ordinance shall be recognized by the [city or county] as valid unless the instrument of original transfer contains the [zoning administrator's] certification.

**107. Instruments of Transfer**

- (1) An instrument of transfer shall conform to the requirements of this section. An instrument of transfer, other than an instrument of original transfer, need not contain a legal description or plat of the sending parcel.
- (2) Any instrument of transfer shall contain:
  - (a) the names of the transferor and the transferee;
  - (b) a certificate of title for the rights to be transferred, prepared by an attorney licensed to practice law in the state of [name of state];
  - (c) a covenant the transferor grants and assigns to the transferee and the transferee's heirs, assigns, and successors, which assigns a specific number of development rights from the sending parcel to the receiving parcel;
  - (d) a covenant by which the transferor acknowledges that he has no further use or right of use with respect to the development rights being transferred; and
  - (e) any other relevant information or covenants.
- (3) An instrument of original transfer is required when a development right is initially separated from a sending parcel. It shall contain the information set forth in paragraph (2), above, and the following information:



- (a) a legal description and plat of the sending parcel prepared by a licensed surveyor named in the instrument;
  - (b) the transfer of development rights certificate described in section 106(3), above;
  - (c) a covenant indicating the number of development rights remaining on the sending parcel and stating the sending parcel may not be subdivided or developed to a greater density or intensity than permitted by the remaining development rights;
  - (d) a covenant that all provisions of the instrument of original transfer shall run with and bind the sending parcel and may be enforced by the [city or county] and [list other parties, such as nonprofit conservation organizations]; and
  - (e) [topics of other covenants, as appropriate].
- (4) If the instrument is not an instrument of original transfer, it must include information set forth in paragraph (2), above, and the following information:
- (a) a statement that the transfer is an intermediate transfer of rights derived from a sending parcel described in an instrument of original transfer identified by its date, names of the original transferor and transferee, and the book and the page where it is recorded in the [land records of the county]; and
  - (b) copies and a listing of all previous intermediate instruments of transfer identified by its date, names of the original transferor and transferee, and the book and the page where it is recorded in the [land records of the county].
- (5) The [city or county law director] shall review and approve the form and legal sufficiency of the following instruments in order to affect a transfer of development rights to a receiving parcel:
- (a) An instrument of original transfer
  - (b) An instrument of transfer to the owner of the receiving parcel
  - (c) Instrument(s) of transfer between any intervening transferees.

Upon such approval, the [law director] shall notify the transferor or his or her agent, who shall record the instruments with the [name of county official responsible for deeds and land records] and shall provide a copy to the [county assessor]. Such instruments shall be recorded prior to release of development permits, including building permits, for the receiving parcel.

*Comment: The procedures in paragraph (5) may need to be modified based on the structure of local government in a particular state and the responsibilities of governmental officials for land records and assessments. The important point is that the TDRs must be permanently recorded, and the property of the owner of the sending parcel, the value of which is reduced because of the transfer, should be assessed only on the basis of its remaining value.*

#### **108. Application of Development Rights to a Receiving Parcel**

(1) A person who wants to use development rights on a property in a receiving district up to the maximums specified in Table 4.6.1 in section 105, above, shall submit an application for the use of such rights on a receiving parcel. The application shall be part of an application for a development permit. In addition to any other information required for the development permit, the application shall be accompanied by:

- (a) an affidavit of intent to transfer development rights to the property; and
- (b) either of the following:
  1. a certified copy of a recorded instrument of the original transfer of the development rights proposed to be used and any intermediate instruments of transfer through which the applicant became a transferee of those rights; or
  2. a signed written agreement between the applicant and a proposed original transferor, which contains information required by section 106(2), above, and in which the proposed transferor agrees to execute an instrument of such rights on the proposed receiving parcel when the use of those rights, as determined by the issuance of a development permit, is finally approved.

(2) The [city or county] may grant preliminary subdivision approval of a proposed development incorporating additional development rights upon proof of ownership of development rights and covenants on the sending parcel being presented to the [local government] as a condition precedent to final subdivision approval.

(3) No final plat of subdivision, including minor subdivisions, shall be approved and no development permits shall be issued for development involving the use of development rights unless the applicant has demonstrated that:

- (a) the applicant will be the bona fide owner of all transferred development rights that will be used for the construction of additional dwellings, the creation of additional lots, or the creation of additional nonresidential floor area;
- (b) a deed of transfer for each transferred development right has been recorded in the chain of title of the sending parcel and such instrument restricts the use of the parcel in accordance with this ordinance; and
- (c) the development rights proposed for the subdivision or development have not been previously used. The applicant shall submit proof in the form of a current title search prepared by an attorney licensed to practice law in the state of [name of state].

### 109. Development Rights Bank [optional]

*Comment: This section establishes a development rights bank, otherwise referred to as a "TDR Bank." The local government or any other existing or designated entity may operate the bank. The TDR Bank should:*

- *have the power to purchase and sell or convey development rights, subject to the local legislative body's approval;*
- *have the power to recommend to the local legislative body property where the local government should acquire development rights by condemnation;*
- *have the power to hold indefinitely any development rights it possesses for conservation or other purposes;*
- *receive donations of development rights from any person or entity; and*
- *receive funding from the local government, the proceeds from the sale of development rights, or grants or donations from any source.*

*Language for the creation of the TDR Bank is not included because the specifics of such must be determined by the operating entity.*

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## **Model Residential Cluster Development Ordinance**



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

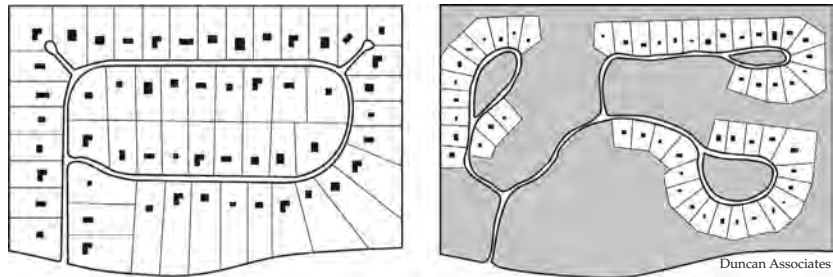
- **Preserve open space and farmland**
- **Create distinctive and attractive places**

Residential cluster development is a form of land development in which principal buildings and structures are grouped together on a site, thus saving the remaining land area for common open space, conservation, agriculture, recreation, and public and semipublic uses (Whyte 1964; Unterman and Small 1977; Arendt 1996; Sanders 1980). In many respects, cluster development dates back to one of the earliest town forms. In primitive early settlements, dwelling units were often organized to form a common area or enclosure that residents could use together and readily defend if necessary.

In the United States, the development of Radburn, New Jersey, in 1928 represented the first formal introduction of the cluster development concept. It drew on English town planning principles, notably those of the Garden Cities movement. In Radburn, single-family homes and garden apartments are sited in “superblocks” of 35 to 50 acres (Stein 1957, 34–37). The superblocks have no through traffic and are interspersed with parks and related green spaces on which the residences face. Clustering is also the basic site design concept in such contemporary new towns as Reston, Virginia, and Columbia, Maryland.

Cluster development has a number of distinct advantages over conventional subdivision development. A well-planned cluster development concentrates dwelling units on the most buildable portion of the site and preserves natural drainage systems, vegetation, open space, and other significant natural features that help control stormwater runoff and soil erosion. The common areas function as a trap for nutrients dissolved or suspended in stormwater runoff (Arendt 1994, 278, 281). Cost savings during construction are achieved by the reduction in street lengths and utility installations. Later savings can be realized in street and utility maintenance (less surface area that needs repaving and fewer feet of water and sewer line to maintain). Because dwelling units are placed closer together, refuse and other service vehicles do not have to negotiate as much street mileage, thus reducing travel time. Where clustering is accompanied by higher-density residential land uses and the provision of pedestrian pathways and bikeways, especially those that link to off-site activity centers, residents of the cluster development may walk and exercise more. Clustering also enhances a sense of community, allowing parents better supervision of children playing in common areas and promoting social interaction among neighbors.

*Figure 4.7.1. Cluster development groups buildings and structures together on a site, saving the remaining land for common open space, conservation, agriculture, and recreational uses.*



This model ordinance is intended to encourage developers to use cluster development as an alternative to conventional lot-by-lot development and authorizes cluster development as of right either in all residential districts or in selected residential districts. Section 105 of the ordinance also offers density bonuses of up to 25 percent when a developer: (a) provides affordable housing as part of the cluster development or (b) conveys land for open space, recreation, or other purposes that is accessible to the public.

Under section 107, the local planning commission has the primary responsibility for reviewing and approving a cluster development, although such a function could also be assigned to a hearing examiner. The model ordinance sets forth criteria for the commission to apply in deciding whether to approve the cluster development. (Remember that the responsibilities of the local planning commission vary from state to state.)

The model does not include a severability clause because it is assumed this ordinance will be incorporated into a zoning code that will have one already.

This model is based on a sample ordinance appearing in *Nonpoint Source Pollution: A Handbook for Local Governments* (Jeer et al. 1997).



**101. Purpose**

(1) It is the purpose of this ordinance to permit residential cluster development in order to:

- (a) encourage creative and flexible site design that is sensitive to the land's natural features and adapts to the natural topography;
- (b) protect environmentally sensitive areas of a development site and preserve on a permanent basis open space, natural features, and prime agricultural lands;
- (c) decrease or minimize nonpoint-source pollution impacts by reducing the amount of impervious surfaces in site development;
- (d) promote cost savings in infrastructure installation and maintenance by such techniques as reducing the distance over which utilities, such as water and sewer lines, need to be extended or by reducing the width or length of streets; and
- (e) provide opportunities for social interaction and walking and hiking in open space areas.

**102. Definitions**

As used in this ordinance, the following words and terms shall have the meanings specified herein:

*Comment: Please remember to consult your state statutes to employ definitions that are consistent with them. These definitions were drawn from different sources and, while useful, may differ from those already established by state legislation.*

**Affordable.** A sales price that is within the means of a moderate-income household or a rental amount for housing that is within the means of a low-income household, as those terms are defined in this section. In the case of dwelling units for sale, housing that is affordable is housing for which the mortgage, taxes, insurance, and fees are no more than [30] percent of the adjusted income for a household whose gross annual income is at or below [80] percent of the median for the area based on household size. In the case of rental housing, housing that is affordable is housing for which the monthly rental amount plus utility costs do not exceed [30] percent of the adjusted income for a household whose gross income is [50] percent of the area median household income adjusted for household size.

*Comment: Definitions of "affordable," "low-income household," and "moderate-income household" may need to be changed here and below. The definitions should comply with current requirements of the applicable federal or state construction or rehabilitation program. In particular, the bracketed percentages may be modified to affect the scope of the definition.*

**Buffer.** Land maintained in either a natural or a landscaped state and used to screen or mitigate the impacts of development on surrounding areas, properties, or rights-of-way.

**Building.** Any structure used or intended for supporting or sheltering any use or occupancy.

**Cluster or Clustering.** A site-planning technique that concentrates buildings and structures in specific areas on a lot, site, or parcel to allow the remaining land to be used for recreation, open space, or preservation of features or structures with environmental, historical, cultural, or other significance. The techniques used to concentrate buildings may include, but shall not be limited to, reduction in lot areas, setback requirements, or bulk requirements, with the resultant open space being devoted by deed restrictions to one or more uses.

**Cluster development, residential.** A land development project in which the site planning technique of clustering dwelling units is employed.

**Common open space.** The portion of the site set aside in perpetuity as open space. This area may include coastal and freshwater wetlands, floodplains or flood-hazard areas, stream corridors, prime agricultural lands, habitats of endangered wildlife (as identified on applicable federal or state lists), scenic views, historical or cultural features, archaeological sites, or other elements to be protected from development, as well as easements for public utilities.

**Development.** The construction, reconstruction, conversion, structural alternation, relocation, or enlargement of any structure; any mine, excavation, landfill, or land disturbance; or any change in use, or alteration or extension of use, of land.

**Gross area.** The total area of the site, including the net buildable area and public rights-of-way.

**Infrastructure.** The facilities and services needed to sustain residential, commercial, industrial, institutional, and other activities.

**Land development project.** A project in which one or more lots, tracts, or parcels of land are to be developed or redeveloped as a coordinated site for a complex of uses, units, or structures, including, but not limited to, planned development or cluster development for residential, commercial, institutional, recreational, open space, or mixed uses as are provided for in the zoning ordinance.

**Lot.** The basic development unit for determination of area, depth, and other dimensional variations; or, a parcel of land whose boundaries have been established by some legal instrument, such as a recorded deed or recorded map and recognized as a separate legal entity for purposes of transfer of title.

**Low-income household.** A household whose gross annual income does not exceed [50] percent of the area median as adjusted for household size.

**Moderate-income household.** A household whose gross annual income is less than [80] percent of the area median as adjusted for household size.

**Net buildable area.** The portion of the cluster development that may be developed or used for common open space, whether publicly dedicated or private but excluding private streets, public streets, and other publicly dedicated improvements.

**Site plan.** The development plan for one or more lots on which is shown the existing and the proposed conditions of the lot.

**Street, private.** A local roadway serving only abutting lots, not publicly dedicated or maintained by the [local government] but meeting specific municipal improvement standards and providing access for service and emergency vehicles.

**Street, public.** All public property reserved or dedicated for street traffic.

**Structure.** Anything constructed or erected that requires location on the ground or is attached to something having location on the ground.

### 103. Applicability; General Provisions

(1) A residential cluster development shall be permitted [as of right in any residential zoning district pursuant to this ordinance [or] as of right in the following zoning districts: [list district names]]:

(a) All principal and accessory uses authorized in the applicable residential zoning district(s) shall be allowed in the cluster development. In addition, multifamily dwellings, duplexes, and town houses may be permitted for a cluster development located in a residential zoning district that does not otherwise allow attached dwelling units.

(b) Maximum lot coverage, floor area ratios, building height, and parking requirements for the applicable zoning district shall apply to the cluster development. Maximum lot coverage, floor area ratios, and parking requirements, however, shall be applied to the entire site rather than to any individual lot.

(2) The following provisions shall apply to any residential cluster development, regardless of the general requirements of the applicable residential zoning district:

(a) The minimum area of the cluster development shall be [two to five] acres.

*Comment: There is a fair degree of debate about whether the area of a cluster development should be limited. Because cluster development is fundamentally a design review process, in theory, the approach should be applicable to a site of any size. However, it may be that, for smaller sites, a cluster development may not yield any appreciable benefits over conventional subdivisions. Consequently, the decision to authorize cluster development will depend on the policy preferences of the individual local government.*

(b) No minimum width or depth of a lot shall apply.

(c) A minimum separation of [10] feet shall be provided between all principal buildings and structures.

(d) A minimum yard or common open space of at least [25] feet in depth shall be provided, as measured from all public streets and from the side and rear lot lines of the entire cluster development.

- (e) Each lot shall have a minimum access of [12] feet to a public or private street. Such access may be shared with other lots.
- (f) More than one principal building or structure may be placed on a lot.
- (g) Not less than [25] percent of the site shall be conveyed as common open space in the manner provided for in section 110, below.
- [ (h) Where the site contains floodplains or coastal or freshwater wetlands, not less than [50] percent of such floodplains or wetlands shall be included in calculating the common open space. ]

**Comment:** In some states, the identification of floodplains and coastal or freshwater wetlands occurs routinely as part of the land development and subdivision review process. Optional language in Section 103(2)(h), above, requires that at least 50 percent of the floodplains or wetlands must be included as part of the common open space. By including the land designated as common open space, the calculation of net buildable area gives credit for the land area in which floodplains and wetlands that meet state criteria are located. This is intended to serve as an incentive to employ clustering by allowing the area represented by lands in floodplains and wetlands to be used in determining the maximum number of dwelling units.

#### 104. Contents of Site Plan

- (1) The preliminary and final site plan for a residential cluster development shall include, but shall not be limited to, the following information:
  - (a) The maximum number and type of dwelling units proposed;
  - (b) The areas of the site on which the dwelling units are to be constructed or are currently located and their size (this may take the form of the footprint of the dwelling unit or a building envelope showing the general area in which the dwelling unit is to be located);
  - (c) The calculations for the permitted number of dwelling units, derived pursuant to section 105, below;
  - (d) The areas of the site on which other proposed principal and accessory uses may be located and their size;

**Comment:** Uses other than residences may be located on the site. For example, the cluster development may include storage facilities, garages, and recreational buildings. Conceivably, a very large cluster development could also include sites for schools.

- (e) The areas of the site designated for common open space and their size;
- (f) The areas of the site designated for parking and loading and the size of individual spaces;
- (g) The number and percentage of dwelling units, if any, that are proposed to be affordable;
- (h) The location of sidewalks, trails, and bike paths;

**Comment:** This model assumes the local government will require sidewalks as part of the public improvements required for subdivision.

- (i) The number of acres that are proposed to be conveyed as common open space; and
- [(j) Cite any other plans or information otherwise required by the local government for a major land development or subdivision in its land development or subdivision regulations, such as a plan for landscaping and screening.]

#### 105. Calculation of Permitted Number of Dwelling Units;

##### Density Bonuses

(1) Except as provided in paragraph (3) below, the maximum number of dwelling units proposed for a residential cluster development shall not exceed the number of dwelling units otherwise permitted for the residential zoning district in which the parcel is located.

(2) Except as provided in paragraph (3) below, the number of permitted dwelling units on a site shall be calculated in the following manner.

**Comment:** The calculations in paragraph (2) are intended to mirror those that a local government would normally employ for determining the maximum number of dwelling units permitted for nonclustered development. Some communities may subtract land area in wetlands and floodplains from the gross area of the cluster development which will reduce the maximum number of dwelling units in the development.



Ric Stephens

**Figure 4.7.2.** Residential cluster developments require a certain percentage of the site to be conveyed as common open space—in this case the steep slopes.

- (a) Measure the gross area of the proposed cluster development site in acres and tenths of an acre.
- (b) Subtract from the gross area determined in subparagraph (a) the area of public and private streets and other publicly dedicated improvements, measured in acres and tenths of an acre, excluding common open space (whether or not it is conveyed pursuant to section 110, below). The remainder shall be the net buildable area.
- (c) Convert the net buildable area from acres to square feet (SF), using the equivalency of 43,560 SF = 1 acre.
- (d) Divide the net buildable area by the smallest minimum lot size (in square feet) per unit for a dwelling unit permitted in the zoning district. This figure shall be rounded to the nearest lower number to establish the maximum number of dwelling units permitted in the cluster development.

(3) The [local planning commission] may approve an increase of up to [25] percent of the maximum number of dwelling units in the cluster development, as calculated in paragraph (2) above, if:

*Comment: The bonus provisions in paragraph (3) are a means by which a local government can ensure that new housing will benefit low- and moderate-income households and implement state goals for affordable housing. Indeed, should a local government decide it wants to more aggressively provide for affordable housing through cluster development (as well as open space conveyance), it might increase the density bonus from the suggested figure of 25 percent.*

- (a) the percent of density bonus is no greater than the percent of dwelling units in the cluster development that are affordable units; or
- (b) the percent of density bonus is no greater than the percent of the gross area of the cluster development that is both:
  - 1. set aside as and conveyed as common open space pursuant to section 110, below; and
  - 2. accessible to the public.

*Comment: Note that only when the common open space is both conveyed and accessible to the public is a density bonus justified. If the common open space was simply conveyed to a private entity (rather than the local government) but there was no public access, a density bonus could not be approved.*

#### **106. Procedures for Review**

(1) The [local planning commission] shall review and approve a residential cluster development and any amendments thereto as a land development project in the manner provided for in [cite applicable state statute], together with any ordinances and regulations adopted pursuant thereto and appearing in [cite applicable local land development regulations].

#### **107. Review Criteria**

(1) In reviewing a residential cluster development, the [local planning commission] shall determine whether:

- (a) the site plan satisfies the requirements of sections 103, 104, and 105, above;
- (b) buildings and structures are adequately grouped so at least [25] percent of the total area of the site is set aside as common open space. To the greatest degree practicable, common open space shall be designated as a single block and not divided into unconnected small parcels located in various parts of the development;
- (c) pedestrians can easily access common open space;
- (d) the site plan establishes, where applicable, an upland buffer of vegetation of at least [50] feet in depth adjacent to wetlands and surface waters, including creeks, streams, springs, lakes, and ponds;
- (e) individual lots, buildings, structures, streets, and parking areas are situated to minimize the alteration of natural features, natural vegetation, and topography;
- (f) existing scenic views or vistas are permitted to remain unobstructed, especially from public streets;
- (g) the site plan accommodates and preserves any features of historic, cultural, or archaeological value;

- (h) floodplains, wetlands, and areas with slopes in excess of [25] percent are protected from development;
- (i) the cluster development advances the purposes of this ordinance as stated in section 101, above; and
- [(j) other, such as contiguity requirement for common open space.]

(2) The [local planning commission] may, in its opinion, apply such special conditions or stipulations to its approval of a residential cluster development as may be required to maintain harmony with neighboring uses and to promote the objectives and purposes of the comprehensive plan and the zoning and subdivision ordinances.

(3) If the [local planning commission] finds that the requirements of paragraph (1), above, are satisfied, it shall approve the residential cluster development, subject to any special conditions or stipulations pursuant to paragraph (2) above, any density bonus pursuant to section 105, above, and any reductions [or waivers] pursuant to section 108, below.

*Comment: While these review criteria are intended to guide the planning commission in the evaluation of the proposed cluster development, they cannot replace a sensitive and creative site planner who has the responsibility of designing cluster development or an experienced professional planner whose responsibility it is to review the proposal and advise the planning commission on necessary design changes.*

#### **108. Reduction [or Waiver] of Certain Physical Design Requirements**

(1) In approving a residential cluster development, the [local planning commission] may reduce the pavement width of any public or private streets that would otherwise be required by the [subdivision regulations or other design specifications for roads] to [22] feet.

(2) An applicant who wants the reduction of pavement width of public or private streets as provided for in paragraph (1), above, shall submit a statement of justification for the reduction [or waiver] along with the final site plan.

*Comment: Most local governments have adopted standard design specifications for streets. This section allows the planning commission to reduce street pavement widths in order to minimize impervious surfaces on the site as well as limit the portions of the site that must be regraded to accommodate wider streets. If a street proposed in a cluster development is to be used as a connector from an adjoining development or as a through street, it is probably not a candidate for a reduction in width. There is no firm rule, however, on when a reduction or waiver should be allowed and determinations should be made on a case-by-case basis.*

*The 22-foot pavement width shown in brackets assumes a 15-foot travel lane and a seven-foot parking area. If parking were desired on both sides of the street, a 28-foot pavement would accommodate two seven-foot parking lanes and a 14-foot wide travel lane (Southworth and Ben-Joseph 1997; Livable Oregon n.d.; Ewing 1996, 69–72).*

#### **109. Controls on Resale and Rerental of Affordable Housing Units Used as Basis for Density Bonus**

(1) Affordable dwelling units used as the basis for approving a density bonus in section 105, above, shall be subject to a deed restriction and a mortgage lien to ensure that newly constructed low- and moderate-income sales and rental units remain affordable to low- and moderate-income households for a period of not less than [30] years, which period may be renewed.

(2) The deed restriction and mortgage lien shall be approved by the [local government] law director and shall be enforceable by the [local government] through legal and equitable remedies.

*Comment: If the density bonus is to be given on the basis of a guarantee of the provision of affordable housing, there must be a mechanism that ensures the housing, whether it is for sale or for rent, will remain affordable for a reasonable period of time.*

#### **110. Conveyance of Open Space**

(1) Common open space provided by a residential cluster development shall be conveyed as follows:

- (a) To the [local government] and accepted by it for park, open space, agricultural, or other specified use or uses, provided that the conveyance is approved by the [local planning commission] and is in a form approved by the [local government] law director; or
- (b) To a nonprofit organization whose principal purpose is the conservation of open space, to a corporation or trust owned or to be owned by the owners



of lots or dwelling units within the residential cluster development, or to owners of shares within a cooperative development. If such a corporation or trust is used, ownership shall pass with the conveyances of the lots or dwelling units. The conveyance shall be approved by the [local planning commission] and shall be in a form approved by the [local government's] law director (see Diehl et al. 1988 for model language for easements).

(2) In any case, where the common open space in a residential cluster development is conveyed pursuant to subparagraph (1)(b), above, a deed restriction enforceable by the [local government] shall be recorded that provides that the common open space shall:

- (a) be kept in the authorized condition(s); and
- (b) not be developed for principal uses, accessory uses (e.g., parking), or roadways.

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## MODEL ORDINANCES TO HELP CREATE A PHYSICALLY ACTIVE COMMUNITY

During the last decade of the twentieth century, a number of communities stepped up support for bicycling and walking as modes of transportation by planning for and providing the necessary infrastructure. Many are college towns (e.g., Madison, Wisconsin; Eugene, Oregon; Davis, California; and Boulder, Colorado). Since 1990, other newly developing and redeveloping cities and suburbs have also implemented plans that incorporate pedestrian, bicycle, and transit facilities. Some of the funding for such plans and projects has come from the federal Transportation Equity Act for the 21st Century (TEA-21) and its precedent law, the Intermodal Surface Transportation Efficiency Act of 1990 (ISTEA). In addition, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was passed in 2005. It carries on the transportation equity program, among others.

All three of these transportation bills represented a departure from the traditional formula for federal and state transportation spending. Rather than devote resources almost exclusively to highway expansion and maintenance, the acts required states to set aside 10 percent of funding for projects that support nonautomobile modes of travel, including transit, bicycling, and walking. This shift occurred largely in response to public and lawmakers' emerging awareness that the auto-only recipe for solving transportation problems (i.e., more, wider roads as the principal strategy) that had dominated transportation funding formulas since World War II was not fiscally or environmentally stable in the long term. Such concerns coincided with growing aversion to low-density urban sprawl and the resultant loss of open space, farmland, and diminished sense of place and community.

A key part of ISTEA, TEA-21, and SAFETEA-LU is the Transportation Enhancements Program, which provides states and local governments with monies for bike trails, sidewalks, public transportation, preservation and restoration of historic transportation facilities, and scores of other projects. Enhancements constitute about 2 percent of the overall funding of the federal-aid highway program. It has

funded more than 15,000 projects nationwide, helping communities create bicycle and pedestrian paths, develop walkable downtowns, and protect scenic vistas and historical sites. To date, bicycle and pedestrian facilities, combined with rail-to-trails programs, make up more than one half of all enhancement obligations.

A 2003 survey by the Surface Transportation Policy Project (STPP), a Washington, D.C.-based organization that monitors the implementation of federal transportation laws, demonstrated that the public has a desire to do more walking but that poorly designed communities and neighborhood streets often prevent them from doing so (STPP 2003). Design elements that survey respondents described as barriers to walking included inconvenient or nonexistent pedestrian routes from neighborhoods to transit stops and shopping streets, streets designed to encourage speeding, and dangerous intersections.

Much of what is implemented through the three model ordinances that follow (a pedestrian overlay district; an on-site access, parking, and circulation ordinance; and a shared parking ordinance) aims to meet the public's desire for walkable communities.

The standards that have arisen over time are in many cases direct responses to planning practices that run counter to the goal of creating active communities. Here is a sampling of those traditional practices, ranging from the very broad to the very specific:

- The perpetuation (through zoning and subdivision regulations) of low-density development, which is not conducive to walking or bicycling and thus is not conducive to incorporating activity into daily routines;
- The regulatory challenge of implementing truly mixed use developments and districts (coupled with the difficulties developers have securing financing for any project that departs from conventional subdivisions, strip shopping centers, or big box retail);

- A preponderance of streets and street environments in American cities and towns that are unsafe and hostile toward anything except the automobile;
- A lack of street connectivity—isolated, single-use subdivisions that have no direct connections to surrounding shopping areas, schools, or other destinations make it very difficult for people to choose to walk, even those that are motivated to do so;
- And finally, there are simple things, like either allowing developers to waive their sidewalk requirement in some cases or not requiring sidewalks at all. Developers may argue that sidewalks add costs to development, and some neighbors may prefer the rural feel of a neighborhood without sidewalks, but neighborhoods send a direct message: No one walks here. The health consequences of what might seem like a fairly inconsequential requirement need to be recognized.

In the mid-1990s, the public health field began to focus its attention and support on bicycle and pedestrian planning and smart growth measures. That profession recognized that many of the community planning and design tools communities were using to implement smart growth objectives (e.g., mixing land uses, broadening transportation options, and encouraging compact form) could result in communities where people could be physically active on a regular basis and where air quality could be improved.

Attention by health professionals to the community design/physical activity relationship was sparked by soaring rates of obesity nationwide and recognition that long-standing models aimed at getting people to modify their exercise and eating habits to reduce their weight and improve their cardiovascular health were only modestly effective. Other relevant factors recognized by health officials included the relationship of land-use decisions to air quality and respiratory health; the impact of urban design on the number of pedestrian injuries and deaths; the relationship between the built environment and transportation systems; the mobility and quality of life of the elderly; and the ways in which land-use decisions affect com-

munity water quality, sanitation, and outbreaks of disease (Frumkin 2002).

While the recent flurry of media and professional attention paid to the planning and public health connection may make it seem new, the two disciplines do have a long shared history. The first master plans and zoning ordinances enacted early in the twentieth century were aimed at preventing overcrowding and stemming the spread of contagious disease in urban areas—the result of the interaction of professional planners and public health officials and advocates. Early zoning laws required homes to be kept separate from noxious industry and nuisances and mandated residential building designs that would provide tenement dwellers with adequate air and light.

As the century progressed, traditional town planning gave way to conventional urban sprawl, which was facilitated in part by zoning. In retrospect, the sharp separation of land uses, a fundamental tenet of zoning, is now recognized as one of several hindrances to communities' efforts to create high-quality neighborhoods, to balance transportation, land use, jobs, and housing, and to protect the environment. Early zoning codes were regulatory tools used by governments to protect the public health and safety. The current concern is on how zoning and subdivision regulations and the plans that support them can be modified to help improve health. For example, conventional patterns of urban sprawl—wherein housing, employment, schools, and shopping are at great distances from one another—have also all but precluded any mode of transportation other than driving for the vast majority of Americans. This pattern of development, combined with other lifestyle and dietary changes, has contributed to the growing epidemic of obesity among every age group in this country. These conditions are known causes of diabetes, cardiovascular disease, and early death. As we have learned more and more about the precise neighborhood and community characteristics that support active living and healthy people, planners and others have responded by crafting new planning and regulatory approaches that ultimately will result in healthier places. The three model ordinances set forth below are three such tools that communities can use to meet health goals.

## Model Pedestrian Overlay District (POD) Ordinance



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Create walkable neighborhoods
- Mix land uses

The model pedestrian overlay district is to be superimposed on a zoning district map and incorporates additional requirements to those of the underlying zone. The ordinance addresses a specific mix of uses that generally work well in a pedestrian environment. In addition, it prohibits setbacks of principal buildings, contains standards for the inset of entrances in order to protect pedestrian movement, requires that ground floors of buildings are chiefly transparent and do not present blank walls, and mandates that the ground floors of parking garages contain commercial or service uses. The overlay includes standards for the installation of canopies over building entrances.



*Figure 4.8.1. Wide sidewalks and transparent storefronts with inset entrances create a safe, attractive, pedestrian-friendly environment.*

The overlay is mapped on the local zoning map and may have different boundaries than the underlying zoning district. The standards contained in the overlay, however, prevail when they conflict with provisions in the underlying zone. Where the overlay is silent, for example, on matters such as the location of accessory buildings and side yards, the underlying zoning district regulations control.

This ordinance is intended to result in districts and areas in which people can walk to and from their destinations and in which pedestrians are given preference over automobiles. Such an overlay district can be considered one of a group of plan and ordinance types that seek to redirect land-use and transportation development and spending priorities toward a more balanced transportation network that accommodates all modes and all users. Such plans and ordinances increasingly aim to promote and improve public health by creating environments where people have opportunities to incorporate physical activity into their daily routines.

One issue not addressed by this model is if and when to waive sidewalks. Sometimes local governments waive sidewalk requirements as part of the subdivision review process or fail to construct them when undertaking road construction, only to find that they are needed as an area develops. The only answer to this is to mandate them everywhere and to use special assessment procedures, which vary according to state law. Such procedures require that local property owners in developed areas install sidewalks at their own expense or the local government will install them and assess the property owners on a lineal-front-foot basis.

In some cases, such as in neighborhoods of predominately low- and moderate-income persons, federal Community Development Block Grants can cover sidewalk installation, eliminating the need to impose assessments. In other cases, the requirement of installation of sidewalks after an area is developed may be politically controversial, so the local government may decide to pay for their installation through its general fund, rather than assessments. Costs may also be reduced by installing asphalt pedestrian paths rather than concrete sidewalks, which must be poured in forms over an aggregate base and which are typically linked to the centerline elevation of the adjoining roadway. If a pedestrian orientation is what a community desires, however, some type of sidewalk is necessary, regardless of who pays. In general, sidewalks should be required, and waivers should be rare or nonexistent.

**101. Purpose**

The purposes of the Pedestrian Overlay District (POD) are to:

- (1) implement the [applicable plan name];
- (2) create a healthful built environment in which individuals have opportunities to incorporate physical activity, such as walking, into their daily routine;
- (3) create a safe, attractive, pedestrian-friendly environment where the risk of pedestrian injuries or fatalities is minimized through the application of appropriate development standards; where residents have increased opportunities to interact with neighbors; where children can walk to and from school; and where the elderly have safe and convenient pedestrian routes;
- (4) encourage active commercial and service uses on the ground floor of buildings; and
- (5) prohibit development that discourages pedestrian activity.

**102. Allowed Uses.** Uses are allowed in a POD in accordance with this use table:

**TABLE 4.8.1. ALLOWED USES**

<i>Use Category</i> Specific Use Type	<i>Zoning District</i> POD
<i>Residential</i>	
Household Living	
• Artist Live/Work Space, above ground floor	P
• Artist Live/Work Space, ground floor	C
• Dwelling Units, above ground floor	P
• Detached House	C
• Multiunit (3+ units) Residential	C
• Single-Room Occupancy	C
• Town House	C
• Two-Flat	C

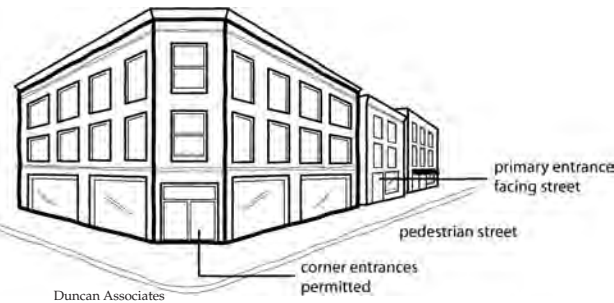
*(continued)*

TABLE 4.8.1. ALLOWED USES (continued)

<b>Use Category</b> <b>Specific Use Type</b>	<b>Zoning District</b> <b>POD</b>
Group Living	
• Assisted Living	C
• Group Home	P
• Nursing Home	C
• Temporary Overnight Shelter	C
• Transitional Residences	C
• Transitional Shelters	C
<i>Public and Civic</i>	
Colleges and Universities	C
Cultural Exhibits and Libraries	C
Day Care	P
Hospital	C
Lodge or Private Club	C
Parks and Recreation	P
Postal Service	C
Public Safety Services	C
Religious Assembly	P
School, Public and Private	C
Utilities and Services, minor	P
Utilities and Services, major	C
<i>Commercial</i>	
Adult Use	N
Animal Services	
• Shelter/Boarding Kennel	N
• Sales and Grooming	P
• Veterinary	P
Artist Work or Sales Space	P
Boat Sales, Repair, and Storage	N
Car Wash	N
Drive-Through Facility	N
Eating and Drinking Establishments	
• Restaurant	P
• Tavern	P
Entertainment and Spectator Sports	
• Small (1–149 seats)	P
• Medium (150–999)	N
• Large (1,000+)	N
Financial Services	P
Food and Beverage Retail Sales	P
Bicycle Sales and Service	P
Movie and Live Theater	P
Gas Stations	N
Lodging	
• Small (1–16 guest rooms)	P
• Large (17+ guest rooms)	C
Medical Service	P
Vehicle Sales, Service, and Repair	N
Office	P
Parking Lot	N
Parking Structure, Commercial (nonaccessory; parking on second floor and levels above)	C
Personal Service (including health clubs and gyms)	P
Repair Service, Consumer (including bicycles)	P
Residential Storage Warehouse	N
Retail Sales, General	P
Vehicle Sales, Service, and Repair	N
<i>Industrial</i>	
Manufacturing, Production and Industrial Services	
• Artisan (hand tools only; e.g., jewelry or ceramics)	P
• Manufacturing	N
<i>Other</i>	
Wireless Communication Facilities	
• Colocated	P
• Freestanding (towers)	

P = permitted by right; C = conditional use; N = not allowed





*Figure 4.8.2. Principal buildings should be located on the front lot line, with primary entrances facing the street and at least 50 percent or more of ground-level wall area devoted to interest-creating features such as windows.*



*Figure 4.8.3. Awnings emphasize building entrances, provide shade and protection for pedestrians, and contribute to a high-quality streetscape.*

**Comment:** The model ordinance permits, by right, restaurants, retail food and beverage sales, and general retail uses. Coffee shops, bakeries, Internet cafés, bicycle shops, and bookstores are a few such uses particularly appropriate in pedestrian districts that jurisdictions may want to encourage. Uses that are institutional or governmental in nature are generally treated as conditional uses. A conditional use permit procedure for such uses (e.g., schools, colleges, and universities) is important to ensure that such uses have a pedestrian orientation incorporated in their building and site design.

### 103. Setbacks

- (1) All principal buildings shall be located on the front lot line.
- (2) Any principal building located on a corner lot shall be located on the front lot line and on the side lot line abutting the street.

**Comment:** Under this setback standard, sidewalk cafés and similar pedestrian-oriented uses would need to be located on public sidewalks. This is a common practice in large cities, where the municipal government establishes standards for the use of sidewalks and issues a permit that allows outdoor cafés.

### 104. Building Entrances

- (1) Building entrances facing a street shall be recessed into the face of the building to a depth that permits the entry door to open and close without projecting into the public right-of-way.
- (2) A principal building located on a corner lot may provide a single primary entrance at the corner.

### 105. Transparency of Street-Level Floor Commercial and Public and Civic Buildings

- (1) Blank street-level walls for commercial, public, and civic buildings are not permitted on any street frontage in the POD.
- (2) At least [50] percent of the ground-level wall area of any new or reconstructed commercial, public, or civic building facing a public street shall be devoted to interest-creating features, such as building entrances, murals, display windows, or windows affording views into retail, office, or lobby spaces. This requirement shall apply to both frontages of a building located on a corner lot.
- (3) All parking structures located within the POD as conditional uses shall have retail or service uses located the ground floor.
- (4) Street-level openings on parking structures shall be limited to those necessary for retail store entrances, vehicle entrance and exit lanes, and pedestrian entrances to stairs and elevator lobbies.

### 106. Awnings and Canopies

- (1) All commercial and public and civic buildings in a POD shall have an awning or canopy over any building entrance that abuts the public right-of-way.
- (2) Awnings or canopies shall:
  - (a) overhang the sidewalk on which the building fronts by a minimum of [5] feet; and
  - (b) if illuminated, be lit internally so that the lighting system is encased or otherwise screened from public view.

**Comment:** An awning is a hood or cover made of fabric, metal, or glass that projects from the wall of a building, above a ground-floor window, or over an entryway. In pedestrian-friendly areas, store signage is often printed on the awnings. Awnings emphasize a store's or restaurant's entrance, provide shade and weather protection for transit users, pedestrians, and café patrons, and contribute to a high-quality streetscape. They add texture to the streetscape and interest and variety to the building façade, while protecting storefront displays from sun exposure. In rainy climates, a requirement that buildings install awnings on the first floor can create an environment where people can still walk and commute to work, shopping, or school without getting wet.

**An additional note about arcades:** This model pedestrian overlay ordinance does not include provisions for arcades, nor does it recommend them. Arcades are recessed areas between the curb and the building wall that are open to the street. Most arcades are one or two stories in height. Arcades were a very popular ground-floor feature of skyscrapers built in the 1960s and 1970s. They were widely used in zoning bonus programs as an amenity that the developer could provide in exchange for additional height and floor area above what the base zoning allowed. As their use grew, several design-related problems became clear, most stemming from the fact that many cities did



not do any substantive urban design review to determine if in fact an arcade would be a pleasant, usable public space that connected with surrounding properties. For example, many arcades were dimly lit (if at all), lacked sunlight, and were generally uninviting to and avoided by pedestrians. Many of them terminated at dead ends (e.g., the side of an adjacent building) and thus created a haphazard experience for pedestrians. From a retailing standpoint, the added distance created by an arcade between the building and the street, coupled with inadequate light, made the ground-floor retail spaces hard to see, meaning that shoppers couldn't find them and, consequently, that building owners had a hard time keeping or recruiting retail tenants.

### 107. Through-Block Connections

Where necessary for public convenience or safety, a developer shall improve and dedicate to the public a [10 to 30]-foot-wide pedestrian and bicycle access way to connect to cul-de-sac streets, to pass through odd-shaped or oversized city blocks [600] feet or longer, to complete existing pedestrian and bicycle routes, and to provide for networks of public paths creating access to schools, parks, shipping centers, transit stops, or other destinations.

*Comment:* Long blocks and cul-de-sacs often increase walking distances by prohibiting people on foot or bike from using the most direct route possible between their origins and destinations. Through-block connections can shorten such walking trips and can thus decrease the tendency to drive between relatively close-by destinations.

### 108. Parking, Including Bicycles

(1) Pursuant to section 102, surface parking lots are prohibited in the Pedestrian Overlay District.

(2) Parking Requirements.

[Insert parking standards]

*Comment:* This model does not specify minimum or maximum parking standards for uses in the POD. Cities that have enacted such districts (e.g., Portland, Oregon; Seattle; and Charlotte, North Carolina) have lessened the required amount of parking and in some cases do not require businesses to provide off-street parking at all. The rationale is that people will make more trips within the walkable district on foot, thus reducing demand for off-street parking. In Portland, a maximum parking standard is applied in the pedestrian district. Cities that have transit systems and transit station area zones (with provisions similar to a pedestrian overlay district) often reduce the amount of parking required for uses within a specific walking distance (e.g., one quarter-mile) of the transit station.

(3) The required minimum number of bicycle parking spaces is based on the principal uses on a site as shown in Table 4.8.2.

**TABLE 4.8.2. MINIMUM REQUIRED BICYCLE PARKING SPACES  
IN THE PEDESTRIAN OVERLAY DISTRICT**

Principal Use Categories	Specific Uses	Long-Term Spaces	Short-Term Spaces
<i>Residential Categories</i>			
Household Living	Multidwelling	1 per 4 units	2, or 1 per 20 units
Group Living		2, or 1 per 20 residents	None
	Dormitory	1 per 8 residents	None
<i>Commercial Categories</i>			
Retail Sales and Service		2, or 1 per 12,000 square feet of net building area	2, or 1 per 5,000 square feet of net building area
	Temporary Lodging	2, or 1 per 20 rentable rooms	2, or 1 per 20 rentable rooms
Office		2, or 1 per 10,000 square feet of net building	2, or 1 per 40,000 SF of net building area
Commercial Parking		10, or 1 per 20 auto spaces	None
Commercial Outdoor Recreation		10, or 1 per 20 auto spaces	None
Major Event Entertainment		10, or 1 per 40 seats or per CU* review	None

(continued)

**TABLE 4.8.2. MINIMUM REQUIRED BICYCLE PARKING SPACES  
IN THE PEDESTRIAN OVERLAY DISTRICT** (continued)

Principal Use Categories	Specific Uses	Long-Term Spaces	Short-Term Spaces
<i>Industrial Categories</i>			
Manufacturing and Production		2, or 1 per 15,000 square feet of net building area	None
Warehouse and Freight Movement		2, or 1 per 40,000 square feet of net building area	None
<i>Institutional Categories</i>			
Basic Utilities		8	None
	Light-Rail Stations, Transit Centers	10, or 5 per acre	None
Community Service	Park and Ride	2, or 1 per 10,000 square feet of net building area	2, or 1 per 10,000 square feet of net building area
Parks and Open Areas		Per CU* review	Per CU* review
Schools	Grades 2 through 5	2 per classroom, or per CU* review	None
	Grades 6 through 12	4 per classroom, or per CU* review	None
Colleges	Excluding dormitories (see Group Living, above)	2, or 1 per 20,000 square feet of net building area, or per CU* review	2, or 1 per 10,000 square feet of net building area, or per CU* review
Medical Centers		2, or 1 per 70,000 square feet of net building area, or per CU* review	2, or 1 per 40,000 square feet of net building area, or per CU* review
Religious Institutions		2, or 1 per 4,000 square feet of net building area	2, or 1 per 2,000 square feet of net building area
Daycare		2, or 1 per 10,000 square feet of net building area	None
<i>Other Categories</i>			
Aviation and Surface Passenger Terminals, Detention Facilities		Per CU* review	Per CU* review

\*CU means "conditional use."

*Comment:* Table 4.8.2 is adapted from the Portland, Oregon, Bicycle Parking Facilities Guidelines (2004). Standards are provided for various land-use categories and according to long-term and short-term needs. As used in this table, long-term spaces provide employees, students, residents, commuters, and others who generally stay at a site for several hours a secure and weather-protected place to park bicycles. The measure of security for long-term bicycle parking must be greater than that provided for short-term parking. Short-term spaces provide shoppers, customers, messengers, and other visitors who generally park for two hours or less a convenient and readily accessible place to park bicycles.

(4) Where the [local government] has established an on-street or off-street bikeway that adjoins or abuts the site, the internal on-site bicycle system for the use shall connect to it.

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## On-Site Access, Parking, and Circulation Ordinance



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Provide a variety of transportation choices
- Create walkable neighborhoods

This model establishes standards for on-site pedestrian access. It is intended to be integrated with a local government's existing procedures for reviewing a variety of development types; consequently, it does not include new procedures in section 102. It does emphasize the design of the site and the linkage of pedestrian and bicycle systems on the site to ensure that bicyclists and pedestrians are able to cross the site safely.





*Figure 4.9.1. When complete separation of pedestrians from movement of vehicles is not possible, site plans should minimize hazards by using special paving, landscaping, and other means to clearly delineate pedestrian areas.*



*Figure 4.9.2. Bicycle parking should be located close to building entrances yet where it will not impede pedestrian or automobile flow.*

### 101. Purpose

- (1) The purposes of this ordinance are to:
  - (a) implement the [applicable plan name];
  - (b) ensure that each development accommodates the safe and convenient movement of vehicles, bicycles, pedestrians, and transit throughout the proposed development and to and from surrounding areas;
  - (c) create a healthful built environment in which individuals have opportunities to incorporate physical activity, such as walking, into their daily routine;
  - (d) create a safe, attractive, pedestrian-friendly environment where the risk of pedestrian injuries or fatalities is minimized through the application of appropriate development standards, where residents have increased opportunities to interact with neighbors, and where the elderly have safe and convenient pedestrian routes;
  - (e) create a circulation system that contributes to the attractiveness of the development and the community as a whole; and
  - (f) establish standards for the review of development plans.

### 102. Definitions and Scope of Application

*Comment:* This section should define which developments are subject to review under the ordinance and how the standards are to be applied.

### 103. Pedestrian Movement

- (1) To the maximum extent feasible, site plans for proposed developments shall separate movement of pedestrians from movement of vehicles and bicycles and protect bicyclists from conflicts with vehicles.
- (2) Where complete separation of movement of pedestrians from movement of vehicles and bicycles is not possible, the site plan shall minimize potential hazards by using special paving, grade separations, pavement marking, signs, striping, bollards, median refuge areas, traffic calming features, landscaping, lighting, or other means to clearly delineate pedestrian areas for both day and night use.
- (3) Where pedestrians and bicyclists share walkways, the pedestrian/bicycle system shall be designed to be wide enough to accommodate anticipated pedestrian and bicycle traffic volumes. A shared walkway shall have a minimum width of [eight] feet and shall comply with the American Association of State Highway and Transportation Officials (AASHTO) guidelines, as contained in AASHTO's *Guide for Development of Bicycle Facilities* (August 1999), which are adopted by reference and which shall be on permanent file in the [planning department].
- (4) Curb cuts and ramps shall be located at convenient, safe locations for the physically disabled, bicyclists, and people pushing strollers or carts. The location and design of curb cuts and ramps shall meet the requirements of the [applicable building code] and the [local government] Americans with Disabilities Act ramp standards and shall avoid crossing or directing traffic through loading areas, drive-in lanes, and solid waste storage and collection areas.

### 104. Location of Bicycle Parking Facilities; Connection to Citywide System

- (1) Bicycle parking facilities shall meet the following standards:
  - (a) A minimum number of bicycle parking spaces as set forth in [cite to bicycle parking requirements section of the parking ordinance] shall be provided on-site. In making the determination, the [local government] shall consider, when appropriate, the number of dwelling units or lodging rooms, the number of students, the number of employees, and the number of auto parking spaces in accordance with the following guidelines.
    - (b) Bicycle parking facilities shall be located within [50] feet of building entrances and shall be visible from the uses they serve. They shall not be located so as to impede pedestrian or automobile traffic flow or to cause damage to plant material from bicycle traffic.
    - (c) Bicycle parking facilities shall be designed to allow the bicycle frame and both wheels to be securely locked to the parking structure. The structure shall be of permanent construction such as heavy-gauge tubular steel with angle bars permanently attached to the pavement. Bicycle parking facilities shall be at least two feet in width and six feet in length, with additional back-out or maneuvering space of at least five feet.
    - [(d) Covered bicycle lockers. In areas with high demand for bicycle parking, the zoning administrator has the authority to require that a certain number of covered, lockable bicycle storage units be provided. Structures that require

a user-supplied locking device shall be designed to accommodate U-shaped locking devices. All lockers and racks must be securely anchored to the ground or the building structure to prevent the racks and lockers from being removed from the location. The surfacing of such facilities shall be designed and maintained to be mud- and dust-free.]

(2) Where the [local government] has established an on-street or off-street bike-way that adjoins or abuts the site, the internal on-site bicycle system for the use shall connect to it.

#### 105. Walkways and Pedestrian Access

(1) Walkways shall provide pedestrian access through parking lots from street sidewalks to building entries. Walkways shall be located and aligned to directly and continuously connect areas or points of pedestrian origin and destination and shall not be located and aligned solely based on the outline of a parking lot configuration unless such a configuration allows for direct pedestrian access.

(2) Such walkways shall have a paved surface not less than [five] feet in width and shall be grade separated from the parking lot or otherwise delineated with pavement markings, planters, or alternate paving material.

(3) Where the primary pedestrian access to the site crosses drive aisles or internal roadways, the pedestrian crossing shall emphasize and place priority on pedestrian access and safety. The material and layout shall be continuous as the pedestrian access crosses the driveway, with a break in continuity of the driveway paving and not in the pedestrian access way.

(4) The entirety of the on-site pedestrian walkway system shall be marked and defined using pavement treatments, signs, striping, lighting, median refuge areas, and landscaping, as appropriate.

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*Figure 4.9.3. Walkways should provide easy pedestrian access through parking lots; this pedestrian walkway is clearly defined through the use of planters and alternate paving material.*



## Model Shared Parking Ordinance



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Variety of transportation choices
- Compact building design

Communities have used several tools to minimize the overall amount of surface parking in neighborhoods, downtowns, and commercial areas. One tool has been to allow certain land uses to meet the minimum requirements for parking spaces by sharing spaces with other uses. Shared parking arrangements are applied when land uses are adjacent or in close proximity to one another, have different parking demand patterns, and are able to use the same parking spaces or lots throughout a day. Shared parking is also commonly used in mixed use developments where commercial and office tenants have varying hours of operation. In general, shared parking is most effective when the land uses have significant different peak parking characteristics that vary by time of day and day of the week. They often work well for businesses, restaurants, churches, schools, and other uses.



Jurisdictions with shared parking standards tend to limit the types of land uses to which such provisions can be applied. For example, in Bastrop, Texas, shared parking may be allowed in the case of mixed uses (different buildings) for up to 50 percent of the parking spaces required for a theater or other place of evening entertainment (after 6:00 p.m.), or shared parking may be provided for a church when there is available parking for banks, offices, and similar uses not normally open, used, or operated during the same hours as church events or services. Shared parking must be in the same parking lot (Bastrop 2003).

In Fort Collins, Colorado, residential uses are prohibited from reducing the amount of parking required per unit by using shared parking. The rationale for this is that circumstances may arise where a resident is unable to access the shared lot and thus would have no parking available at all. Planners recognize that such a scenario would be very unpopular and could undermine the overall effort to promote shared parking (Barkeen 2003).

The commentary for Portland Metro's Model Shared Parking Ordinance notes that the closer shared spaces are to the land uses they serve, the more likely the arrangement will be a success. The model ordinance provides maximum distances between land uses and parking spaces that would make them eligible to be classified as shared parking spaces or areas (Portland Metro 1997).

Of the dozen or so ordinances that were reviewed for this model, Seattle offers the largest overall reductions in required parking in its shared parking provisions. For example, where an office use and a retail sales or service use share parking, the parking requirement for the retail sales and service use may be reduced by 20 percent, provided the reduction does not result in fewer spaces than the minimum required for the office use. For arrangements involving a residential and retail sales and service use, the residential use may reduce its parking by 30 percent, provided the reduction does not result in less than the minimum required for the retail and service use. And for residential and office use shared arrangements, the residential portion may be reduced by as much as 50 percent, provided there is still the minimum required amount for the office use. However, no restaurant or entertainment uses may share parking with residential uses. Jurisdictions using this model ordinance may consider applying no minimum number of required spaces for office uses if such an approach is appropriate and practical in the local districts.

The ordinance has additional provisions for shared parking arrangements between land uses that are either solely daytime uses or solely nighttime and Sunday uses. Daytime uses include administrative offices, retail sales and service (excluding restaurants), and wholesale storage. Nighttime and Sunday uses include restaurants and drinking establishments, religious uses, theaters, and school auditoriums. The planning director can authorize that up to 90 percent of the parking required for a daytime use may be supplied by the off-street parking provided by a nighttime or Sunday use and vice versa, and up to 100 percent when the nighttime or Sunday use is a religious facility. Applicants must show there is no major conflict between the operating hours of the uses that share parking.

According to Mark Troxel, a land-use planning analyst with the City of Seattle, shared parking is applied primarily by single-owner, mixed use buildings. This is the case for two primary reasons: Seattle's land-use code has many mixed use zones, and the city strongly encourages mixed use developments that incorporate residential and retail uses, residential and office uses, or a combination thereof. Troxel says that because "parking is such a big cost driver" most developers are eager to use shared parking as a means of reducing the total number of spaces they must provide (Troxel 2004).



Marya Morris

*Figure 4.10.1. Shared parking arrangements are common in mixed use developments where commercial and office tenants with different hours of operation are in close proximity to each other.*

Less than 5 percent of the shared parking arrangements in Seattle are between adjacent properties with different owners. Troxel says this is largely because each property owner is required to sign a parking covenant, which essentially places an easement on the portion of the parking that one owner is providing to the other as part of the arrangement. In the past, landowners had signed covenants without a sunset date, essentially locking them into the arrangement indefinitely. Troxel says some of those arrangements became a problem for property owners who sell their property (when the new owners balk at the existing parking covenant) and for the other owner who still needs the parking but must deal with the new owner. Finally, in some cases property owners have granted rights to share the exact same spaces with as many as six other properties. Such problems with the covenants and the oversharing of parking are difficult to remedy.

The model shared parking ordinance here adapts Seattle's regulations. Under this model, applicants for zoning permits in certain areas within the community would either be required to evaluate the use of shared parking or may elect to do so. The zoning administrator or other code enforcement official would promulgate guidelines for the preparation of shared parking feasibility studies, which applicants would use. Where the shared parking proposal entails two or more separately owned properties, the owners of those properties must enter into an agreement regarding access to, and maintenance and management of, the shared parking spaces. The zoning administrator may require applicants to submit a shared parking plan as part of the site plan requirements for a zoning permit.

#### 101. Purpose

- (1) The purposes of the ordinance are to:
  - (a) allow a reduction in the total number of parking spaces required for certain properties in cases where a mix of adjacent land uses have varying peak periods of parking demand;
  - (b) reduce the overall amount of impervious surfaces, specifically the amount of land devoted to surface parking; and
  - (c) support [plan name] policies that call for:

[List relevant plan policies here such as: 1. Encouraging compact development and efficient use of land; 2. Promoting nonmotorized vehicle trips including walking and bicycling; and 3. Improving accessibility and mobility to common destinations for users of all transportation modes.]

#### 102. Applicability

- (1) Applicants for a zoning permit for any change of use [must or may] evaluate the feasibility of shared parking arrangements as part of their application where:
  - (a) The proposed use is in an area identified in [plan name] as characterized by concentrated or mixed use development, including land located in the following zoning districts:
    - [1. Central business district]
    - [2. Town center district]
    - [3. Transit station or transit-oriented development district]
    - [4. Regional center district]
    - [5. Neighborhood commercial district]
    - [6. Main street district]

*Comment: These are sample names for zoning districts. Users of this model can substitute their own districts.*

- (b) The number of parking spaces proposed by the applicant is more than [10] percent of, or more than [10] spaces greater than, the minimum number of parking spaces required by the [parking standard ordinance], whichever is greater.

#### 103. General Provisions

- (1) Shared parking is allowed between two or more uses to satisfy all or a portion of the minimum off-street parking requirement.
- (2) Shared parking is permitted between different categories of uses or uses with different hours of operation.



(3) A use for which an application is being made for shared parking shall be located within [800] feet of the parking facility.

(4) The reductions to parking permitted through shared use of parking shall be determined as a percentage of the minimum-parking requirement as modified by the reductions permitted in other sections of the parking ordinance.

*Comment: A jurisdiction may allow initial reductions in parking requirements for certain uses or in certain districts that would be calculated prior to the consideration of a shared parking arrangement. Seattle, for example, allows for reductions in parking standards for landmark buildings, for uses in areas where transit is available, and in pedestrian commercial zones.*

(5) An agreement providing for the shared use of parking, executed by the parties involved, shall be filed with the [zoning administrator]. Shared parking privileges shall continue in effect only as long as the agreement, binding on all parties, remains in force. If the agreement is no longer in force, parking shall be provided as otherwise required by this chapter.

#### **104. Calculation of Parking Requirements for Shared Parking; Shared Parking Feasibility Study**

*[Alternative 1]*

(1) Where shared parking arrangements are proposed, the [zoning administrator] shall determine the number of parking spaces that may be shared based on a shared parking feasibility study prepared by the applicant for a zoning permit. The [zoning administrator] shall promulgate written guidelines for the preparation of such studies by [date].

(2) A shared parking feasibility study shall:

(a) identify the properties and uses for the study (the study may include properties and uses not the subject of the zoning permit, provided that the applicant obtains a letter of authorization from the property owner or his or her agent);

(b) determine the number of parking spaces that would be required by applying the standard for the uses for all of the properties in subparagraph (2)(a), above;

(c) determine the peak parking demand for the combined demand of all of the uses for all of the properties in subparagraph (2)(a), above, using standard parking generation rates in sources approved by the [zoning administrator]; and

(d) compare the results of subparagraphs(2)(b) and (c), above. [See sidebar, page 145.]

If the [zoning administrator] finds that the shared parking feasibility study is consistent with guidelines promulgated pursuant to paragraph (1), above, the [zoning administrator] shall use the lesser of the two parking demands calculated in subparagraph (2)(d), above, as the minimum number of parking spaces to be provided for all the properties and uses in the study.

(3) If standard parking generation rates for any of the uses in the study are not available, the applicant may collect data at similar sites to establish local parking demand rates. If the shared parking feasibility study assumes use of an existing parking facility, the applicant shall conduct field surveys to determine actual parking accumulation.

*Comment: The Urban Land Institute (2005) has developed procedures for conducting shared parking studies. For parking generation rates see, for example, Davidson and Dolnick (2001), which contains examples of parking standards from hundreds of ordinances around the United States. In addition, see ITE (2004) and ITE (1995), which contain guidelines for planning and regulating shared parking facilities.*

*Shoup (2005) assails planners' use of parking standards altogether. He argues that, because of numerous significant flaws in how jurisdictions calculate parking standards, the amount of parking that gets built bears little or no relationship to what is actually needed. This has resulted in an oversupply of parking in many jurisdictions, which has had far reaching negative implications on everything from the natural environment to downtown revitalization efforts to making transit infeasible through low-density auto-dependent land-use patterns.*

*[Alternative 2]*

(1) Business establishments constituting different categories of use may share parking as follows:

(a) If an office use and a retail sales and service use share parking, the parking requirement for the retail sales and service use may be reduced

by 20 percent, provided that the reduction does not exceed the minimum parking requirement for the office use.

(b) If a residential use shares parking with a retail sales and service use other than lodging uses, eating and drinking establishments, or entertainment uses, the parking requirement for the residential use may be reduced by 30 percent, provided that the reduction does not exceed the minimum parking requirement for the retail sales and service use.

(c) If an office and a residential use share off-street parking, the parking requirement for the residential use may be reduced by 50 percent, provided that the reduction shall not exceed the minimum parking requirement for the office use.

(2) Shared Parking for Uses with Different Hours of Operation.

(a) For the purposes of this section, the following uses shall be considered daytime uses, operating anytime between the hours 8:01 a.m. and 5:59 p.m. [Monday through Friday only]:

1. Customer service and administrative offices
2. Retail sales and services, except [eating and drinking establishments and] entertainment uses
3. Wholesale, storage, and distribution uses
4. Manufacturing uses
5. Other similar primarily daytime uses, as determined by the [zoning administrator]

(b) For the purposes of this section, the following uses shall be considered nighttime uses, operating anytime between the hours of 6:00 p.m. and 8:00 a.m., or [Saturday and] Sunday uses:

1. Auditoriums accessory to public or private schools
2. Religious facilities
3. Entertainment uses, such as theaters, bowling alleys, and dance halls
- [4. Eating and drinking establishments]
5. Other similar primarily nighttime or Sunday uses, as determined by the [zoning administrator]

*Comment: A good deal of judgment must be applied to determine which uses are "daytime" and which are "nighttime" activities because these are not cut-and-dried determinations. Of these, eating and drinking establishments may be the most problematic. A restaurant that is a "supper club" would be a "nighttime" use, but one that serves breakfast and lunch would not. For that reason, they have been placed in brackets.*

(c) The [zoning administrator] may authorize upon application the use of up to 90 percent of the required off-street parking for a daytime use to serve as the required off-street parking provided for a nighttime or Sunday use and vice versa, except that this may be increased to 100 percent when the nighttime or Sunday use is a religious facility. The applicant shall demonstrate that there is no substantial conflict in the principal operating hours of the uses for which the sharing of parking is proposed.

(3) Shared Parking for the Uses of the Same Type

(a) The [zoning administrator] may authorize in writing shared parking arrangements between two or more commercial uses having the same or overlapping operating hours, allowing reductions in the total minimum number of required parking spaces as follows:

1. Up to a 20 percent reduction in the total minimum number of required parking spaces for four or more separate establishments;
2. A 15 percent reduction in the total minimum number of required spaces for three establishments; and
3. A 10 percent reduction in the total minimum number of required spaces for two establishments.

(b) No reductions to the parking requirement shall be made if the proposed business establishments have previously received a reduction through the provisions for shared parking under paragraphs (1) or (2) above.

(c) The establishments for which the application is being made for shared parking shall be located within 800 feet of the parking facility. The parking facility shall be located in a commercial or residential-commercial zone.

(d) The reductions to parking quantities allowed through shared parking shall be determined as a percentage of the minimum parking requirement

as stated in section [cite to section establishing minimum parking requirements by use].

(e) New business establishments seeking to meet parking requirements by becoming part of an existing shared parking arrangement shall provide the [zoning administrator] with an amendment to the agreement stating their inclusion in the shared parking facility or area.

#### **105. Written Agreement between Property Owners to Share Parking**

(1) Where an application for a zoning permit for which shared parking is proposed includes two or more separately owned properties and the [zoning administrator] has made a determination of the minimum number of required parking spaces for the each of the applicable properties and uses, the [zoning administrator] shall require that the owners of the properties enter into a legal agreement guaranteeing access to, use of, and management of designated shared parking spaces. The agreement shall be in a form approved by the [local government law director], included as a condition of the zoning permit, and enforceable by the [local government].

(2) Where an application for a zoning permit for which shared parking is proposed includes two or more properties owned by the same property owner and the [zoning administrator] has made a determination of the minimum number of required parking spaces for the applicable properties and uses, the [zoning administrator] shall require that the owner of the properties shall enter into a legal agreement with the [local government] guaranteeing access to, use of, and management of designated shared parking spaces. The agreement shall be in a form approved by the [local government law director], included as a condition of the zoning permit, and enforceable by the [city or county].

#### **106. Shared Parking Plan**

(1) The [zoning administrator] may require an applicant for a zoning permit that incorporates shared parking to submit a shared parking plan. Such a plan shall be included as an addendum to a site plan and shall be drawn to the same scale. A shared parking plan includes one or more of the following:

- (a) A site plan showing parking spaces intended for shared parking and their proximity to the uses they will serve
- (b) A signage plan that directs drivers to the most convenient parking areas for each particular use or group of uses, if such distinctions can be made
- (c) A pedestrian circulation plan that shows connections and walkways between parking areas and land uses.

(2) The shared parking plan shall satisfy the following standards, as applicable:

- (a) Shared spaces for residential units must be located within [300] feet of dwelling unit entrances they serve.
- (b) Shared spaces at nonresidential uses must be located within [500] feet of the principal building entrances of all sharing uses. However, up to [20] percent of the spaces may be located greater than [500] feet but less than [1,000] feet from the principal entrances.
- (c) Clearly delineated and direct pedestrian connections must be provided from the shared parking area(s) to the building entrances.
- (d) Pedestrians shall not be required to cross an arterial street to access shared parking facilities except at a signalized intersection along a clearly delineated pedestrian pathway.

**AN EXAMPLE OF A SHARED PARKING CALCULATION**

Calculate the shared parking required for a mixed use development with a 40,000-gross-square-foot (GSF) office building and a 5,000 GSF restaurant.

**Step 1.** Determine the base parking required (as per the local parking ordinance) for each land use.

Assume the parking standards ordinance requires, at a minimum, 2.7 spaces per 1,000 GSF for office uses and 15.3 spaces per 1,000 GSF for restaurants.

Parking for offices =  $2.7 \times 40,000 / 1,000 = 108$  spaces

Parking for restaurant =  $15.3 \times 5,000 / 1,000 = 77$  spaces

**Combined base requirement:  $108 + 77 = 185$  spaces**

**Step 2.** Based on the hourly variation in parking demand, determine the peak parking demand for the combined demand of all the uses in the development.

Standardized data (e.g., those contained in ULI (1983)) or other studies should be used to estimate hourly variations. Field studies can also be performed on similar land uses within the jurisdiction to establish the hourly variation patterns. This analysis may be needed for both weekdays and weekends, depending on the type of uses involved, and may need to consider seasonal peak periods.

**Example:** Table 4.10.1 shows the various hourly parking demand rates for offices and restaurants (columns 2 and 4) from ULI data. These rates were multiplied by the GSF of each development to determine the number of parking spaces needed each hour during a typical weekday. The hourly parking demands for this example are shown in Table 4.10.1 above. Below is the combined peak parking demands for several critical hours during the day (Table 4.10.2):

**TABLE 4.10.1. WEEKDAY HOURLY PARKING DEMAND RATIOS FOR OFFICE BUILDINGS AND RESTAURANTS**

Hour of Day (1)	Office Parking Demand per 1,000 GSF (2)	40,000 GSF Office (3)	Restaurant Parking Demand per 1,000 GSF (4)	5,000 GSF Restaurant (5)	Total Spaces Needed to Meet Combined Demand (6)
10 a.m.	3.0	120	4.0	20	140
11 a.m.	3.0	120	6.0	30	150
12 noon	2.7	108	10.0	50	158
1 p.m.	2.7	108	14.0	70	178
2 p.m.	2.9	116	12.0	60	176
3 p.m.	2.3	92	12.0	60	150
4 p.m.	2.3	92	10.0	50	142
5 p.m.	1.4	56	14.0	70	126
6 p.m.	0.7	28	18.0	90	118
7 p.m.	0.2	8	20.0	100	108
8 p.m.	0.2	8	20.0	100	108

Adapted from ULI 1983 [2005]

**TABLE 4.10.2. COMBINED PARKING REQUIREMENTS**

Metro Codes	Office Code	40,000 GSF	Restaurant	5,000 GSF	Total	Total	Net
	Requirements	Office	Code	Restaurant	Required	Demand	Savings
Minimum	2.7	108	15.3	77	185	178	7
Maximum—Zone A	3.4	136	19.1	96	232	178	54
Maximum—Zone B	4.1	164	23	115	279	178	101

Adapted from Portland Metro 1997

*Combined Demand for Office, peak hour at 11 a.m.:*

Office = 3.0 spaces/1,000 GSF; Restaurant = 6.0/1,000 GSF

Combined Demand =  $(3.0 \times 40) + (6.0 \times 5) = 120 + 30 = 150$  spaces

*Combined Demand for Restaurant, peak hour at 7 p.m.:*

Office = 0.2 spaces/1,000 GSF, Restaurant = 20.0/1,000 GSF

Combined Demand =  $(0.2 \times 40) + (20.0 \times 5) = 8 + 100 = 108$  spaces

*Peak Demand for Combined Uses at 1 p.m.:*

Office = 2.7 spaces/1,000 GSF, Restaurant = 14.0/1,000 GSF

Combined Demand =  $(2.7 \times 40) + (14.0 \times 5) = 108 + 70 = 178$  spaces

**Peak-Hour Parking Demand for Combination of Uses = 178 spaces**

**Step 3.** Compare the calculations of the two steps above. The lesser of the two parking demands shall be used as the minimum number of parking spaces required.

Minimum parking required for both uses according to local parking standards = 185 spaces

Peak-hour parking needs with shared parking = 178 spaces

$185 - 178 =$  Net savings of 7 spaces

Table 4.10.2 shows the potential savings in the construction of parking spaces based on the calculations in the example. Using the maximum parking ratio requirements from the Portland, Oregon, Metro Functional Plan for its Zones A and B, a shared parking arrangement could save as many as 101 parking spaces. The effect of shared parking for this example is also shown in Figure 4.10.2.

**FIGURE 4.10.2. PARKING COMPARISONS: SHARED PARKING DEMAND VERSUS CODE REQUIREMENTS**



Adapted from Portland Metro 1997

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## Model Street Connectivity Standards Ordinance



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Create walkable neighborhoods
- Provide a variety of transportation choices

Street connectivity ordinances are designed to increase the number of street connections in a neighborhood and to improve the directness of routes (Handy 2003, 68). The purpose is to achieve an open street network that provides multiple routes to and from destinations. Such a network is key to supporting walking and bicycling as convenient, safe, and healthy forms of transportation. It also discourages the proliferation of limited-access street designs where residential subdivisions have only one or two points of entry and exit and where commercial developments have access only onto arterial streets with no connections to adjacent properties.



*Figure 4.11.1. A limited-access street design provides this residential subdivision with few points of entry or exit.*



*Figure 4.11.2. Traditional street grids in St. Paul, Minnesota provide a variety of direct routes through the neighborhood.*

The growing trend in cities enacting connectivity requirements is reflective of several larger trends and forces shaping planning and land development. These trends include the following:

- Acknowledgment that bicycling and walking need to be routinely accommodated as transportation modes in regional and local transportation plans, models, and funding formulas
- Recognition that the traditional street hierarchy of arterial, collector, and local streets has reinforced the problems caused by conventional single-use zoning, including neighborhood isolation and inaccessibility (by all modes, but in particular walking) between origins and destinations
- Inclusion of traditional town planning principles (i.e., new urbanism) in the mainstream of community planning and design whether on a community-wide or project-level scale
- Growing recognition of the relationship between neighborhood design and residents' level of physical activity and rates of overweight and obesity
- The desire of residents, local officials, and others to tame the effects of the automobile on communities and to provide alternative transportation modes at the neighborhood, city, and regional levels.

In general, connectivity requirements have the purposes of creating multiple, alternate routes for automobiles and creating more route options for people on foot and on bicycles. Additional requirements can be added to the ordinances to establish pedestrian routes and passageways between land uses that can link isolated subdivisions to each other and create the shortest, safest routes possible between origins and destinations. Almost all communities that have pursued street connectivity also prohibit or greatly limit gated streets or gated communities.

Handy (2003) describes what supporters of connectivity point to as its potential benefits and what those who oppose it see as its potential detriments. Perceived benefits include:

- Decreased traffic on arterial streets
- Continuous and more direct routes for travel by walking and biking
- Greater emergency vehicle access
- Improved utility connections, easier maintenance, and more efficient trash and recycling pickup

Perceived detriments include:

- Increased traffic on residential streets
- Increased infrastructure costs and impervious cover
- The need for more land for development, thus increasing housing costs and threatening the profitability of housing development

Handy says these potential outcomes have not been adequately studied to fully determine which assertions are most supportable. Furthermore, what research there is on connectivity has generally compared the extremes—the traditional grid with a conventional suburban curvilinear pattern—ignoring the fact that many communities have a hybrid of the two systems. She concludes that connectivity requirements should be aimed at increasing connections without significantly increasing through-traffic in residential areas. This can be done by avoiding long, straight streets that may encourage

speeding, using curves to slow traffic, and allowing cul-de-sacs as well as bicycle cut-throughs where natural or built features prevent connectivity.

Connectivity ordinances generally use one of two methods to evaluate proposed developments. The first and most common method is to establish a maximum block length. In Portland, Oregon, the maximum block length is 530 feet; in Austin, Texas, 600 feet; and in Fort Collins, Colorado, 660 feet. The appropriate block length for any community can be determined by examining and measuring the dimensions of blocks in residential areas of the city that reflect the desired scale, character, and connectivity the municipality is hoping to achieve within new developments. For example, consider the specific block lengths of identifiable areas of these cities: the mean block length in San Francisco's city center is 353 feet; in Lower Manhattan, 274 feet; and in areas of Boston built as of 1895, 190 feet (Jacobs 1993).

The second measurement method is a connectivity index. Such indices are calculated by dividing the number of street links (i.e., street sections between intersections, including cul-de-sacs) by the number of street nodes (i.e., intersections and cul-de-sacs). Cary, North Carolina, for example, requires a street connectivity index of 1.2 or higher. That means a neighborhood with 50 street links needs to have approximately 41 street nodes to meet the standard.

The model ordinance below uses the more common block-length approach rather than the index approach. The model is sufficiently flexible for a jurisdiction to apply the index measurement if it so desires.

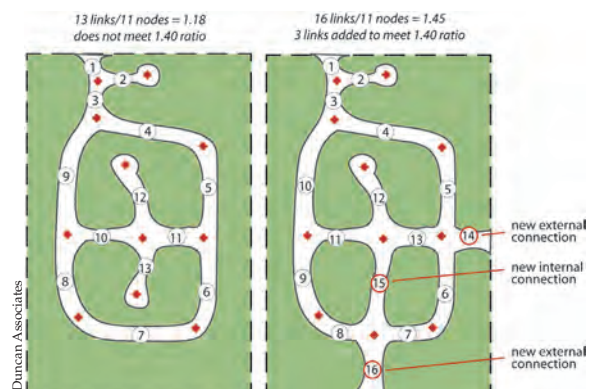
A note regarding one-way streets: Although not addressed in the ordinances reviewed for this model, the use of one-way streets can affect street connectivity and more importantly pedestrian, bicyclist, and motorist safety. On the one hand, one-way streets can simplify crossings for pedestrians, who must look for traffic in only one direction; however, studies have shown that while conversion of two-way streets to one way generally reduces pedestrian accidents, one-way streets tend to result in higher auto speeds, which create other safety problems.

As a system, one-way streets can also increase travel distances for motorists and bicyclists and can create confusion, especially for nonlocal residents. For pedestrians, provided they are on a grid or modified grid pattern, one-way streets should not increase the length of a route. Too often, one-way street systems become confusing to pedestrians because cities install street signs that face only in the direction of oncoming traffic.

According to the Pedestrian and Bicycle Information Center (n.d.), one-way streets operate best in pairs, separated by no more than 0.4 km (0.25 mi). If one-way streets are present in the area in which street connectivity requirements are being applied, this standard should be considered.

#### 101. Purpose

- (1) The purpose of this ordinance is to support the creation of a highly connected transportation system within [city or county] to:
  - (a) provide choices for drivers, bicyclists, and pedestrians;
  - (b) promote walking and bicycling;
  - (c) connect neighborhoods to each other and to destinations, such as schools, parks, shopping, libraries, and post offices, among others;
  - (d) provide opportunities for residents to increase their level of physical activity each day by creating walkable neighborhoods with adequate connections to destinations;
  - (e) reduce vehicle miles traveled and travel time to improve air quality and mitigate the effects of auto emissions on the health of residents;
  - (f) reduce emergency response times;



*Figure 4.11.3. Connectivity indices are calculated by dividing the number of street links by the number of street nodes. Communities can require minimum connectivity indices for proposed developments.*

- (g) increase effectiveness of municipal service delivery; and
- (h) restore arterial street capacity to better serve regional long-distance travel needs.

#### 102. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

**Arterial street.** A street that primarily accommodates through-traffic movement between areas and across the local government and that secondarily provides direct access to abutting properties.

**Connectivity.** A system of streets with multiple routes and connections serving the same origins and destinations.

**Development.** A subdivision, resubdivision, planned unit development, [insert name of any other type of development,] or any other type of land-use change that results in the creation of public or private streets.

**Local street system.** The interconnected system of collector and local streets providing access to a development from an arterial street.

#### 103. Relationship to Other Adopted Plans and Ordinances

The design and evaluation of vehicular, bicycle, and pedestrian circulation systems built in conjunction with new residential and nonresidential development and the application of the street connectivity requirements to those developments shall conform to [list all applicable ordinances and plans].

#### 104. General Standards

(1) A proposed development shall provide multiple direct connections in its local street system to and between local destinations, such as parks, schools, and shopping, without requiring the use of arterial streets. Each development shall incorporate and continue all collector or local streets stubbed to the boundary of the development plan by previously approved but unbuilt development or existing development.

(2) To ensure future street connections to adjacent developable parcels, a proposed development shall provide a local street connection spaced at intervals not to exceed [660] feet along each boundary that abuts potentially developable or redevelopable land.

(3) A proposed development shall provide a potentially signalized, full-movement intersection of a collector or a local street with an arterial street at an interval of at least every 1,320 feet (one quarter-mile) along arterial streets. A proposed development shall provide an additional nonsignalized, potentially limited-movement intersection of a collector or local street with an arterial street at an interval not to exceed 660 feet between the full-movement collector and the local street intersection.

(4) The [local government] engineer may require any limited-movement collector or local street intersections to include an access-control median or other acceptable access-control device.

(5) The requirements of paragraphs (1), (2), and (3), above, may be waived if, in the written opinion of the [local government] engineer, they are infeasible due to unusual topographic features, existing development, or a natural area or feature.

(6) Gated street entryways into residential developments are prohibited.

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## Model Urban Growth Boundary Ordinance

This urban growth boundary ordinance establishes a planning and regulatory tool that directs growth and development into compact and efficient development patterns by capitalizing on vacant or underused infill sites and carefully considered expansion of the regional urbanized envelope. It is also intended to preserve open space and agricultural uses outside the boundary. The California Planning Roundtable defines an urban growth boundary as “a boundary, sometimes parcel-specific, located to mark the outer limit beyond which urban development will not be allowed. It has the aim of discouraging urban sprawl by containing urban development during a specified period, and its location may be modified over time.” An urban growth area is defined as the land within the urban growth boundary, except for areas that may be deemed off-limits because of various specified development constraints.



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Direct development toward existing communities
- Preserve open space and farmland

Pendall, Martin, and Fulton (2002) identify urban growth boundaries as one of three primary methods for managing the growth of urban areas. The other two are urban service areas, which seek to control and channel growth by limiting the extension of infrastructure, such as sewer and water lines, and greenbelts, which are common in the United Kingdom and South Korea. They rate greenbelts as the “tightest” type of boundary and urban service areas as the loosest.

An urban growth boundary typically has multiple objectives for areas both inside and outside the line. On its website, Portland Metro, the regional agency that administers that region’s boundary, lists three benefits:

- Motivation to develop and redevelop land and buildings in the urban core. This helps keep core “downtowns” in business.
- Assurance for businesses and local governments about where to place infrastructure (such as roads and sewers) needed for future development.
- Efficiency for businesses and local governments in terms of how that infrastructure is built. Instead of building roads farther and farther out, as happens in urban “sprawl,” money can be spent to make existing roads, transit service, and other services more efficient.

The foregoing points make clear that a major objective of urban growth boundaries is to steer both public and private investment back toward the urban core while making such investment more efficient in spurring local economic growth and reinvigorating existing urban neighborhoods. However, this is effective only if the boundaries are well drawn, based on solid land-market data, and revised with regularity as conditions and forecasts change. Some entity must be given power and responsibility for monitoring development and growth projections and recommending needed changes over time. If the boundary affects a single municipality, this can be the local planning department. If the boundary affects multiple jurisdictions, a new or existing regional board or agency may need to be empowered with this task. This regional planning group is likely to need some authority to coordinate between regional and local comprehensive plans in adopting the boundary.

This ordinance assumes adoption by either a county legislative body or some state-designated regional authority, with participation from, and subsequent adoption by, individual communities within the larger urban growth area, unless the urban area is such that only one incorporated municipality occupies the relevant landscape. Various studies have repeatedly emphasized the likely futility of individual municipalities enacting separate growth boundaries within a larger metropolitan area, in large part because the probable result will simply be a shift in development from one community to others rather than a truly effective separation of urban and rural land uses. Growth management statutes in Oregon and Washington have incorporated this regional approach.

It is necessary to qualify this model by noting that in some states the designation of urban growth boundaries is mandated or controlled by state planning legislation or related guidelines. Where that is the case—including, particularly, Maryland, Maine, Tennessee, Oregon, and Washington—the provisions of such legislation take precedence over any model ordinance language. Those guidelines can be quite specific in detailing the methodology for delineating urban growth boundaries.

Typically, as in Oregon, the urban growth boundary must contain a 20-year supply of land for future residential and industrial development. (Maine prescribes 10 years.) In addition to including the amount of additional land needed in line with growth calculations, it is common practice to add some

additional amount as a “land market supply factor,” which in effect provides the market with enough elasticity to handle the projected growth without undue constraints. How large an additional increment is needed depends in part on the regularity with which planners monitor the regional land supply and the frequency with which the boundaries are updated.

It is also essential to establish priorities for the use of land. Oregon uses a categorization system of first through fourth priority lands to define the order in which specific lands outside the boundary will be brought within it. The first priority land, or urban reserve land, is designated as land that can be brought in to accommodate growth. A simplified diagram of the overall scheme, below, drawn from Easley (1992), illustrates the nested sectors of the overall urban growth area within the boundary.

#### 101. Purpose

The purpose of the Urban Growth Boundary Ordinance is to achieve or ensure urban containment by promoting compact and contiguous development patterns. Specifically, the Urban Growth Boundary Ordinance is intended to:

- (a) Foster patterns of development that can be efficiently served by public services;
- (b) Provide a mechanism whereby a [regional or county] planning agency and local governments within its jurisdiction may coordinate the location and extent of urban growth;
- (c) Encourage preservation and adaptive reuse of historic buildings;
- (d) Protect agricultural and forest lands, scenic areas, and other natural resources, living and nonliving, from urban development;
- (e) Identify where urban services are being or will be provided;
- (f) Direct growth to locations where infrastructure capacity is available or committed to be available in the future;
- (g) Ensure the provision of an adequate supply of buildable land for at least 20 years;
- (h) Ensure a variety of affordable housing types at various densities.

#### 102. Definitions

As used in this ordinance, the following words and terms will have the meanings specified herein:

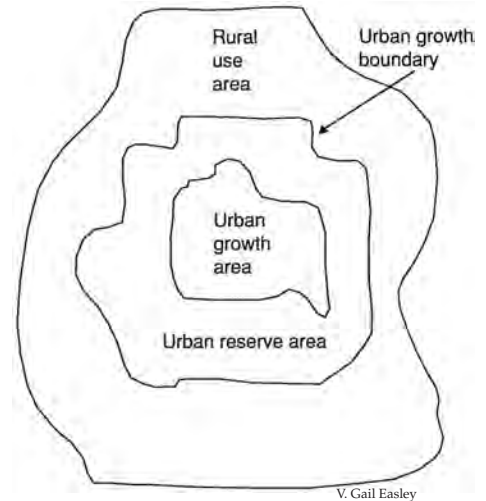
**Affordable housing.** Housing that has a sales price or rental amount that is within the means of a household that may occupy middle-, moderate-, or low-income housing. In the case of dwelling units for sale, housing that is affordable means housing in which mortgage, amortization, taxes, insurance, and condominium or association fees, if any, constitute no more than [30] percent of such gross annual household income for a household of the size which may occupy the unit in question. In the case of dwelling units for rent, housing that is affordable means housing for which the rent and utilities constitute no more than [30] percent of such gross annual household income for a household of the size which may occupy the unit in question.

**Agricultural land.** Land used for farming, livestock, and the growing and harvesting of food.

**Buildable land.** Land within or near urban areas that is suitable and available for residential, commercial, and industrial uses and includes both vacant land and developed land that, in the opinion of the local planning agency, is likely to be redeveloped.

**Comprehensive plan.** An adopted official statement of a legislative body of a local government that sets forth (in words, maps, illustrations, or tables) goals, policies, and guidelines intended to direct the present and future physical, social, and economic development that occurs within its planning jurisdiction and that includes a unified physical design for the public and private development of land and water.

**Development.** Any building, construction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation; any material change in the use or appearance of any structure or in the land itself; the division of land into parcels; any change in the intensity or use of land, such as an increase in the number of dwelling units in a structure or a change to a commercial or industrial use from a less intensive use; any activity that alters



*Figure 4.12.1. Sectors of the overall urban growth area.*

a shore, beach, seacoast, river, stream, lake, pond, canal, marsh, dune area, woodland, wetland, endangered species habitat, aquifer, or other resource area, including coastal construction or other activity.

**Forest land.** Land that is suitable for commercial forest uses including adjacent or nearby lands that are necessary to permit forest operations or practices and other forested lands that maintain air, soil, water and fish, and wildlife resources.

**Public services.** Activities, facilities, and utilities that are provided to urban-level densities and intensities to meet public demand or need and that, together, are not normally associated with nonurban areas. These may include but are not limited to: the provision of sanitary sewers and the collection and treatment of sewage; the provision of water lines and the pumping and treatment of water; fire protection; parks, recreation, and open space; streets and roads; mass transit; and other activities, facilities, and utilities of an urban nature, such as stormwater management or flood control.

**Urban growth area.** An area delineated in the adopted [county or regional] comprehensive plan [in accordance with an applicable state enabling statute or plan guidelines] within which urban development is encouraged by delineation of the area, compatible future land-use designations, and implementing actions in local comprehensive plans, and outside of which urban development is discouraged. The area will allow existing or proposed land uses at minimum densities and intensities sufficient to permit urban growth that is projected for the [county or region] for the succeeding 20-year period and existing or proposed urban services to support that urban growth adequately.

**Urban growth boundary.** A perimeter drawn around an urban growth area.

### **103. Applicability of Regulations**

This ordinance applies to all development activities, including land-use regulation activities, of the [county or regional authority and counties therein] and local governments within the [county or regional authority]. These activities should include the development of a local comprehensive plan by any local government and the extension of public services to facilitate development. Local governments whose jurisdiction lies outside the urban growth boundary established for the [county or region] itself and any boundary covering multiple local jurisdictions must establish in their own comprehensive plans an urban growth boundary for that community that meets the criteria established by the [county or regional authority] and [any applicable state laws and guidelines]. Applicable procedures appear in section 104, below.

Hereafter, no building or structure may be erected, demolished, remodeled, reconstructed, altered, enlarged, or relocated, and no building, structure or premises may be used in the urban growth area except in compliance with the provisions of this title and then only after securing all required permits. Any building, structure, or use lawfully existing at the time of passage of this title, although not in compliance therewith, may be maintained as provided for in [the applicable section of the local zoning code dealing with nonconforming uses].

### **104. Designation of Urban Growth Area**

The [county or regional authority] must designate an urban growth area or areas within which urban growth will be encouraged and outside which growth can occur only if it is not urban in nature. Each city within the [county or region] must be included within an urban growth area, but an urban growth area may include more than one city. An urban growth area may include territory that is located outside a city only if such territory already is characterized by urban growth whether or not the urban growth area includes a city or is adjacent to territory already characterized by urban growth or is a designated new fully contained community.

#### **104.1 Procedure for Adoption**

The [county or regional] planning department will be responsible for applying the criteria in this section to develop a proposed urban growth boundary and urban growth area(s), subject to approval by the planning commission and the [county or regional council or board]'s adoption of the recommendation submitted by the planning commission. The planning commission will complete its recommendation to the [county or regional council or board] within one year of the effective date of this ordinance. The [county or regional] planning department will be responsible for coordinating the gathering of data with, and for consulting with, all individual local governments within the [county



or region] concerning the boundaries and areas proposed. In addition, each city within the [county or region] will consider the relevant aspects of the adopted urban growth boundary and urban growth area(s) for adoption and incorporation into its own comprehensive plan.

During the process of development of the urban growth boundary, each municipality within the [county or region] will propose the designation of an urban growth area that will include the area within its municipal boundary and may include additional unincorporated areas contiguous to its municipal boundary. Once a proposed boundary is recommended to the [county or regional council or board], any local government may object formally with the [county or regional authority] over the designation of the urban growth area within which it is located. The planning department will attempt to resolve conflicts, including the use of mediation services, and the [county or regional council or board] will consider the solutions offered as a result.

***Comment:** The timeline here is primarily intended to provide some model for implementation of the ordinance. Actual timelines in a local ordinance may depend on state enabling legislation or growth management mandates, where they apply, or on other relevant local considerations. The underlying idea is simply that providing a reasonable certain date is necessary to ensure that the process moves forward. This section envisions the subsequent step of adoption of a defined urban growth boundary and urban growth area(s) once this work is completed. In addition, section 106 provides for subsequent amendments to the originally adopted boundary and area(s). The precise applicability and wording of the final sentence of the first paragraph will depend in large part on how state law defines the relationships, especially for planning purposes, between counties and the cities they contain.*

*The provisions for consultation with local governments in the first paragraph, and for objections and dispute resolution in the second paragraph, are derived from both APA's Growing Smart and a related mechanism in Washington State law and are aimed at ensuring meaningful collaboration and cooperation among county and city planners and elected and appointed officials in the development of the urban growth boundary. However, it should be noted that some states provide a state-level mechanism for arbitrating or resolving such disputes. Where that is the case, reference to the state mechanism must be included.*

#### **104.2 Criteria for Designation**

(1) The planning department will obtain, consider, and develop the best projections available regarding growth of population over the 20-year [or other] period during which the urban growth area must provide adequate land for anticipated development, including changes in household size and age-related, socioeconomic, and other factors necessary for acquiring an accurate estimate of likely future needs for housing, public services, education, and other facilities relevant to determining future development needs.

***Comment:** Although 20 years is a commonly used period for projecting anticipated growth within the urban growth area, state and local governments may develop a rationale for establishing some other period within the ordinance. If that decision is made, it should also be reflected in the language of sections 106 and 107, below, to make them consistent.*

- (2) Urban growth should be located according to the following priorities:
- (a) In areas already characterized by urban growth that have adequate existing public facility and service capacities to serve such development;
  - (b) In areas already characterized by urban growth that will be served adequately by a combination of both existing public facilities and services and any additional needed public facilities and services that are provided by either public or private sources;
  - (c) In the remaining portions of the urban growth areas.
  - (d) Urban growth may also be located in designated new fully contained communities.

In order to properly determine an urban growth boundary that makes most efficient use of the existing network of public services, the planning process will include consideration of the following:

- (a) Locations and current service areas of existing facilities;
- (b) Levels and capacities of services provided;
- (c) Plans for expansion or extension of facilities or services;
- (d) Present and projected adequacy of each service;

- (e) Condition of each facility;
- (f) Costs of providing each service; and
- (g) Historically underserved communities.

*Comment: When inclusion of an area inside an urban growth boundary is conditioned on the adequacy of existing public facilities to support greater development density, consideration should be given to whether the area is one that for reasons of racial or economic exclusion has suffered disproportionate lack of economic development and infrastructure investment. In such cases, the goal of equitable investment should take precedence over other boundary designation criteria.*

(3) Recommendations from the planning commission for adoption of an urban growth boundary will include consideration of at least the following factors related to past, current, and future land use and local policies regulating or otherwise affecting land use:

- (a) Existing land use, specifically including residential densities and intensities of nonresidential uses;
- (b) Developments already approved but not yet completed, with their proposed densities and intensities;
- (c) Local policies, whether in comprehensive plans or other documents, concerning planned or proposed annexation, housing types and densities, and redevelopment and infill of existing developed areas;
- (d) Existing and proposed zoning patterns and anticipated rezonings within the proposed boundary;
- (e) Holding capacity of vacant lands within the proposed boundary;
- (f) Effects of subdivision, planned unit development, and other ordinances on the density, intensity, and siting of development within the proposed boundary;
- (g) Agricultural land-preservation programs, including all existing and planned purchases or transfers of development rights;
- (h) Effects on land use of current or proposed floodplain management regulations or other resource protection programs;
- (i) Effects of anticipated and probable market conditions on the sale of residential, commercial, and industrial property;
- (j) Density goals planned within the proposed boundary, those established by local zoning, and actual density ranges achieved within communities within the proposed boundary; and
- (k) Comparisons of existing residential density with the capacity of public infrastructure.

*Comment: The art of designing an effective urban growth area and boundary ultimately depends on a considerable amount of professional judgment of the above planning criteria, and the ordinance is merely an attempt to spell out the necessary considerations. Included in (i) is the need to establish some appropriate market multiplier that takes into account the amount of additional land needed above that actually necessary for development at the intended densities and intensities to allow some choice and flexibility in the market. Those numbers vary, often in the range of 15 to 20 percent beyond the stated need, but must be determined based on local market conditions and should not be specified in the ordinance. However, one might make a case for explicitly specifying in (i) the use of some multiplier to be determined by the planning department or planning commission.*

(4) In order to account adequately for the constraints on development within the urban growth area posed by natural features of the landscape, anticipated growth needs should account for those factors that may or will limit or prohibit development within areas containing those features. Recommendations must include considerations of how the following factors may reduce the overall supply of buildable land within the proposed urban growth area:

- (a) Floodplains
- (b) Steep slopes
- (c) Habitats for endangered species
- (d) Watersheds, especially where an urgent need exists to reduce impervious surface areas
- (e) Water bodies
- (f) Agricultural lands targeted for preservation

- (g) Areas containing seismic or geological hazards such as fault zones or areas subject to liquefaction
- (h) Aquifer recharge zones and well fields
- (i) Wetlands
- (j) Forest lands
- (k) Historic, cultural, or archaeological sites

**Comment:** Although the lists of considerations above are largely universal in nature, local legislatures obviously should consider including any additional factors that have special local relevance and deleting those that do not apply. This is most likely to be the case with the final subsection on natural resources because these tend to vary depending on regional climate, geography, and topography. Greater or lesser specificity may be deemed appropriate according to the circumstances. The intent here is to provide a solid inventory of the basic planning considerations that need to be addressed in almost every case in order to establish a workable boundary. In drafting or revising this section of the ordinance, it would be wise to refer to the Critical Areas Model Ordinance, below.

### 105. Interpretations

- (1) The director of planning for the [county or region] will review and resolve any questions involving the proper interpretation or application of the provisions of this ordinance or of the subsequently adopted urban growth area(s) and urban growth boundary that any affected property owner, tenant, government officer, department, or other person may request. The director will make that decision in keeping with the spirit and intent of the ordinance and the [county or regional] and local comprehensive plan.
- (2) The director of planning and the [county or regional] board will keep a record of all interpretations made by each, and these will be used for future administration and ordinance amendments.
- (3) In any conflict between a local or county zoning map and the text of this ordinance or of the resolution adopting the urban growth area, the urban growth boundary provisions will prevail.

**Comment:** This is basically a stripped-down version of the language used in the Thurston County code in Washington, and its intent is to ensure that there is a clear source of authority for interpretation of any ambiguities in either the authorizing ordinance for the urban growth boundary or the actual boundaries in force at the time that an interpretation is requested. Not all ordinances examined have included such a section, but its utility seems self-evident.

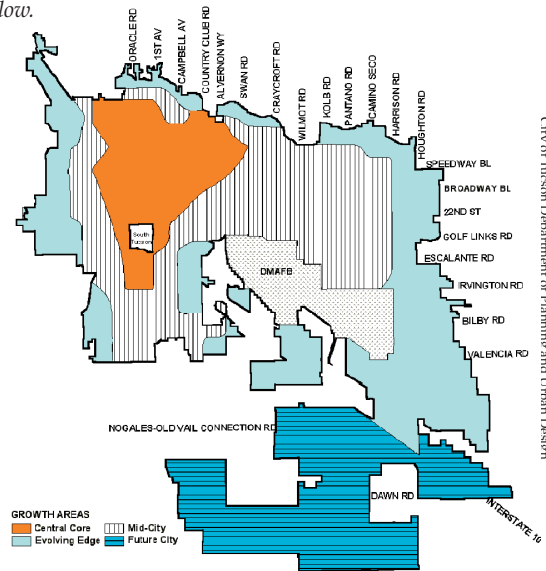
### 106. Periodic Reassessment

The [county or region] will evaluate the need to amend the urban growth boundary and related provisions of any local and [county or regional] comprehensive plan, and associated land development regulations, at least every [five] years, or when the urban growth area does not contain sufficient buildable lands to accommodate residential, commercial, and industrial needs for the next 20 years. This reassessment will be based on the land supply monitoring system established in section 107, below. In addition, municipalities within the [county or region] may petition for amendments and provide the rationale for the proposed amendments to the existing boundary.

**Comment:** Every system created for maintaining an urban growth area and boundary has included provisions for periodic updating. While this ordinance prescribes five years, where state law specifies some other period for mandatory plan updates that provision must apply. Likewise, local governments with some other regular period (say, three years) for updating comprehensive plans may wish to stay with an existing regime and update both the urban growth boundary and the plan simultaneously. A five-year update is simply common and convenient. The 20-year land supply is tied to the provisions of section 104, above, but again, state law or local policy may dictate some other goal. The important point is to recognize the need to institutionalize some sort of periodic readjustment to reflect evolving development realities.

### 107. Land Supply Monitoring

- (1) The [county or regional] planning department will establish, as a means of implementing and supporting the urban growth area, a land supply monitoring system. The planning department may, by agreement, establish a land supply monitoring system for municipalities [and other local governments] within the [county or region] and may assume those responsibilities on behalf



**Figure 4.12.2.** The urban growth area must be regularly reassessed to ensure that it contains sufficient buildable land for the next 20 years.

of a local planning agency. Municipalities [and other local governments] may also establish their own system in cooperation with the [county or regional] planning department or contract for such services with a private vendor.

(2) In line with the stated goals of section 104, above, the purposes of the land supply monitoring system are to:

(a) Periodically inventory the supply of buildable lands for the [county or region] to determine its adequacy;

(b) Evaluate the impact of the goals and policies of the planning department and of municipalities [or other local governments] on the prices and supply of and demand for buildable land;

(c) Propose changes, if necessary, that will ensure the supply of buildable land within the planning jurisdiction of the [county or region] meets projected needs for residential, commercial, and industrial development, and supports public and community facilities in the land-use element of the local comprehensive plan; and

(d) Provide information to the public on the operation of the land market within the [county or region].

(3) Using a geographic information system as part of the periodic review required in section 106, above, the planning department will, on at least a five-year basis, inventory the supply of buildable lands within the urban growth area. The planning department may also inventory any other buildable lands within the local government's jurisdiction. In determining whether land is buildable, the planning department will use the definition in section 102 and the criteria established in section 104, above.

(4) **Proposals for Adjustment of Urban Growth Area**

Based upon the inventory of buildable lands determined in compliance with paragraph (3), above, if it determines that the urban growth area does not contain adequate buildable lands to accommodate residential, commercial, and industrial needs for the next 20 years, the planning department will:

(a) Propose amendments to the urban growth area to accommodate residential, commercial, and industrial needs for the next 20 years at the actual development density or intensity during the period since the last periodic review or within the last five years, whichever is greater. The proposed amendments will include additional lands that are adequate and reasonably necessary for public and community facilities or services, including transportation, to support residential, commercial, and industrial needs. After the [county or regional council or board] has amended the urban growth area in the [county or regional] comprehensive plan, municipalities will also incorporate and adopt the urban growth area into their own local comprehensive plans.

(b) Propose inclusion of measures in the comprehensive plan and land development regulations that will demonstrably increase the likelihood that (1) residential development will occur at densities and with types sufficient to accommodate housing needs, and (2) commercial and industrial development will occur at intensities and with a mix of types and categories sufficient to accommodate commercial and industrial needs, for the next 20 years without expansion of the urban growth area; or

(c) Adopt a combination of actions described in subparagraphs (a) and (b), above.

To achieve the goals of subparagraphs (a) through (c), above, measures proposed for enactment by the [county or regional council or board] or by individual municipalities may include but not be limited to:

(a) Increases in the permitted density of existing residential land use and in intensity of existing commercial and industrial lands in a zoning ordinance;

(b) Financial incentives for higher-density housing;

(c) Reduction of on-site parking requirements in a zoning ordinance;

(d) Reduction of yard requirements in a zoning ordinance;

(e) Provisions permitting additional density or intensity beyond that generally allowed in the particular zoning district(s) in exchange for amenities and features provided by the developer;

(f) Minimum density or intensity requirements in a zoning ordinance;

- (g) Redevelopment, infill, or brownfields strategies;
- (h) Authorization of housing types or site planning techniques in a zoning ordinance that were not previously allowed by a local comprehensive plan or zoning ordinance;
- (i) Authorization of changes in the zoning use classification, including the employment of mixed use zones; and
- (j) Changes in standards for public and community facilities or services, including transportation, that require the use of less land.

*Comment:* Most of this section involves a substantial adaptation of provisions in the Growing Smart Legislative Guidebook (2004) concerning the establishment of a land market monitoring system. Growing Smart takes the position that such a system is a mandatory element of any system to create an urban growth boundary in order to ensure that the jurisdiction creating such a boundary can make well-informed decisions that avoid the undesired side effects of overly restrictive or poor growth management policies. The land supply monitoring system established here should be seen as a necessary and essential tool in implementing an effective urban growth area policy. In addition to Growing Smart, Knaap (2001) and Moudon and Hubner (2000) can be seen as essential resources in guiding the practice of managing a land supply monitoring system.

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## **Model Transit-Oriented Development Overlay District Ordinance**



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Provide a variety of transportation choices
- Mix land uses

Decades of conventional, low-density, sprawling suburban development followed World War II. However, frustrations with the development pattern's segregated land use and overwhelming prioritization of the private automobile eventually sparked a revival of more compact, mixed use, urban development designed for pedestrians and oriented toward mass transit stations. Advocates promote transit-oriented development principles as "not new, but simply a return to the timeless goals of urbanism, in its best sense" (Calthorpe 1993).

The reemergence of transit-oriented development means a reorientation toward pedestrians and public transit as a more efficient option to the private automobile. This shift in development design priorities has given community planning departments cause to revisit their comprehensive plans and zoning ordinances, since traditional post–World War II planning and zoning legislation often discourages or prohibits mixing land uses and higher densities.

A transit-oriented development (TOD) zoning overlay district ordinance is adopted by a community to reinforce the use of public transportation by locating higher-density mixed use development, including employment oriented businesses and higher density residential uses, adjacent to transit stops. The effect of concentrating more compact development around transit stops is to reduce automobile dependency and roadway congestion by combining trips and locating destinations within walking and biking distances—all interconnected with transit.

Although the precise level of density which can trigger a dramatic shift away from the private automobile and toward public transit use is the subject of debate, the establishment of minimum density/land-use intensity standards to support public transit is critical for any community serious about smart growth. Smaller, growing communities may face the need for a public bus system for the first time, while larger cities may want to add rail to their public transit network. Failure to require minimum densities, design standards for intensity, and land-use efficiency stymie a jurisdiction's efforts to encourage more transportation options for its constituents. Standards for land use and transportation growth depend on developing ordinances of mutual support between land use and transportation strategy; they should complement each other. A local zoning ordinance should include distinct districts, or overlay districts, where transportation system needs are explicitly discussed in the context of residential and nonresidential uses and intensities.

The overall suggestion for communities is to develop a model TOD zoning overlay district ordinance with quantitative prescriptions for both residential and nonresidential densities. Residential densities should be given in units per acre and reflect distance from the station and level of transit service provided at the station (Table 4.13.1). Nonresidential or mixed use densities should be given in employees per acre or floor area ratio. Note that nonresidential or mixed use density does not vary with distance from the station because this type of use should be packed tightly around the station and restricted at greater distances from the station.

A Transportation Research Board 2004 report on the state of TOD practice in the United States cites numerous cities as being proactive about TOD density in recent years: Dallas, Denver, Salt Lake City, Charlotte, Portland, and Minneapolis (Parsons Brinckerhoff et al. 2004). This model TOD zoning overlay district blends code language from model ordinances in Columbus, Ohio (Mid-Ohio Regional Planning Commission 1999), the Commonwealth of Massachusetts, and language from the more progressive communities cited by Cervero et al. (2004) to provide a ordinance for practitioners.

#### **101. Background and Authority**

The [city or county] finds that transit-oriented development (TOD) benefits the health, safety, and general welfare of the inhabitants of the [city or county] by fulfilling existing housing, transportation, and employment needs. The TOD overlay district will be superimposed on the existing zoning districts established by the [city or county] zoning ordinance. All regulations of the zoning ordinance applicable to such underlying districts will remain in effect. Where a conflict occurs between regulations, the TOD overlay district will govern.

*Comment:* Section 101 is from the *Transit-Oriented Development Overlay District Model Bylaw in the Massachusetts Smart Growth Toolkit*.



*Figure 4.13.1. High levels of residential density are important for successful transit corridors.*

### 102. Purposes

The purposes of the TOD overlay district are the following:

- (1) Reinforce the use of public transportation by locating higher-density mixed use development, including employment-oriented businesses and higher density residential uses, adjacent to transit stops.
- (2) Reduce automobile dependency and roadway congestion by combining trips and locating destinations within walking and biking distances—all interconnected with transit.
- (3) Provide an alternative to traditional development by emphasizing mixed use development that is pedestrian oriented.
- (4) Enhance neighborhood identity by creating more choices that promote safety, friendliness, and livability, such as walking, biking, and shopping, to residents.
- (5) Encourage infill and redevelopment along transit corridors in existing neighborhoods.
- (6) Provide a mix of housing types, costs, and densities.

*Comment: Section 102 is from the Transit-Oriented Development Overlay District Model Bylaw in the Massachusetts Smart Growth Toolkit and the Transit-Oriented Development Zoning Overlay District Model Ordinance from the Mid-Ohio Regional Commission (1999).*

### 103. Definitions

For the purposes of the TOD overlay district, the following definitions will apply:

**Commercial parking facilities.** Parking facilities created for the purpose of generating income from paid parking but not including commuter parking lots owned by the transit operator.

**Development.** The physical alteration of a tract of land, including buildings, structures, grading, and other related changes.

**Drive-through facilities.** Retail and service entities where transactions with customers take place without the customer leaving a motor vehicle.

**Fast-food establishment.** A food-service business that offers relatively immediate service of semiprepared or prepared foods for drive-through, take out, or in-house consumption in disposable containers.

**Floor area ratio.** The amount of enclosed gross floor area in relation to the amount of site area, expressed in square feet. For example, a floor area ratio of 0.5 means one square foot of floor area for every two square feet of site area.

**Gross residential density.** The measure of the number of dwelling units permitted per acre of land area.

**Mixed use development.** A development that contains a variety and integration of uses (residential and nonresidential) that complement the surrounding neighborhoods. The land uses are designed to work together to result in an attractive place to live, work, shop and recreate.

**Net residential density.** The measure of the number of dwelling units permitted per acre of land area, minus dedicated right-of-way (typically 20 percent of total land area).

**Overlay district.** A zoning district that encompasses one or more underlying zones and imposes additional or alternative requirements to those required by the underlying zone.

**Park-and-ride lot.** A parking structure or surface parking lot intended for use by transit riders or carpoolers.

**Pedestrian-friendly design.** Design of communities, neighborhoods, streetscapes, buildings, and other uses to promote pedestrian convenience, connectivity, comfort, safety, and visual interest.

**Podium apartment.** A multifamily structure in which parking is located below the living quarters such as on the ground level.

**Public seating area.** Any outside seating area designated for use by the public, including outdoor seating owned and operated by eating and drinking establishments.

**Shared parking.** The sharing of a given parking supply by land uses that generate different peak-period parking demands, such as entertainment and office uses.

**Site coverage.** The part of a development site occupied by buildings.

**Strip commercial development.** Commercial development characterized by a low-density (one-story) linear development pattern (usually one lot in depth), separate curb cuts for each use, no defined pedestrian system, and high traffic volumes. Parking lots are generally located between the street and the front entrance to the businesses.

**Transit-oriented development (TOD).** A development approach characterized by higher density, mixed uses, a safe and attractive pedestrian environment, reduced surface parking, and direct and convenient access to the transit facility. The strategic design and location of a TOD should support pedestrians and their use of public transportation.

**Transit station.** A public transit station served primarily by a light or commuter rail train or bus rapid transit station. The station may contain bus line service, park and ride facilities, and retail and service establishments. The area includes the platform, which supports transit usage and is owned and operated by the transit agency.

*Comment: The above definitions were derived from the Massachusetts and Mid-Ohio code language. However, there is a wide range of terms that may be used in a model TOD overlay district code. The definition section should be tailored to the local situation and terminology.*

#### 104. Applicability

The area subject to the TOD overlay district must encompass an area surrounding a transit station or located along a transit line (see Figure 4.13.2), as determined by a development plan (see section 113 or as determined, below).

The zoning overlay may comprise any of the following four subdistricts:

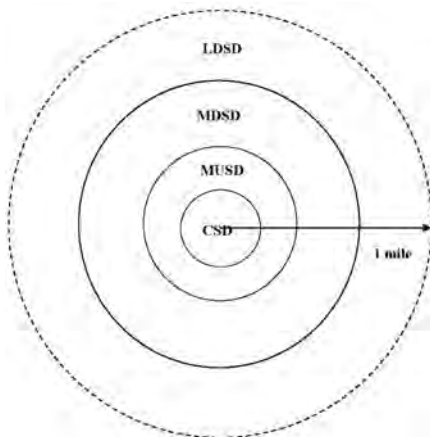
**Core Subdistrict (CSD).** This subdistrict is defined by a center core area of about one-eighth-mile radius, focused around the transit station. The intent of the core subdistrict is to provide immediate access to high-density development associated with the transit station. The subdistrict contains jobs, commercial services, and housing that will generate high levels of pedestrian activity and transit use, supporting multiple trips. The highest development densities occur within the core area and include commercial, office, and integrated residential uses. All land uses are pedestrian oriented and well connected to the transit station.

**Mixed Use Subdistrict (MUSD).** This subdistrict encompasses an area between one-eighth and one-quarter mile from the transit station, surrounding the CSD. The intent of the mixed use subdistrict is to provide easy and convenient access to the transit station. Development should contain a combination of retail, office, services, and various types of housing within easy walking distance of transit stations. The district has slightly lower densities than the core subdistrict. Land uses are predominantly residential with supporting commercial and office uses. A pedestrian network provides a link to the transit station.

**Medium Density Subdistrict (MDS).** This subdistrict encompasses an area between one-quarter and one-half mile from the transit station, surrounding the MUSD. The intent of the medium density subdistrict is to provide modest yet walkable access to transit stations for surrounding medium density residential uses. Retail and office uses should support the local housing population. The dominant land use is medium density residential. A pedestrian network connects residential developments with supporting land uses and the transit station.

**Low Density Subdistrict (LDS).** This subdistrict encompasses an area between one-half mile and one mile from the transit station, surrounding the MDS. The intent of the low density subdistrict is to provide general accessibility to transit stations for low density development on the outlying areas of a TOD. The focus is on single-family residential uses with some neighborhood convenience centers serving the local neighborhood. Low density development may occur at distances greater than one mile from the transit station, but its transit orientation would be greatly diminished.

*Comment: Section 104 is from Mid-Ohio Regional Commission (1999); Figure 4.13.2 is not included in the original language but illustrates the concept of the*



*Figure 4.13.2. Subdistricts within a transit-oriented development overlay district.*

TOD subdistricts. Most likely the overlay district will not follow perfect concentric circles, but the general idea of increasing density and intensity of development with decreasing distance from the transit station should be clearly outlined in the TOD overlay district.

### 105. Procedural Requirements

Certain specified uses are allowed by right in the TOD overlay district. Other uses may be allowed by special permit (conditional use permit). The [planning commission] (or analogous entity) will be the special permit-granting authority for any special permit granted in a TOD overlay district. Procedural requirements, including application requirements, abutter notification, and public hearing must be in accordance with the special permit procedures as found in [cite to the zoning ordinance]. The [planning commission], acting as the special permit granting authority, may grant a special permit in a TOD district if it finds that the use will: (1) promote the purpose of the overlay district as described in section 102, above; and (2) include active ground-floor uses, subordinate parking, and have upper-floor residential units.

*Comment: Section 105 is from Massachusetts code language.*

### 106. Land-Use Regulations

All development must be in compliance with applicable regulations.

(1) The following uses are permitted, in addition to the transit station itself, provided they comply with the development plan (see section 113, below). Permitted uses are subject to the applicable development standards of the overlay. Unless otherwise prohibited, the following uses are consistent with this intent.

**TABLE 4.13.1. PERMITTED USE**

Permitted Use	Subdistrict			
	Core	Mixed Use	Medium Density	Low Density
High density multifamily dwellings	yes	no	no	no
Medium density multifamily dwellings, including townhouses	no	yes	no	no
Low density multifamily dwellings, including garden apartments	no	no	yes	no
Elderly housing that meets the density standards of the subdistrict	yes	yes	yes	yes
Duplexes and single-family residential	no	no	yes	yes
Ground floor retail, personal services and offices are required in office and multifamily structures and parking structures fronting along pedestrian pathways and public streets, opposite transit stations, in structures two stories or higher, and along transit streets <sup>a</sup>	yes	yes	no	no
Retail <10,000 square feet, personal services, and offices (including banks)	no	no	yes	yes
Office buildings, administrative facilities, and employment centers	yes	yes	no	no
Hotels, restaurants (fast food only by special permit), theaters (not drive-ins), and entertainment establishments (excluding adult-oriented)	yes	yes	no	no
Government and institutional offices (labs/research by special permit)	yes	yes	no	no
Educational institutions meeting density standards of subdistrict	yes	yes	yes	yes
Adult and child day-care facilities, gift shops, and cafeterias (day-care location at transit station encouraged)	yes	yes	yes	no
Hospitals	yes	yes	no	no
Parking structures	yes	yes	no	no
Surface parking lots	no	no	yes	yes
Plazas, courtyards, cultural and civic uses, and major community facilities	yes	yes	no	no
Neighborhood parks and recreational facilities <sup>b</sup>	no	no	yes	yes

Source: Mid-Ohio Regional Planning Commission (1999)

<sup>a</sup>Dry cleaners stores permitted but locate cleaning facilities outside TOD

<sup>b</sup>Stadiums and sports facilities with more than 10,000 seats also allowable by special permit



(2) The following uses are allowed in the zoning overlay subdistricts only as indicated:

TABLE 4.13.2. RESTRICTED USES

Permitted Use	Subdistrict			
	Core	Mixed Use	Medium Density	Low Density
Warehousing or distribution facilities; freight terminals; industrial uses	no	no	no	no
Large public parks; golf courses; cemeteries; amusement parks	no	no	no	yes
Automobile sales, storage, salvage, washing, and repairs; drive-through facilities; commercial surface parking lots; strip commercial developments; nurseries; ministorage facilities; gas stations	no	no	yes	yes
Retail uses larger than 10,000 square feet unless art of multiuse	no	no	yes	yes
Free-standing retail uses larger than 40,000 square feet; RV and manufactured home sales; boat sales and storage yards	no	no	no	no

Source: Mid-Ohio Regional Planning Commission (1999)

**Comment:** There is some flexibility in the above uses as permitted/restricted in various TOD subdistricts. However, inefficient uses designed for private automobiles (such as surface parking lots and big-box retail (>40,000 square feet)) should either be limited to the medium density or low density subdistricts or restricted from the TOD overlay district completely.

#### 107. Density

The following density requirements will apply to all uses allowed by right located in the overlay subdistricts as indicated:

- (1) Builders are required to build to a specified density within each subdistrict.
- (2) The following minimum residential and nonresidential density (floor area ratio) requirements will apply:

TABLE 4.13.3. DENSITY REQUIREMENT

Subdistrict	Density	
	Minimum Residential	Minimum Nonresidential
CSD	45 units per acre (28,800 units/square mile)	Floor Area Ratio > 3.0 (130,680 square feet/acre)
MUSD	30 units per acre (19,200 units/square mile)	Floor Area Ratio > 2.0 (87,120 square feet/acre)
MDSD	20 units per acre (12,800 units/square mile)	Floor Area Ratio > 1.0 (43,560 square feet/acre)
LDSD	7 units per acre (4,480 units/square mile)	Floor Area Ratio > 0.5 (21,780 square feet/acre)
Total TOD	10 units per acre (6,400 units/square mile)	Floor Area Ratio > 0.7 (30,628 square feet/acre)

**Comment:** The minimum density requirements provided in Table 4.13.3 are based on a review of the TOD literature. The primary objective of TOD density is to ensure adequate support for the transit system serving the TOD. Several sources cite an overall minimum residential density of 10 units per acre for the entire TOD. However, minimum density requirements should vary within the TOD according to subdistrict just as the permissible and restricted uses vary by subdistrict. The TOD literature provides some guidance. All sources agree that seven units per acre is the minimum residential density required to support bus service, so the LDSD should be at least seven units per acre. The literature also prescribes a minimum residential density of at least 20 units per acre for rail service, so all the other subdistricts within one-half mile of the transit station should have a minimum residential density of 20 units per acre. However, to ensure the overall TOD district will have a minimum residential density of 10 units per acre, the MUSD and the CSD should have minimum residential density requirements of 30 units per acre and 45 units per acre respectively.

The TOD literature also provides guidance for minimum nonresidential density standards. Minimum floor area ratios for subdistricts with structured parking should



be greater than 2.0. This standard would be applicable to both the MUSD and the CSD, since structured parking is permitted in both. Minimum floor area ratios for subdistricts without structured parking should be greater than 0.5, but no more than 1.0. Since structured parking is not a permitted use within the LDSD or MDSD, a minimum floor area ratio of 0.5 is assigned to the LDSD, and a minimum floor area ratio of 1.0 is assigned to the MDSD. The overall TOD floor area ratio is 0.7.

Other examples from around the country indicate a range of nonresidential density requirements. Portland requires only a minimum 1.0 floor area ratio around light-rail stations, while Denver mandates a 5.0 floor area ratio within its new transit-mixed use (TMU)-30 zoning district (which is the area within one-third of a mile of transit station). Some communities, such as Huntersville, North Carolina, require a minimum employee density for nonresidential uses. Although floor area ratio is the recommended measurement for minimum nonresidential density requirements, there are sources in the TOD literature that prescribe anywhere from 25 to 100 employees per acre. Huntersville's code requires 40 to 70 employees per acre.

Advocates are clear that net density of transit-oriented and traditional urban development should be higher than that of post-World War II suburban development. More specifically, proponents of transit-oriented development advocate that development should contain higher net residential densities than conventional developments.<sup>1</sup> Net residential density is defined as the number of dwelling units per acre in residential or mixed use, while gross residential density includes the land area plus infrastructure, open spaces, and exclusively nonresidential land uses (Kaiser et al. 1995). Net densities are roughly 20 percent higher than gross densities, once streets and other infrastructure improvements are considered (Calthorpe 2003). Table 4.13.7 (page 173) offers residential and nonresidential density thresholds.

#### 108. Parking

Parking within the TOD overlay district must be located in multilevel structures or in shared parking lots as permitted in the subdistrict, where feasible and with approval of the city. Parking must comply with the development standards set forth here. The following requirements will apply to all uses allowed by right located in the zoning overlay subdistricts as indicated.

##### (1) General

- (a) A maximum of one parking space per multifamily unit is permitted; one guest space per 15 units is permitted.
- (b) A maximum of three parking spaces per 1,000 square feet of office space is permitted.
- (c) A maximum of three parking spaces per 1,000 square feet of retail space is permitted.
- (d) Where feasible, ingress and egress from parking must be from side streets or alleys.
- (e) On-street parking is permitted and encouraged.
- (f) Signage that shows the location and best means of access to the transit station must be provided at all parking facilities.

*Comment: The general parking requirements are from Mid-Ohio Regional Planning Commission (1999), as are the additional parking guidelines for each subdistrict, below.*

##### A. Core Subdistrict (CSD)

- i. Surface parking lots are prohibited in the core subdistrict.
- ii. Further reduction in the number of required parking spaces is permitted with city approval based on the number of forecasted trips generated by the development which will be accommodated by the transit system.

##### B. Mixed Use Subdistrict (MUSD) and Medium Density Subdistrict (MDSD)

Surface parking lots are not permitted in the medium density subdistrict.

##### C. Low Density Subdistrict (LDSD)

- i. Surface parking lots are permitted in the low density subdistrict but must not exceed two acres in size and are prohibited in front of businesses.
- ii. Residential parking must be located at least 10 feet behind the building line and must not dominate the streetscape.

##### (2) Surface Parking Lots

- (a) Surface parking lots must not dominate a development site.

#### CASE STUDY: PORTLAND, OREGON

Portland, Oregon, provides an excellent example for other communities of how to organize residential densities in TOD districts according to both distance from a transit station and the level of transit service provided. Cervero et al. (2004) reported minimum density standards for Portland, supported by Tri-Met, Oregon's regional bus and light-rail transportation system (Ohland 2001). Residential densities varied by distance from the station and the mode of transit service provided:

- Light-rail service
- 30 units per acre: 0– $\frac{1}{8}$  mile from station
- 24 units per acre:  $\frac{1}{8}$ – $\frac{1}{4}$  mile from station
- 12 units per acre:  $\frac{1}{4}$ – $\frac{1}{2}$  mile from station
- Bus service
- 24 units per acre: 0– $\frac{1}{8}$  mile from station
- 12 units per acre:  $\frac{1}{8}$ – $\frac{1}{4}$  mile from station
- not defined:  $\frac{1}{4}$ – $\frac{1}{2}$  mile from station

However, Portland's Light Rail Transit Station Zone, updated in 2004, uses a floor area ratio to reflect the mixture of land uses desired (versus strict residential or nonresidential densities).

- (b) Surface parking lots with 50 spaces or more must be divided into separate areas and divided by landscaped areas at least 10 feet wide or by a building or group of buildings.
  - (c) Surface parking lots must be screened along all sidewalks by a [three-foot high masonry wall, fence, or compact vegetation] that is compatible with adjacent structures.
  - (d) Walkways that cross parking, loading, or driveway areas must be clearly identifiable through the use of elevation changes, speed bumps, a different paving material, or other similar method.
  - (e) A total minimum of 5 percent of the area of surface parking lots must be landscaped.
  - (f) On-street parking is permitted and encouraged.
  - (g) Surface parking lots must be located at the rear of the building. Surface parking lots must include pedestrian walkways and connections to the sidewalk system. These must be clearly marked and continuous in design.
- (3) Shared Parking
- (a) Shared parking is strongly encouraged. A shared parking plan should be submitted to the [city or town or county] for approval. The methodology must be approved by the [planning director] prior to submittal of the plan.
  - (b) Table 4.13.4 represents general parking demands for common uses at different times of the day and different days of the week. Provisions for any use not indicated should be determined by the most similar use or by establishing similar criteria for that specific use as approved by the [planning commission].

*Comment: The subsections on surface parking lots, shared parking, parking structures, and bicycle parking are from the Mid-Ohio Regional Commission’s code language on development standards (1999); for the sake of continuity, they have been integrated into the parking section here. Note also that while the code urges that parking lots not “dominate” development sites, the term “dominate” is not quantified, so communities can determine for themselves how to integrate parking in TODs.*

**TABLE 4.13.4. SCHEDULE OF SHARED PARKING**  
(Percentage Capacity for Each Use)

General Use Classification	Weekdays (percentage)			Weekends (percentage)		
	12–7 a.m.	7 a.m.–6 p.m.	6 p.m.–12 a.m.	12–7 a.m.	7 a.m.–6 p.m.	6 p.m.–12 a.m.
Office/ Light Industrial	5	100	5	0	5	0
Retail	0	100	80	0	100	60
Restaurant	50	70	100	70	45	100
Hotel	100	65	100	100	65	100
Residential	100	50	80	100	75	75
Theater/ Entertainment	5	20	100	5	50	100
Place of Worship	0	30	50	0	100	75

Source: South Salt Lake City Municipal Code (Title 17, Zoning Code)

*Comment: The shared parking table was derived from the Envision Utah project, which informed the zoning codes of several communities in Salt Lake Valley. A quantitative table for shared parking is important for TOD overlay district codes to clearly illustrate the concept and demonstrate how it would work. (Details of the distribution may vary by location.)*

- (4) Parking Structures
- (a) Parking structures must include pedestrian walkways and connections to the sidewalk system. These must be clearly marked and continuous in design.
  - (b) Parking structures must contain ground-level retail along streetside edges of the parking structure.

- (c) Parking structures must be architecturally integrated or designed with an architectural theme similar to the main building.
- (d) Blank façades, solid walls, and nonactive uses at grade are discouraged.
- (5) Bicycle Parking
  - (a) Bicycle parking facilities must be provided for all office and multifamily structures and freestanding commercial uses (see Table 4.13.5 below).
  - (b) The required number of bicycle parking spaces will be based on the following:

**TABLE 4.13.5. BICYCLE PARKING**

Land Use	Bicycle Parking Required
Multifamily Residential	1 space/dwelling unit
Retail	0.50 space/1,000 square feet
Office	0.25 space/1,000 square feet
Industrial	0.14 space/1,000 square feet
Park and Ride Facilities	10 spaces/acre

Source: Mid-Ohio Regional Planning Commission (1999)

- (c) Bicycle parking facilities must be located in a secure, lockable, and well-lighted area.
- (d) All bicycle racks, lockers, or other facilities must be securely anchored to the ground or to a structure.
- (e) All required bicycle parking must be located within 50 feet of central or well-used building entrances.
- (f) Long-term bicycle parking facilities that provide parking for bike storage lasting six or more hours may be located inside buildings for added security.
- (g) The amount of short-term bicycle parking required for bike storage lasting less than two hours must be provided for at each building.
- (h) In buildings that have several uses, shared short-term bicycle parking facilities are encouraged and should be centrally located between uses.

### 109. Development Standards

The following development standards will apply to all uses allowed by right in the TOD zoning overlay district as indicated. Pedestrian and bikeway paths as well as open space areas connecting to the transit station and activity centers will be required in each of the subdistricts, in order to develop a strong pedestrian network.

#### (1) Building Façades

- (a) All buildings in TOD subdistricts must provide a main entrance on the façade of the building nearest to and facing a transit station or a street leading to a transit station.
- (b) A building may have more than one entrance.
- (c) Building façades must provide a visually interesting environment and should avoid uniform design styles.
- (d) Architectural style and materials must be compatible throughout the subdistrict and may be defined by the development plan.
- (e) Architectural style and materials must be compatible with or complement the built environment of the surrounding area. This may be defined by the development plan.

#### (2) Building Height

- (a) Building height within the subdistricts must be defined by the development plan (see section 113, below).
- (b) Minimum building height must be at least six stories in the core subdistrict, four stories in the mixed use subdistrict, and three stories in the medium density subdistrict, unless modified by an approved development plan.

*Comment:* There is wide range in codes about how to address height limitations of buildings. In the Massachusetts Smart Code for TOD, the minimum allowable building height is 28 feet, and the maximum is 78 feet (6.5 stories). Columbus, Ohio, and



*Figure 4.13.3. Rail stations such as this one on the Metra line in Downers Grove, Illinois, can spur higher-density residential redevelopment necessary to support transit.*

Salt Lake City codes each limit buildings to about six stories. In Denver, however, the maximum allowable building height is 220 feet (18 stories). Planners should consider the need for very high densities within the CSD and even MUSD and permit maximum building heights high enough to support transit use. Existing conditions of the neighborhood should not dictate height restrictions, since TODs are intended to transform the landscape into a more intense, compact mix of uses that will require much taller buildings than what may currently exist.

(3) Building Orientation

(a) Buildings within the TOD must be oriented toward the pedestrian by providing a direct link between each building and the pedestrian walking system, with emphasis on directing people to a transit station.

(b) A building's ground floor facing a transit station or public street must contain a minimum of 50 percent unobscured windows, doors, or display areas.

(4) Buildings must be set back a maximum of five feet from a public right-of-way. A setback may be increased to a maximum of 20 feet from a public street if a courtyard, plaza, or seating area is incorporated into the development adjacent to the public street.

(5) Blocks must not exceed [600] feet in length and must provide pedestrian linkages at least every 200 feet.

(6) Street Design

(a) On-street parking is permitted and encouraged.

(b) Street design standards are as follows:

**TABLE 4.13.6. STREET DESIGN STANDARDS**

Street	Right-of-Way (feet)	Travel Lanes	Travel Lane Width (feet)	Parking Lanes	Parking Lane Width (feet)
Alley	12–18	1+	N/A	0	N/A
Local	40–45	2	7–9	2	8–9
Collector	50–60	2	9–11	2	10
Arterial	follow existing code				

Source: Mid-Ohio Regional Planning Commission (1999), adapted.

**Comment:** The numbers in Table 4.13.6 have been changed from the original to reflect narrower rights-of-way and narrower travel lanes. The changes reflect the goal communities should have to allow the narrowest streets possible within the TOD zoning overlay district, so that pedestrians and transit have highest priority, not the private automobile. Narrower streets also create greater opportunities for community socializing and reduce the harmful environmental impacts of impervious surfaces. Narrower streets will be a tough sell to emergency response services (police, fire, and EMS), but communities must strive for the narrowest streets possible without threatening the health, safety, and general welfare of the public.

(7) Sidewalks

(a) Sidewalks must be at least five feet in paved unobstructed width.

(b) Sidewalks must be constructed along the frontage of all public streets and within and along the frontage of all new development or redevelopment.

(c) Sidewalks may range in width from a minimum of five feet to a maximum of 20 feet, depending on expected pedestrian traffic.

(d) Pedestrian-scale lighting fixtures no greater than 12 feet in height must be provided along all sidewalks and walkways to provide ample lighting during nighttime hours for employees, residents, and customers.

(e) Stairs or ramps consistent with ADA requirements must be provided where necessary to provide a direct route.

(f) Walkways must be as direct as possible and avoid unnecessary meandering.

(8) Streetscapes

(a) Street trees are required along all sidewalks.

(b) Pedestrian amenities such as benches, public art, picnic areas, seating areas, planters, and fountains must be located in landscaped areas, open spaces, and plazas along streets and in parks.

**TABLE 4.13.7. SUGGESTED RESIDENTIAL AND NONRESIDENTIAL DENSITY THRESHOLDS FOR TRANSIT-ORIENTED DEVELOPMENT**

Density Thresholds	Transit Service Supported	Source
<i>Residential:</i>		
7 units per acre	Basic bus service	Ewing (1997)
15 units per acre	Premium bus service (bus rapid transit)	Ewing (1997)
20–30 units per acre	Rail transit service	Ewing (1997)
7 units per acre	Fixed-line bus system	Dittmar and Ohland (2004)
10 units per acre	General public transit	Institute for Metropolitan Studies (1994)
6–20 units per acre	General public transit and walking for shopping trips	Frank and Pivo (1994)
10 units per acre	Overall transit-oriented development district	Calthorpe (1993)
7 units per acre	Neighborhood component of transit-oriented development district	Calthorpe (1993)
12 units per acre	Urban core component of transit-oriented development	Calthorpe (1993)
10 units per acre	New urbanism developments	Duany (2004)
7 units per acre	Transit-oriented development district	Farr (2007)
<i>Nonresidential:</i>		
Floor Area Ratio > 0.35	Transit-oriented development district	Calthorpe (1992)
Floor Area Ratio 0.5–1.0	Commercial developments without structured parking	Puget Sound Regional Council (1999)
Floor Area Ratio > 2.0	Commercial developments with structured parking	Puget Sound Regional Council (1999)
25 jobs per acre	Frequent, high-capacity transit service	Puget Sound Regional Council (1999)
50 jobs per acre	Light-rail transit service	Puget Sound Regional Council (1999)
100 workers per downtown acre	Light-rail transit service	Transportation Research Board (1995)

*Note:* Several resources shown in Table 4.13.7 offer quantitative prescriptions for appropriate minimum residential density thresholds for compact, mixed use neighborhoods, based largely on the density necessary to support a public transportation system. Although the precise level of density at which there is a dramatic shift toward transit use is the subject of debate (Dittmar 2004), there appears to be consensus in the literature that net residential densities of no less than seven units per acre is necessary to support any type of public transit system. Interpretation of nonresidential densities is less straightforward, but higher densities (measured by either floor area ratio or employees per acre) support higher levels of transit service. Communities that wish to prescribe minimum density thresholds for TOD zones in their ordinances must consider the level of transit service and the mix of residential and nonresidential uses intended.

The arrangement of density zones by proximity to the transit station also matters. Generally, density and distance from the station should be inversely proportional, so highest densities are closest to the station. The implications of higher densities around transit stations are increased ridership and reduced use of private automobiles. The most dense development generates the most activity; thus, the greatest potential for automobile use reduction is to concentrate activity close to alternative transportation options. Holtzclaw et al. (2002) determined that for each doubling of density within communities and metropolitan areas, annual vehicle miles traveled are reduced 20 to 40 percent. Communities need to structure their density patterns accordingly when drafting or revising their zoning ordinances.



(9) Signage

- (a) Signs may not extend higher than the height of the ground story.
- (b) A façade sign may not exceed 25 percent of the ground-floor wall area. No other sign may exceed 25 square feet in size.
- (c) All signs within a given district must be complementary in their use of color, shape, and material to the architecture on the site.

**110. Additional Standards**

*Comment: The community may wish to include additional standards that meet locally defined goals relative to TOD or that address other related concerns. These may include design standards to ensure that new construction or redevelopment is focused on the pedestrian. Standards for building, street and parking lot designs, and open space may be set forth.*

**111. Exemptions and Exclusions**

This code will apply to all new construction in the TOD overlay district. It will apply to reconstruction or redevelopment when the redevelopment will result in an increase of property value of 50 percent or greater of the assessed values of the existing property. The provisions of this code will apply to the maximum extent feasible to reconstruction of existing property where the reconstruction will result in less than a 50 percent increase in property value over the assessed value of the existing property.

**112. Severability**

If any provision of this code is found to be invalid by a court of competent jurisdiction, the remainder of the code will not be affected and will remain in full force. The invalidity of any section of this code will not affect the validity of the remainder of the [city or county] zoning ordinance.

**113. Development Plan**

(1) A development plan must be prepared by the [city or town or county] planning department for each designated TOD overlay district. The development plan may modify the boundaries of the subdistricts and provide for the physical design of the TOD relative to public improvements, development standards, urban design criteria, and public incentives. The development plan must consist of the following components:

- (a) Existing land use, property ownership, development character, and related characteristics within one mile of the proposed transit station location.
- (b) Real-estate market analysis of the development and redevelopment potential of the TOD. The analysis must consider potential demand for commercial (retail and services), office, hotel, entertainment, light industrial, and residential development (multifamily-owner and renter occupied, duplexes, single family, affordable housing, and elderly housing), as well as any other applicable uses.
- (c) Conceptual placement of the subdistricts onto the study area and an analysis of potential impacts, development opportunities, infrastructure needs, and other relevant factors. A traffic study must also be prepared.
- (d) Final development plan indicating subdistrict boundaries, development pattern by use, density, and similar characteristics; supporting infrastructure; pedestrian and bicycle system; urban design guidelines; and implementation timetable.
- (e) An incentive package that is responsive to market conditions for the area.

(2) The process for preparing the development plan must include major stakeholders, including but not limited to major property owners, transportation authorities, neighborhood organizations, and other interested parties. These individuals must serve as an advisory committee that will work with city staff and consultants to prepare the development plan within the required timeframe. The development plan must be submitted to the [planning commission] and [local governing board] for adoption. Once adopted, the TOD overlay district must be drafted to implement the development plan recommendations and must be submitted for adoption.

**Case Study: Minneapolis TOD Development Plan**

Minneapolis has taken a case-by-case approach rather than pursue sweeping municipal code reform. Communities that wish to treat each transit station



area as unique may want to follow the Minneapolis example. Zoning for transit station areas could be tailored to each area's individual characteristics, thus making a case for placemaking as well as for high-density, transit-oriented urban design. While the proposed model code suggests communities develop both a TOD zoning overlay district and development plans for areas around stations, the Minneapolis case highlights how a community chose the latter in lieu of the former.

Construction began on the Hiawatha light-rail line in Minneapolis in 2001; by 2005, the full line was operating between downtown, the airport, and the Mall of America. Through Minneapolis's comprehensive plan, city planners designated official transit station areas in the Hiawatha Light Rail Corridor. The areas were the subject of a full rezoning study that began in 2004, simultaneously with service on the line. According to Minneapolis City Council ([www.ci.minneapolis.mn.us/lrtrezoning](http://www.ci.minneapolis.mn.us/lrtrezoning)), the upshot of the study was a two-step process for rezoning within transit station areas:

Zoning amendments in the Hiawatha Corridor outside of downtown will occur in two phases. The first phase establishes a pedestrian oriented "overlay" zoning district within the neighborhood Light Rail Transit station areas. This creates additional regulations and incentives for development in these areas (e.g., such as the prohibition of expanding or establishing new automobile service uses). The second phase will result in recommendations for changes to "primary" zoning districts. Any changes to downtown zoning will occur separately from this process.

The rezoning study also determined that the city should follow a set of strategies when making changes within the Hiawatha Light Rail Corridor:

- Zoning changes may be immediate if development is anticipated.
- Greater development rights may be granted to achieve higher density.
- The city may consider long-term rezoning and identify zoning changes for future implementation.
- The city may act to prevent the expansion or intensification of uses that are not consistent with long-range plans through rezoning.

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*Figure 4.13.4. The Hiawatha light-rail line in Minneapolis.*

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#### ENDNOTE

- 1 Andres Duany, one of the principal proponents of traditional neighborhood design (TND), concedes that while the TOD and TND literature offer prescriptions for residential densities in exclusively residential areas, there is a dearth of prescriptions for residential densities in mixed use districts and for nonresidential densities in mixed use or exclusively nonresidential districts (personal correspondence, August 8, 2004).

## Infill Development Incentive Model Approaches

Many local governments use incentives to encourage development of vacant and underdeveloped or economically underperforming parcels in urbanized areas where infrastructure and services already exist. Typical locations for infill development include downtowns, transit corridors, and other areas adjacent to employment, shopping, educational, and recreational centers. There are many reasons for local governments to use infill development incentives. For one, the incentives help revitalize properties that are underused or blighted. The revitalization of these properties creates jobs, increases purchasing power, and generates tax money for local governments. Also, if infill development is oriented around public transit, it can lessen auto dependence and therefore reduce air pollution and congestion.



**PRIMARY SMART GROWTH  
PRINCIPLE ADDRESSED:**

- Direct development toward existing communities

While there are benefits to infill development, there are also challenges associated with building on an infill property, such as environmental contamination, outdated infrastructure, complicated title issues, and the fragmented nature of many infill lots. Some of these issues are quite costly to remedy. To compensate for the possible financial hardships of developing infill properties, some local governments have implemented infill incentives programs. Infill incentives take many forms, such as land-use incentives, regulatory approaches, tax incentives, and infrastructure-related incentives.

One important prerequisite to encouraging infill development is to review local government land-use controls to eliminate overly burdensome, inflexible, or restrictive dimensional or design requirements that may serve as a deterrent to those considering infill development. One such example is to include zoning for mixed use in areas where infill is expected.

### Infill Overlay Zoning Districts

Overlay zones can be used to direct infill incentives to the areas that need them most. For example, a municipality may allow development occurring within a designated infill overlay district to have reduced impact fees or infrastructure costs. Phoenix, Arizona, has an “Infill Incentive District” wherein qualifying projects can take advantage of expedited plan processing. In addition, an infill incentive team will help to coordinate the project and guide the developer through the approval process. It is important when regulating infill development to allow for the development of irregular, small, or otherwise abnormally sized parcels. Such allowances turn underused land into productive space.

Conventional Euclidean zoning, the most prevalent land-use regulation in the United States, is based on segregating land uses within a municipality. However, in order for infill to be economically viable, a mix of uses and higher densities often need to be accepted. One key to successful infill development is the creation of mixed use districts. Such districts are often created around transit hubs and provide a centralized location for jobs, housing, recreation, cultural amenities, and retail. For an example of a mixed use zoning ordinance, see Chapter 4.1, above.



**Figure 4.14.1.** One key to successful infill development is the creation of mixed use districts around transit hubs.

### Flexible Code Standards

The State of Oregon devised two alternative approaches for local governments in addressing regulatory constraints in order to allow infill development. The approach is presented in the *Infill and Redevelopment Code Handbook* (1999). The handbook suggests that communities apply the flexible code standards either “by definition” or “by district.” Applying codes “by definition” means allowing flexible standards on any parcel that meets the code’s definition of an infill parcel. A parcel with existing development on lots that abut at least two of the subject property’s boundary lines is one such definition. The Oregon handbook says that the “by definition” approach is best suited for situations where a change of land use is not anticipated; rather, the setbacks, driveways, lot coverage, and so forth that apply to existing use types are what need flexibility.

Applying a “by definition” approach could necessitate an inventory of potential infill sites throughout the city or county. That process would, with little doubt, reveal many more parcels than just the vacant and underdeveloped commercial sites initially considered for infill development. If a city or county wants to use this approach but does not wish to open up the availability of the flexible standards to areas outside the sites in question, it would have to craft a very narrow definition of “infill site,” to ensure that the flexibility is provided only where city policy has indicated that it should be.

Applying the flexible regulations “by district” means that the standards will be administered in one of two ways: via a newly created special base district or as an overlay to an existing base district. Creating new special base districts is a more complicated process, requiring changes to the zoning map and considerable involvement by affected property owners. According to the infill handbook, creating such districts typically follows a community planning process for a specific neighborhood or subarea.

The Oregon handbook lists a number of standards for which flexibility is needed to accommodate infill development (see sidebar). Every city or county using this approach has to devise its own list of existing development standards that have hindered infill and redevelopment. Then, a generalized infill development overlay floating zone should be drafted, with the intent that it be applied as needed to developable parcels. An applicant may not need an adjustment to every single standard for which flexibility is allowed, but the overlay zone would provide relief for those elements that would otherwise make the project unworkable. The permitted variations in the standards themselves is expressed in numerical ranges or performance targets.

### Land Assembly

Another tactic to promote infill development is through a land assembly program, within which local governments assemble small, individual parcels into blocks that are under common ownership in a land bank. The city or county could then make improvements to the property (or properties) and ensure that it is suitable for redevelopment. A benefit of land assembly is that parcels that may have been unattractive to developers or too small to build on are given new life. Through land assembly, the local government ensures that land is ready to be developed, which saves a developer time and money.

Cleveland runs a land assembly program wherein most of the parcels are eventually transferred to the local housing authority or nonprofit affordable housing organizations or developers. However, cities must exercise caution in land assembly practices for a few reasons. For one, it can be very expensive and time consuming to clear up possible title issues and environmental contamination. There may be dilapidated or damaged buildings that require expensive demolition or rehabilitation. Also, in assembling land, some property owners may hold out for more money once they learn of the land bank’s existence. The price of land may increase in general in the area once it is common knowledge that the land is desirable. Another aspect to keep in mind is that, in some instances, eminent domain may be necessary to secure properties. If that is the case, local governments must be sure to demonstrate a valid public purpose in seizing the property.

### Density Bonuses

A variety of densities should also be allowed to make infill development economically viable. To spark interest in infill development, many communities offer density bonuses for building in target areas.

Density bonuses allow developers to increase the density of an infill project. An increase in density may make a project economically feasible or otherwise provide greater incentive for a developer to choose to build in an infill area. For example, Battle Ground, Washington, allows duplexes in its “infill development opportunities” overlay district to be built at 120 percent of the normal maximum density. Portland, Oregon, allows duplexes to be built in single-family zoning districts as long as the duplexes are built on corner lots with unit entrances facing different streets. This design strategy results in a single-family appearance but still increases density.

#### WHICH PROVISIONS MAY NEED FLEXIBILITY?

- Purpose and Intent Statements
- Applicability and General Provisions
- Application Requirements and Review Procedures
- Permitted Land Uses and Building Types
- Development Standards and Guidelines
- Lot Coverage
- Building Setbacks and Encroachments
- Building Heights
- Street Frontage, Access, and Circulation
- Residential Density Standards
- Residential Building Size
- Commercial Floor Area
- Building and Site Design
- Building Orientation
- Residential Open Space
- Landscaping
- Parking
- Building Design
- Safety and Security
- Special Use Standards

Source: The Infill and Redevelopment Handbook, State of Oregon, 1999





*Figure 4.14.2. Infill redevelopment can add needed density to established residential neighborhoods.*

### **Expedited Review Processes**

Expedited review procedures can be put into place by adding a staff person who is responsible for dealing with infill review (as in Baltimore and Cleveland) or, if possible, by processing applications electronically (as in Tampa, Florida). Streamlining the review and approval process is important because infill projects are often seen as high risk, and the lengthy, complex approval process makes the development even riskier and more expensive. Simplifying the review process will save the developer money and make infill development more attractive. An even more radical approach is to allow infill development as of right as long as it complies with the standards for the zoning district (Robinson and Cole 2002, 31).

### **Fast-Track Permitting**

Fast-track permitting allows infill development proposals to be processed ahead of traditional projects. Some communities consolidate permit processes to allow the review and processing of related development permits to happen concurrently (“Infill Incentives” n.d.). By shortening the permit process, developers are saving money that otherwise would have been spent on holding costs.

### **Sales Tax Rebates**

One way that Arizona encourages infill development is by offering a sales tax rebate for infill single-family housing. Through this program, sales taxes are returned on the gross receipts for construction materials of the single-family home. To get the refund, actual receipts must be turned in, and it must be proved that the home is in an infill area. Also, if the developer sells the home within 24 months of its completion, it must pass along to the purchaser all amounts rebated by the state.

### **Property Tax Abatement**

Spokane, Seattle, and Tacoma, Washington, are all eligible under state law to take advantage of a 10-year property tax exemption for multifamily housing construction or rehabilitation in infill areas. To qualify, the development must include at least four multifamily units built in predetermined target areas in the city. The units may be either affordable or market rate. The tax abatement is made possible by Washington State’s Growth Management Act and is applicable to cities with populations over 150,000, although the three aforementioned cities are the only ones to have such programs. Tacoma’s Tax Incentive for Multi-Family Housing, first offered in 1996, has enjoyed much success and in its first three years resulted in more than 700 units of housing and more than \$33 million in investment in its target areas.

Portland, Oregon, also offers a property tax abatement program in target “distressed” areas for housing development that costs under \$105,000. The property owner does not pay taxes on the value of improvements to the property for the first ten years. In certain instances, this abatement is also applied to rehabilitated housing.

### **Infrastructure-Related Incentives**

One way for local governments to make an infill area more attractive to developers is to invest in the infrastructure of the area, including public works, parks, libraries, and schools. Funding for infrastructure investments can be raised through a tax increment financing (TIF) district or another special assessment district. A TIF district is a tool used by municipalities to subsidize investment in areas that might not otherwise attract redevelopment. Existing property values are established as a base, and tax revenue from any increase in property value over that base (the “increment”) is diverted into



a special fund the municipality can use to finance infrastructure improvements to attract private investment and infill redevelopment. This tool was originally envisioned as a way to jump-start redevelopment in distressed urban areas that would see no investment “but for” the incentives created by TIF funding. A recent trend, however, has been to broaden the criteria for establishing TIF districts, resulting in TIF funding being used in suburban or affluent areas on projects such as big-box shopping centers. Such practices can lead to greenfield development, which exacerbates sprawl, and provide an unnecessary subsidy to developers at the expense of the community. It is important to restrict the use of TIF to infill development in declining areas that otherwise would not see the reinvestment they so badly need.

One example of special assessment district legislation is Texas’s Public Improvement District (PID) Act. This act made it possible for residents to choose to create a PID, within which a special assessment based on property values is charged to each property owner. The money collected is, in turn, used to fund services and infrastructure improvements. In order to enact such a district, the community must submit a petition to local government with signatures from either more than 50 percent of property owners or owners representing more than 50 percent of the appraised value of the taxable property in the community.

New development, particularly the high-density housing that is associated with infill, puts additional strain on the existing public facilities and services that will serve the development. To compensate for this, an impact fee is typically assessed on developers. In order to encourage infill development, however, jurisdictions may offer lower impact fees or even waive the fees altogether for development in infill target areas. Another option is to allow the developer to delay the payment of impact fees until after he or she sees a profit on the infill development project. These fee reductions, waivers, or delays are beneficial not only to the developer but to the purchaser as well, as the savings will translate to a reduced price tag on the home.

Infill can also be encouraged by providing disincentives for greenfield development. Lancaster, California, has an “Urban Structure Program” in place that assesses higher impact fees for development more than five miles from the central core. There is a standard impact fee for development in the core area, and fees increase as development moves outward. For example, a new house built within the central core would incur an impact fee of approximately \$5,500 while the same house one mile outside the core would incur a fee of almost double that amount. The Urban Structure Program is quite similar to the more widely used “urban service area,” in which a city will not extend public works and services outside a designated boundary.

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## Model Critical Area Ordinance



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Preserve open space and farmland
- Direct development toward existing communities

This Critical Area Ordinance (CAO) is designed to protect environmentally sensitive areas such as critical aquifer recharge areas, geologic hazard areas, frequently flooded areas, fish and wildlife habitat conservation areas, and wetlands. Such resources are integral parts of both urban and rural life. Critical areas provide a variety of benefits and functions, including enhanced water quality, invaluable plant and wildlife habitat, stormwater management, landscaping, increased property values, and recreational opportunities. Protecting and enhancing them is essential to public welfare and the well-being of future generations.



Kristina Peterson

*Figure 4.15.1. This chenier (a raised area in the marsh that is covered in trees) west of Grand Bayou Village in Plaquemines Parish, Louisiana, is sinking and the trees are dying because of saltwater intrusion. The water in the foreground is a recent occurrence. It was previously solid ground.*

CAOs are not meant to prohibit all development in critical areas or to make a parcel of property unusable by denying its owner reasonable economic use. Rather, the focus of a CAO is to direct development that is not dependent on critical areas to less sensitive sites while regulating and mitigating the unavoidable alterations that must be made to such areas. CAOs should be administered with flexibility and attention to site-specific characteristics. As such, each community should tailor its CAO to address the types of critical areas present in its region.

The implementation of CAOs has become increasingly necessary due in part to widespread destruction and degradation of habitat and wetlands. Such deterioration of natural conditions has been greatly exacerbated by the conversion of large amounts of land to housing and commercial development and transportation projects. The immense consumption of land taking place in the United States pushes many groups of plants and animals out of their natural habitats and puts them at risk of extinction. Scientific research shows that one-third of the best-known plants and animals are at risk of extinction, and more than 200 American species of flora and fauna are already extinct. In addition, loss of wetlands limits the ability of some areas to adequately store stormwater, which can lead to flooding. Wetlands also contribute to aquifer recharge. At the state and national levels, the trend has been to cut funding and weaken regulations for habitat and wetlands protection. To this point, it is crucial for local governments to enact protective legislation for critical areas.

Another important aspect of a CAO involves setting standards for geologic hazards, including erosion hazard areas, landslide hazard areas, seismic hazard areas, and coal-mine hazard areas. Regulating the development that occurs in these areas is essential to protecting public safety and welfare.

The vast majority of existing critical area ordinances in the United States are from Washington State, where they are required by the state's Growth Management Act, enacted in 1990. Most cities and counties in Washington include the five critical area types listed above in one comprehensive ordinance, instead of in five separate ordinances. When interviewed, officials noted that the CAO was easier to adopt as a "unified" ordinance and also that the CAO was more cohesive that way (Douglas Peters and Nicole Ward).

This model ordinance draws on codes from several cities and counties in Washington, namely Bellingham, Bremerton, Longview, and Seattle, and Thurston and King counties.

#### 101. Purpose

The purposes of this critical area ordinance are to identify and protect environmentally sensitive lands in [the city or county] and to promote public health, safety, and welfare by providing appropriate and reasonable controls for the development of such lands. Specifically, this ordinance is intended to:

1. Comply with other local, regional, state, and federal regulations and permits.
2. Protect people, property, and public resources and facilities from injury, loss of life, financial loss, or property damage due to natural hazards such as flooding, erosion, landslides, seismic events, soil subsidence, or unstable slopes [list other area-specific hazards, such as volcanic eruptions or avalanches here].
3. Protect unique, fragile, and valuable elements of the environment, including, but not limited to, fish and wildlife habitat, wetlands, vegetation specimens, riparian habitats, and other healthy, functioning ecosystems.
4. Ensure the availability of quality water by preventing adverse impacts on groundwater, wetlands, streams, and other water sources.
5. Provide [city or county] officials with complete and accurate information in order to adequately prepare them to make decisions regarding development in critical areas.
6. Mitigate unavoidable impacts to critical areas and prevent avoidable impacts by regulating development and alterations in or near critical areas.

7. Require innovative planning, design, and construction techniques for development in critical areas by requiring applicants and their professional consultants to utilize current technologies.

#### 102. Definitions

As used in this ordinance, the following words and terms will have the meanings specified herein:

**Aquifer.** A geological formation, group of formations, or part of a formation that is capable of yielding, storing, or transmitting a significant amount of groundwater to a well or spring.

**Aquifer recharge areas.** Areas where geological formations are present that, due to the presence of certain soils, geology, and surface water, act to recharge an aquifer by the downward percolation of water.

**Best management practices.** Conservation practices or systems of practices and management that: (a) control soil loss and protect water quality from degradation caused by nutrients, animal waste, toxins, and sediment, and (b) minimize adverse impacts to surface water and groundwater flow, as well as to the chemical, physical, and biological characteristics of critical areas.

**Buffer.** An area that is adjacent to or part of a critical area that protects the critical area from adverse impacts and may also provide wildlife habitat related to the critical area.

**Erosion.** The process whereby wind, rain, ice, and other natural agents wear away soil, sediment, or rock fragments.

**Frequently flooded areas.** Areas in the floodplain subject to a 1 percent or greater chance of flooding in any given year (also known as the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program).

**Geologically hazardous areas.** Areas that may not be suited to development due to their susceptibility to erosion, sliding, earthquakes, and other geological events that jeopardize public health or safety.

**Impervious surface.** Any surface that prevents or impedes the absorption of stormwater into previously undeveloped land. Such surfaces may include, but are not limited to, gravel, asphalt, and concrete paving, rooftops, walkways, patios, driveways, parking lots, and packed-earth material.

**Riparian habitat.** The transitional areas adjacent to aquatic systems (e.g., streams and rivers) that contain elements of both aquatic and terrestrial ecosystems that mutually influence one another.

**Seismic hazard areas.** Areas that are potentially subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or surface faulting.

**Wetlands.** Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

#### 103. Applicability of Regulations

(1) This ordinance applies to any alteration of either public or private land, water, or vegetation within environmentally critical areas and their buffers. This may include, but is not limited to, new structures, additions to structures, short subdivisions and subdivisions, grading and drainage activity, and tree and vegetation removal.

(2) The following activities will be fully exempt from critical areas review and will not be subject to the provisions of this ordinance:

(a) Activities in response to emergency situations which threaten the public health, safety, or welfare, or which pose an immediate risk of damage to a utility facility or private property.

(b) Normal and routine maintenance, repair, and replacement of existing utility facilities, if the activity does not further alter or increase the impact to critical areas or their buffers.

#### 104. General Requirements

(1) Compliance with other local, regional, state, and federal regulations and permits is required, in addition to critical areas requirements.

(2) If any regulation conflicts with the requirements of this ordinance, that which provides more protection to the critical area will govern.



- (3) If compliance with all applicable regulations relating to critical areas is impossible, the requirements of the critical area ordinance will prevail.
- (4) The application for development in a critical area will be reviewed in conjunction with any other related applications.

*Comment: Applicants should be advised that the ordinary permitting process for development may be prolonged by a proposal for development in a critical area. The delay may be caused by special studies that are determined and performed after an application for development in a critical area has been returned to the appropriate department. A preapplication conference may be an option in some areas in order to assess beforehand what studies may be required and, therefore, how long the permitting process may take.*

#### **105. Submittal Requirements**

- (1) Applications for any development within a critical area or associated buffer must at a minimum include the following:
- (a) A completed application.
  - (b) A critical area report (required components listed below).
- (2) Required characteristics or components of a critical area report include:
- (a) Preparation by a qualified professional.
  - (b) Incorporation of best management practices and scientifically valid methods and studies.
  - (c) Special reports. When a critical area is determined to be on-site, the appropriate department may require submittal of additional reports and studies prepared by qualified specialists to make an assessment or delineation of the critical area. Some critical areas may have special report requirements, which will be detailed in their specific sections.
  - (d) Site plan. Additional site plan information may be required for sites that include landslide- or flood-prone areas, riparian corridors, wetlands, or steep slope areas or their buffers.
  - (e) Technical assessments. Technical reports and other studies and submittals must be prepared as required by the appropriate department detailing soils, geological, hydrological, drainage, plant ecology and botany, and other pertinent site information.

*Comment: Some communities require a "Critical Area Identification Form" or "Critical Area Checklist" in order to identify critical areas on proposed development sites. While the State of Washington's Growth Management Act strongly recommends that cities and counties maintain an inventory of critical areas, such inventories are often incomplete and require further identification by property owners. The inventories are based primarily on previous identifications made by Washington's Department of Fish and Wildlife and its Department of Natural Resources. Other cities and counties should consult such applicable state departments to build their inventories (Nicole Ward, City of Bremerton).*

*Washington's State Environmental Policy Act (SEPA) also requires governmental agencies to consider the environmental impacts of a development before making a decision on whether to approve a project proposal. To that end, the SEPA Environmental Checklist ([www.ecy.wa.gov/pubs/ecy05045.pdf](http://www.ecy.wa.gov/pubs/ecy05045.pdf)) is a guide for communities to use to determine whether further environmental impact studies must be performed in order to complete a project application. Communities using this model ordinance should explore any similar state guides in determining whether environmentally sensitive areas exist on a proposed development site.*

#### **106. Critical Area Project Review Process**

- (1) As part of this review, the [city or county] must:
- (a) Verify the information submitted by the applicant;
  - (b) Evaluate the project area and vicinity for critical areas;
  - (c) Assign the [planning director] the responsibility to determine whether the proposed project is likely to impact the functions or values of critical areas; and
  - (d) Assign the [planning director] the responsibility to determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.
- (2) If the proposed project is within or adjacent to or is likely to impact a critical area, the [city or county] must:

- (a) Require a critical area report from the applicant that has been prepared by a qualified professional;
- (b) Review and evaluate the critical area report;
- (c) Determine whether the development proposal conforms to the purposes and performance standards of this ordinance;
- (d) Assess the potential impacts to the critical area and determine if they can be avoided or minimized; and
- (e) Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this ordinance.

## 107. Aquifer Recharge Areas

### 107.1 Classification and Designation

#### [Alternative 1]

Critical aquifer recharge areas (CARAs) shall be categorized as follows:

- (1) Category I includes those areas that are highly susceptible to groundwater contamination and are located within a sole-source aquifer or a wellhead protection area.
- (2) Category II includes those areas that have medium susceptibility to groundwater contamination and are located within a sole-source aquifer or a wellhead protection area or are highly susceptible to groundwater contamination but are not located within a sole-source aquifer or a wellhead protection area.
- (3) Category III includes those areas that currently or may in the future provide recharge to aquifers that are currently or potentially will become potable water supplies.

#### [Alternative 2]

Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water. CARAs have geologic conditions associated with infiltration rates that create a high potential for contamination of groundwater resources or contribute significantly to the replenishment of groundwater. These areas include but are not limited to: wellhead protection areas, sole-source aquifers, susceptible groundwater management areas, special protection areas, moderate or highly vulnerable aquifer recharge areas.

**Comment:** Bremerton's ordinance provides two categories for CARAs. Category I CARAs are those where potential land-use activities pose a high likelihood of adversely affecting groundwater. According to Washington's standards, Category I CARAs include: five-year time-of-travel zones for "Group A water system wells"; ten-year time-of-travel zones in wellhead protection areas when a well draws its water from an aquifer that is at or above sea level and is without an overlying protective impermeable layer; and areas identified by the city as being regionally significant aquifer recharge areas.

Category II CARAs are those areas where recharge is provided to aquifers that are or will potentially become potable water sources and may be subject to pollution, depending on what sort of land-use activity is taking place. Such CARAs include highly permeable soils and areas above shallow, permeable aquifers that are not protected by an impermeable layer that would prohibit the proposed land use from adversely affecting the water below.

King County adds another category, to allow for areas with high, moderate, and low susceptibility to pollution.

Using these categories to describe CARAs allows communities to consolidate areas that have similar characteristics. However, Doug Peters, senior planner for Washington State, believes that using the category system favors those CARAs that are used for potable water. Some municipalities have argued that if no potable water can be drawn from an aquifer, there is no reason to protect that aquifer. This leaves many CARAs open to potential contamination. Listing the different CARAs, as Washington State has done, helps to ensure that all CARAs will be protected and allows for a more comprehensive ordinance.

### 107.2 Permitted Uses and Activities

- (1) The following activities are allowed in CARAs and do not require the submission of a critical areas report:
  - (a) Construction of structures and improvements, including additions, resulting in less than [5 percent or 2,500 square feet] (whichever is greater) total site impervious surface area that does not result in a change of use or increase the use of a hazardous substance.

- (b) Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than [5 percent] total site impervious surface area that does not increase the use of a hazardous substance.
- (c) On-site domestic septic systems releasing fewer than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per acre.

#### 107.3 Additional Report Requirements for CARAs

A hydrogeological assessment may be required, depending on the condition and location of the CARA. The scope of the report will be determined according to site-specific conditions. The assessment must prove that the proposed development will not cause significant impacts on the aquifer quality or recharge.

**Comment:** *Report requirements can be stratified according to the specific activities occurring on the site. For example, Washington's example code provisions require all proposed activity in CARAs to complete a Level One hydrogeologic assessment. Those projects that possess any of the qualities listed below must also complete a Level Two hydrogeologic assessment.*

1. Activities that result in 5 percent or more impervious site area;
2. Activities that divert, alter, or reduce the flow of surface water or groundwater, or that otherwise reduce the recharging of the aquifer;
3. The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;
4. The use of injection wells, including on-site septic systems, except those domestic septic systems releasing fewer than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per acre; or
5. Any other activity determined by the [director] likely to have an adverse impact on groundwater quality or quantity or on the recharge of the aquifer.

*For more details on what these assessments entail, please reference Washington's example code provisions, Section X.30.050, "Critical Area Report—Additional Requirements for Critical Aquifer Recharge Areas."*

### 108. Geological Hazard Areas

#### 108.1 Classification and Designation

Areas susceptible to one or more of the following types of hazards will be designated as a geological hazard area:

- (1) Erosion hazard areas, which include:
  - (a) Those areas identified by the U.S. Department of Agriculture Natural Resources Conservation Service as having a "moderate to severe," "severe," or "very severe" rill and interrill erosion hazard.
  - (b) Those areas affected by shoreland or streambank erosion and those areas within a river's channel migration zone.
  - (c) Any areas where the soil type predominantly [> 50 percent] comprises sand, clay, silt, or organic matter and where the slope is greater than [30 percent].
- (2) Landslide hazard areas are those areas that are prone to landslides, based on a combination of geologic, topographic, and hydrologic factors, including but not limited to any combination of bedrock, soil, slope, slope aspect, structure, hydrology, topography, underlying geologic structure, freeze-thaw, earthquakes, and other geologic factors.
- (3) Seismic hazard areas are those areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting.

**Comment:** *Washington's example code provisions, "Designation of Specific Hazard Areas," notes the factors that determine the strength of ground shaking, settlement, and liquefaction, namely the:*

- (a) magnitude of an earthquake;
- (b) distance from the source of an earthquake;
- (c) type of thickness of geologic materials at the surface; and
- (d) type of subsurface geologic structure.

*Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow groundwater table.*

(4) Mine hazard areas are those areas underlain or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sinkholes, gas releases, or subsidence due to mine workings.

**Comment:** Some communities use additional geologic hazard categories, such as volcanic, tsunami, mass wasting, debris falls, rock falls, and differential settlement. Hazard categories should be added as appropriate for your community. Erosion and landslide hazard areas, since they share similar characteristics, are often combined into one section.

### 108.2 Regulatory Approaches

(1) Alterations of geologic hazard areas or associated buffers may occur only for activities that:

- (a) Will not increase the threat of the geologic hazard to adjacent properties beyond predevelopment conditions;
- (b) Will not adversely affect other critical areas;
- (c) Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and
- (d) Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in [name of state].

(2) Critical Facilities Prohibited. Critical facilities must not be sited within geologic hazard areas unless there is no other practical alternative.

### 108.3 Hazard-Specific Requirements

(1) Erosion and Landslide Hazard Areas

(a) *Applicability.* All development to be located in erosion and landslide hazard areas must conform to the standards of the general requirements delineated above and also to these specific requirements:

(b) *Buffer Requirement.* A buffer must be established from all edges of landslide hazard areas. The size of the buffer will be determined by the [director] to eliminate or minimize the risk of property damage, death, or injury resulting from landslides caused in whole or part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.

(i) Minimum Buffer. The minimum buffer must be equal to the height of the slope or 50 feet, whichever is greater.

(ii) Buffer Reduction. The buffer may be reduced to a minimum of 10 feet when a qualified professional demonstrates to the [director's] satisfaction that the reduction will adequately protect the proposed development, adjacent developments, and uses in the subject critical area.

(iii) Increased Buffer. The buffer may be increased where the [director] determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

(c) *Alterations.* Alterations of an erosion or landslide hazard area or buffer may occur only for activities for which a hazards analysis is submitted and certifies that:

- (i) The development will not increase surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions;
- (ii) The development will not decrease slope stability on adjacent properties; and
- (iii) Such alterations will not adversely affect other critical areas.

(d) *Design Standards.* Development within an erosion or landslide hazard area or buffer must be designed to meet the following basic requirements, unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this ordinance. The requirement for long-term slope stability must not include designs that require regular and periodic maintenance to maintain their level of function.

(i) The proposed development must not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions must be based on a minimum horizontal acceleration as established by the current version of the International Building Code;



James Schwab

*Figure 4.15.2. These slopes along Interstate 70 in Colorado west of Denver are part of an extensive terrain subject to landslides, in this case following heavy rains. A variety of engineering and environmental measures are available to mitigate such hazards in vulnerable and critical areas.*

- (ii) Structures and improvements must be clustered to avoid geologically hazardous areas and other critical areas;
  - (iii) Structures and improvements must minimize alterations to the natural contour of the slope, and foundations must be tiered where possible to conform to existing topography;
  - (iv) Structures and improvements must be located to preserve the most critical portion of the site and its natural landforms and vegetation;
  - (v) The proposed development must not result in greater risk or a need for increased buffers on neighboring properties;
  - (vi) The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes; and
  - (vii) Development must be designed to minimize impervious lot coverage.
- (e) *Vegetation Retention.* Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer is prohibited.
- (f) *Seasonal Restriction.* Clearing will be allowed only from May 1 to September 30 of each year, provided that the city may extend or shorten the dry season on a case-by-case basis depending on actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practice permit issued by the [city, county, or state].
- (g) *Utility Lines and Pipes.* Utility lines and pipes will be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe must be located aboveground and properly anchored and designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance will be allowed only through a high-density polyethylene pipe with fuse-welded joints or a similar product that is technically equal or superior.
- (h) *Point Discharges.* Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area will be prohibited except as follows:
- (i) Conveyed via continuous storm pipe downslope to a point where there are no erosion hazards areas downstream from the discharge;
  - (ii) Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or
  - (iii) Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope.
- (i) *Subdivisions.* The division of land in landslide hazard areas and associated buffers is subject to the following:
- (i) Land that is located wholly within a landslide hazard area or its buffer may not be subdivided. Land that is located partially within a landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of, and will not affect, the landslide hazard or its buffer.
  - (ii) Access roads and utilities may be permitted within the landslide hazard area and associated buffers if the [city or county] determines that no other feasible alternative exists.
- (j) *Prohibited Development.* On-site sewage disposal systems, including drain fields, are prohibited within erosion and landslide hazard areas and related buffers.

**Comment:** *More detailed language for regulatory approaches is in Washington's example code provisions, Section X.50.090, "Performance Standards—Specific Hazards" and Bellingham's ordinance, Section 16.55.460, "Performance Standards—Specific Hazards."*

*The critical area ordinance of Scottsdale, Arizona, includes a section on the intensity of development allowed in its critical areas, particularly hillside landforms. The ordinance sets base and maximum intensities of development for different types of*



housing in such areas. The hillside landform areas are grouped by slopes of under 25 percent; between 25 and 35 percent; and more than 35 percent. Erosion and landslide hazard area ordinances, since they share similar characteristics, are often combined into one section.

#### (2) Seismic Hazard Areas

All development to be located in seismic hazard areas must conform to the standards of the general requirements delineated above.

*Comment:* King County's development standards for seismic hazard areas allow alterations only if the applicant uses suitable engineering design based on the best available engineering and geological practices that minimize or eliminate the chance of structural damage or personal injury resulting from a seismic episode. Also, King County may waive engineering study and design requirements for alterations in seismic hazard areas for mobile homes, additions, or alterations that do not have occupants, as well as for those structures with fewer than 2,500 square feet of either floor or roof area, whichever is greater.

#### (3) Mine Hazard Areas

All development to be located in mine hazard areas must conform to the standards of the general requirements delineated above and also to these specific requirements:

(a) *Alterations.* Alterations of a mine hazard area and buffer are allowed, as follows:

- (i) All alterations are permitted within a mine hazard area with a low potential for subsidence;
- (ii) Within a mine hazard area with a moderate potential for subsidence and at coal mine by-product stockpiles, all alterations are permitted subject to a mitigation plan to minimize risk of structural damage using appropriate criteria to evaluate the proposed use, as recommended in the hazard analysis; and
- (iii) Within a mine hazard area with a severe potential for subsidence only the activities listed below will be allowed.
  - a. Construction of new buildings with fewer than 2,500 square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;
  - b. Additions to existing residences that are 250 square feet or fewer;
  - c. Installation of fences; and
  - d. Private road construction.

(b) *Subdivisions.* The division of land in mine hazard areas and associated buffers is subject to the following:

- (i) Land that is located within 200 feet of a mine hazard area with a severe potential for subsidence may not be subdivided. Land that is located partially within a mine hazard area may be divided provided that each resulting lot has sufficient buildable area that is 200 feet away from the mine hazard area with a severe potential for subsidence. Land that is located within a mine hazard area with a low or moderate potential for subsidence may be subdivided.
- (ii) Access roads and utilities may be permitted within 200 feet of a mine hazard area with a moderate or severe potential for subsidence if the [city or county] determines that no other feasible alternative exists.

(c) *Reclamation Activities.* For all reclamation activities, including grading, filling, and stockpile removal, as-built drawings must be submitted to the [city or county] in a format specified by the [director].

### 108.4 Additional Report Requirements for Geologically Hazardous Areas

#### (1) General Critical Area Report Requirements

All critical area report requirements specific to geologically hazardous areas must:

- (a) include a geological hazards assessment, including site and construction plans, assessment of geological characteristics, analysis of proposal, and minimum buffer and building setback;
- (b) incorporate previous studies; and
- (c) address the mitigation of long-term impacts.



## (2) Special Report Requirements.

(a) *Erosion and Landslide Hazard Areas.* Additional requirements may include geological assessment, drainage, erosion, and sediment control plans, a grading plan, a revegetation plan, a site plan, hazards analysis, a geotechnical engineering report, mitigation plans, and the monitoring of surface waters.

(b) *Seismic Hazard Areas.* Additional requirements may include a geological assessment.

(c) *Mine Hazard Areas.* Additional requirements may include a geological assessment, a site plan, and hazards analysis.

**Comment:** For more information on these types of special reports, see the Washington State example code provisions, Section X.50.070, "Critical Area Report—Additional Technical Information Requirements for Specific Hazards" and Thurston County, Section 17.15.660, "Special Reporting Requirements."

**109. Frequently Flooded Areas**

## 109.1 Classification and Designation

Any of these designations may be used to determine flood hazard areas in a community:

(1) Areas identified as 100-year floodplains on the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA).

(2) Areas identified or designated by the [public works director or department] or other qualified authority.

(3) The use of additional information to determine flood hazard areas.

## 109.2 Regulatory Approaches

(1) Development is prohibited within the "floodway" of flood-prone areas. Permitted development within flood-prone areas lying outside the floodway must not contribute to increased downstream flow of floodwaters.

(2) *Drainage Control Plan.* If the site is mapped or determined to be flood-prone, the [director] may require a drainage control plan to be submitted with the permit application showing the flood-prone area, the tributary watershed, and all drainage features, to describe the existing situation and proposed modifications to the drainage system. If required, the drainage control plan must provide for control of water quality and quantity in compliance with any applicable [local] flood-control codes or ordinances to protect the public interest and prevent harm.

(3) *Elevation above Base Flood Level.* The lowest floor elevation of any structure located in a flood-prone area must be no less than two feet above the 100-year flood elevation.

## 109.3 Prohibited Uses

(1) Critical facilities are prohibited from frequently flooded areas to prevent damage to such facilities, to avoid costs that will be incurred by the public, and to maintain functionality of such facilities during flood events. If such a prohibition is unreasonable, an allowance should have the following specific conditions:

(a) Construction of new critical facilities will be permissible within frequently flooded areas if no feasible alternative site is available.

(b) Critical facilities constructed within frequently flooded areas must have the lowest floor elevated three feet or more above the level of the base flood elevation (100-year flood).

(c) Flood-proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

(d) Access routes elevated to or above the level of the base flood elevation must be provided to all critical facilities to the extent possible.

(2) Water wells used for potable water must be located on high ground and are prohibited from the floodway.

(3) On-site sewage disposal systems are prohibited from the floodway, the channel migration zone, and the ten-year floodplain elevation.

## (4) Construction in Floodways

(a) *New Construction Certification.* Encroachments, including new construction, substantial improvements, fill, and other development, are prohibited



**Figure 4.15.3.** Development along rivers with a history of flooding, such as the Iowa River in eastern Iowa, can become very problematic.

within designated floodways unless certified by a registered professional engineer. Such certification must demonstrate through hydrologic and hydraulic analyses, performed in accordance with standard engineering practice, that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge. Small projects that are solely to protect or create fish habitat and designed by a qualified professional may be allowed without certification, if the [director] determines that the project will not obstruct flood flows. Fish protection projects will be reviewed on behalf of the [city or county] by a qualified professional in the field of hydraulics.

(b) *Residential Construction and Reconstruction.* Construction and reconstruction of residential structures is prohibited within designated floodways, except for:

(i) Repairs, reconstruction, or improvements to a structure that do not increase the ground-floor area; and

(ii) Repairs, reconstruction, or improvements to a structure for which the cost does not exceed 50 percent of the market value of the structure either:

a. Before the repair or reconstruction is started, or

b. If the structure has been damaged and is being restored, before the damage occurred. (Improvement to a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to ensure safe living conditions or to structures identified as historic places may be excluded from the 50 percent).

(c) If subsections (a) and (b) above are satisfied, all new construction and substantial improvements must comply with all applicable flood hazard reduction provisions.

(5) Construction in Coastal High Hazard Areas

(a) Fill for structural support of buildings is prohibited in coastal high hazard areas.

(b) Man-made alteration of sand dunes that would result in increasing the potential flood damage is prohibited in coastal high hazard areas.

*Comment: An alternative to listing the activities that are prohibited in frequently flooded areas is to list approved activities. Thurston County has an "Approvable uses and activities" (Section 17.15.720) that has a table depicting allowed activities, including agricultural uses, drainage ditches, roads/railroads, utilities, recreation, trails, water access, structures and accessory uses, stormwater facilities, vegetation removal and maintenance, habitat enhancement and restoration, in-stream projects, lakes and ponds, and other uses.*

#### 109.4 Additional Report Requirements for Frequently Flooded Areas

Special report requirements for frequently flooded areas may include the preparation of:

(1) a drainage and erosion control plan;

(2) a grading plan;

(3) a topographic survey;

(4) a channel hazard migration area report; and

(5) an assessment of the effects of the proposed development on floodplain functions, including but not limited to storing and conveying floodwater, reducing peak flows and flow velocities, reducing and displacing rearing juvenile fish at the project site and downstream, and maintaining sediment quality in streams.

### 110. Fish and Wildlife Conservation Areas

#### 110.1 Classification and Designation

A fish and wildlife habitat conservation area must be designated as such if it possesses one or more of the following characteristics:

(1) Areas with which state-designated endangered, threatened, or sensitive species have primary association;

(2) Species and habitats of local importance;

(3) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;

- (4) Waters of the state;
- (5) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
- (6) State natural area preserves and natural resource conservation areas;
- (7) Unintentionally created ponds;
- (8) Areas of rare plant species and high-quality ecosystems;
- (9) State priority habitats and areas associated with state priority species; or
- (10) Land useful or essential for preserving connections between habitat blocks and open spaces.

#### 110.2 Regulatory Approaches

(1) **Alterations.** A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations are prohibited from habitat conservation areas, except in accordance with this ordinance.

(2) **Nonindigenous Species.** No plant, wildlife, or fish species not indigenous to the region may be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

(3) **Approval of Activities.** The [planning director] will condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers as necessary to minimize or mitigate any potential adverse impacts. Conditions may include, but are not limited to, the following:

- (a) Establishment of buffer zones;
- (b) Preservation of critically important vegetation and habitat features;
- (c) Limitation of access to the habitat area, including fencing to deter unauthorized access;
- (d) Seasonal restriction of construction activities;
- (e) Establishment of a duration and timetable for periodic review of mitigation activities; and
- (f) Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

#### (4) Mitigation

(a) Mitigation sites must be located to preserve or achieve contiguous wildlife habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

(b) Mitigation of alterations to habitat conservation areas must achieve equivalent or greater biologic and hydrologic functions and must include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation must address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

#### (5) Buffers

(a) The [planning director] will require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers must consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths must reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby. Habitat conservation areas and their buffers must be preserved in perpetuity through the use of native growth protection areas and critical area tracts.

(b) When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required, and activities may be further restricted during the specified season.

(c) The [director] may allow the recommended habitat-area buffer width to be reduced with a critical area report, only if:

- (i) It will not reduce stream or habitat functions;



Krishna Peterson

*Figure 4.15.4. This great blue heron is feeding in the front yard of a home by Bayou Dularge, on the southern tip of Terrebonne Parish, Louisiana. Flooding problems have increased here as a result of new housing and fishing developments that have replaced foliage, trees, and groundcover with pavement, boat ramps, and grass.*

- (ii) It will provide additional natural resource protection, such as buffer enhancement;
- (iii) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
- (iv) The buffer area width is not reduced by more than 25 percent in any location.

(6) Subdivisions

The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

- (a) Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.
- (b) Land that is located partially within a habitat conservation area or its buffer may be divided provided that the developable portion of each new lot and its access is located outside of the habitat conservation area or its buffer and meets the minimum lot size requirements of [locally adopted zoning dimensions].
- (c) Access roads and utilities serving the proposed may be permitted within the habitat conservation area and associated buffers only if the [city or county] determines that no other feasible alternative exists and when consistent with this ordinance.

*Comment: Regulations on signs and fencing in habitat conservation areas can also be outlined in this section. The Bellingham CAO divides this topic into temporary markers, permanent signs, and fencing.*

### 110.3 Additional Report Requirements for Fish and Wildlife Habitat Conservation Areas

(1) A habitat assessment may also be required, wherein the applicant would prepare a report to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. For more details on habitat assessment, refer to the Washington State example code, Section X.60.020, "Critical Area Report—Additional Requirements for Habitat Conservation Areas."

(2) If the proposed use or activity is to be located within an important habitat area or associated buffer, a mitigation plan must be submitted, along with a drainage and erosion control plan, a habitat restoration plan, and a grading plan.

*Comment: For more detailed information on these specific types of reports, see the Thurston County CAO, Section 17.15.880, "Special Reports."*

## 111. Wetlands

### 111.1 Classification and Designation

*Comment: Below are examples of three major wetlands classification systems: the Washington State classification system, the Cowardin system, and the hydrogeomorphic system.*

#### *Washington State Classification System*

The wetland rating categories will be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories will not change due to illegal modifications.

#### *Wetland Rating Categories*

Category I. Category I wetlands are those that meet one or more of the following criteria:

1. Documented habitat for federal or state listed endangered or threatened fish, animal, or plant species;
2. High-quality native wetland communities, including documented category I or II quality Natural Heritage wetland sites and sites which qualify as a category I or II quality Natural Heritage wetland; or
3. High-quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens; estuarine, wetlands, or mature forested swamps; or wetlands of exceptional local significance.

Category II. U.S. Fish and Wildlife Service and National Marine Fisheries Service documented habitats for state-listed sensitive plant, fish, or animal species:

1. Wetlands that contain fish or animal species listed as priority species and plant species listed as rare;

2. Wetland types with significant ecological functions as determined by an agency-approved functional evaluation methodology that may not be adequately replicated through creation or restoration;
3. Wetlands possessing significant habitat value; or
4. Documented wetlands of local significance.

Category III. Category III wetlands are those that do not satisfy category I, II, or IV criteria.

Category IV. Category IV wetlands are those that meet one or more of the following criteria:

1. Hydrologically isolated wetlands, as determined by the U.S. Army Corps of Engineers Regulatory Branch, that are less than or equal to one acre in size, have only one wetland class, and are dominated [greater than 80 percent area cover] by a single, nonnative plant species (monotypic vegetation); or
2. Hydrologically isolated wetlands that are less than or equal to two acres in size and have only one wetland class and greater than 90 percent areal cover of nonnative plant species.

#### **Cowardin System**

**Comment:** *The Cowardin system ([www.water.ncsu.edu/watershedss/info/wetlands/class.html](http://www.water.ncsu.edu/watershedss/info/wetlands/class.html)) recognizes two classes of wetlands: coastal (also known as tidal or estuarine wetlands) and inland (also known as nontidal, freshwater, or palustrine wetlands). Within those two types, there are five major classes, which are briefly described below.*

1. *Marine.* Open ocean overlying the continental shelf and coastline exposed to waves and currents of the open ocean shoreward to (a) extreme high water of spring tides; (b) seaward limit of wetland emergents, trees, or shrubs; or (c) the seaward limit of the estuarine system, other than vegetation. Salinities exceed 30 parts per thousand (ppt).
2. *Estuarine.* Deepwater tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the ocean, with ocean-derived water at least occasionally diluted by freshwater runoff from the land. The upstream and landward limit is where ocean-derived salts measure less than 0.5 ppt during the period of average annual low flow. The seaward limit is (a) an imaginary line closing the mouth of a river, bay, or sound; and (b) the seaward limit of wetland emergents, shrubs, or trees when not included in (a).
3. *Riverine.* All wetlands and deepwater habitats contained within a channel except those wetlands (a) dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (b) that have habitats with ocean-derived salinities in excess of 0.5 ppt.
4. *Lacustrine.* Wetlands and deepwater habitats (a) situated in a topographic depression or dammed river channel; (b) lacking trees, shrubs, persistent emergents, emergent mosses, or lichens with greater than 30 percent areal coverage; and (c) whose total area exceeds eight hectares (20 acres) or an area less than eight hectares if the boundary is active wave-formed or bedrock or if water depth in the deepest part of the basin exceeds two meters (6.6 feet) at low water. Ocean-derived salinities are always less than 0.5 ppt.
5. *Palustrine.* All nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and all such tidal wetlands where ocean-derived salinities are below 0.5 ppt. This category also includes wetlands lacking such vegetation but with all of the following characteristics: (a) area less than eight hectares; (b) lacking an active wave-formed or bedrock boundary; (c) water depth in the deepest part of the basin less than two meters (6.6 feet) at low water; and (4) ocean-derived salinities less than 0.5 ppt.

#### **Hydrogeomorphic System**

**Comment:** *The hydrogeomorphic approach uses a hierarchical classification with seven major wetland classes. These classes include riverine, depressional, slope, flats (organic soil and mineral soil), and fringe (estuarine and lacustrine). This classification system is based on three factors that influence how wetlands function: the position of the wetland in the landscape (geomorphic setting), the source of water (hydrology), and the flow and fluctuation of the water once in the wetland (hydrodynamics).*



**TABLE 4.15.1. HYDROGEOMORPHIC CLASSES OF WETLANDS**  
*(associated dominant water sources, hydrodynamics, and examples of subclasses)*

Hydrogeomorphic Class	Dominant Water Source	Examples of Subclass		
		Dominant Hydrodynamics	Eastern United States	Western United States
Riverine	Overbank flow from channel	Unidirectional, horizontal	Bottomland hardwood forests	Riparian forested
Depressional and interflow	Return flow from groundwater	Vertical	Prairie potholes marshes	California vernal pools
Slope	Return flow from groundwater	Unidirectional, Horizontal	Fens chutes	Montane seeps; Avalanche
Flats (mineral soil)	Precipitation	Vertical	Wet pine flatwoods	Playas
Flats (organic soil)	Precipitation	Vertical	Peat bogs; portions of peat bogs	Everglades
Fringe (Estuarine)	Overbank flow from estuary	Bidirectional, horizontal	Chesapeake Bay marshes	San Francisco Bay marshes
Fringe (Lacustrine)	Overbank flow from lake	Bidirectional, horizontal	Great Lakes marshes	Flathead Lake marshes

Source: Smith et al. 1995

**Comment:** Because wetlands vary widely due to regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance, those using this ordinance should investigate whether their state has a classification system for wetlands.

## 11.2 Regulatory Sections

### (1) Wetland Buffers

- (a) Standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width must be increased or the buffer should be planted to maintain the standard width. Required standard wetland buffers, based on wetland category and land-use intensity, should be determined at the local level.
- (b) All buffers must be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer will be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations will be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers.
- (c) The [director] will require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist on a case-by-case basis. This determination will be based on one or more of the following criteria:
  - (i) A larger buffer is needed to protect other critical areas;
  - (ii) The buffer or adjacent uplands has a slope greater than [15 percent] or is susceptible to erosion, and standard erosion-control measures will not prevent adverse impacts to the wetland; or
  - (iii) The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it must include densities that are not fewer than [three] feet on center for

shrubs and [eight] feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered “inadequate” and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (1) nonnative or invasive plant species provide the dominant cover, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (3) enhancement plantings in the buffer could significantly improve buffer functions.

(d) The [director] may allow modification of the standard wetland buffer width in accordance with an approved critical area report on a case-by-case basis by averaging buffer widths. Such averaging may be allowed only where a qualified professional wetland scientist demonstrates that:

- (i) No feasible site design exists without buffer averaging;
- (ii) It will not reduce wetland functions or functional performance;
- (iii) The wetland contains variations in sensitivity due to existing physical characteristics, or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely affected by a narrower buffer in other places;
- (iv) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
- (v) The buffer width is not reduced to less than [75 percent] of the standard width or [35] feet.

(e) All mitigation sites must have buffers consistent with the buffer requirements of this ordinance.

(f) Except as otherwise specified or allowed in accordance with this ordinance, wetland buffers must be retained in an undisturbed or enhanced condition. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.

(g) The following uses may be permitted within a wetland buffer in accordance with the review procedures of this ordinance, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland: conservation and restoration activities, passive recreation, stormwater management facilities, and low impact development (LID) facilities.

*Comment: Washington planners noted that buffer standards were the most contentious topic in the CAO because of the property development limitations that buffers might place on a piece of land. The state released additional guidance on buffer standards in Wetlands in Washington State, Vol. 2: Guidance for Protecting and Managing Wetlands (Final Version). Appendix 8-C provides guidance on buffer widths, noting three alternatives to determine buffer width: (a) buffer width is determined only by wetland category (I, II, III, IV); (b) buffer width is determined by a combination of wetland category and the projected intensity of impact of the proposed development; or (c) width is determined based on the consideration of category, projected impact, and wetland function or special characteristics. For more information on the numbers associated with these alternatives, please refer to that guidebook.*

## (2) Signs and Fencing of Wetlands

(a) The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization must be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the [director] prior to the commencement of permitted activities. This temporary marking must be maintained throughout construction and must not be removed until permanent signs, if required, are in place.

(b) As a condition of any permit or authorization issued pursuant to this ordinance, the [director] may require the applicant to install permanent signs along the boundary of a wetland or buffer.

### (c) Fencing

(i) The [director] will determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the [director] will condition any permit or authorization issued pursuant to this chapter to require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland.

(ii) Fencing installed as part of a proposed activity or as required in this subsection must be designed so as to not interfere with species migration, including fish runs, and must be constructed in a manner that minimizes impacts to the wetland and associated habitat.

(3) Nonindigenous species. No plant, wildlife, or fish species that is not indigenous to the region may be introduced into any wetland or wetland buffer unless authorized by a state or federal permit or approval.

### 111.3 Additional Report Requirements for Wetlands

Additional report requirements for wetlands may include a monitoring study, wetland analysis, or wetland delineation report.

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## Model Home Occupation Ordinance



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Mix land uses
- Provide a variety of transportation choices

This model establishes criteria and develops standards for regulating the use of residential structures for home occupations. Home occupation ordinances are designed to allow modest, low-impact business or commercial uses within residences that focus on the provision of a wide range of services. Local governments use these ordinances to encourage the growth of small businesses while balancing the need to protect the residential character of the surrounding neighborhood and community.



Most local ordinances regulating home occupations today are outdated. Changes in the nature of home-based work have occurred so rapidly (e.g., the sharp rise in the number of people who telecommute) that local ordinances have not kept pace. They address only the most conventional activities that people conduct in their homes, such as food preparation and child care. As technologies continue to evolve and adapt, so, too, does the nature of work. In fact, in addition to improving productivity and giving workers the pleasure and freedom to work from their own homes, telecommuting protects environmental quality and supports energy conservation by preventing long commutes. (Telecommuting is the use of telecommunications technology to work in a secondary business office, where the business has its principal office, staff, and equipment located elsewhere.)

The average travel time to work is 24.7 minutes for U.S. workers who work outside the home (American Community Survey 2004). As mobile technologies advance, more people are able to work from just about anywhere. According to WorldatWork, a telecommuting trade group, approximately 20 percent of the workforce telecommutes, with varying regularity. The number of telecommuters (both employed and self-employed) working remotely at least one day per month has risen 10 percent, from 26.1 million in 2005 to 28.7 million in 2006, with approximately 80 percent of workers telecommuting at least once a week.

Although there are far more telecommuters than people employed by home occupations, home occupations are certainly a factor to consider when analyzing the American workforce. According to the U.S. Census, about 4.2 million Americans (or 3.3 percent of the workforce) worked from home in 2000.

Home occupations are great economic development tools that provide numerous direct and indirect economic, social, and environmental benefits. Home occupations frequently nurture the development of new and innovative business models, provide financial stability for workers who are laid off, and serve as a great economic development incubator. Socially, home occupations encourage increased family and neighborhood interaction while providing for a more pedestrian-friendly community. Home occupations do their part in curbing the number of commuter miles traveled while also reducing land consumption affiliated with office complex sprawl.

The home occupation provision is perhaps the most consistently violated section of the zoning ordinance. This is the case for a number of different reasons: many people are unaware that home occupation regulations exist, do not know whom to speak to about the regulations, are afraid of asking questions because they assume that they are in the wrong, or are simply confused by the vague language typically found in home occupation ordinances (Wunder 2000). In fact, many home-based businesses are operating illegally without having any adverse impacts on the surrounding neighborhood. Zoning administrators are frequently forced either to ignore the zoning ordinance or to impose unreasonable regulations on modern business practices (Wunder 2000). People who are interested in working at home complain that they are either prevented from pursuing occupations for reasons that are not clear to them or that a large number of home occupations take place illegally, putting those who stay within the law at an unfair disadvantage (Butler and Getzels, in Wunder 2000).

This model is based on codes in Clackamas County, Oregon; Issaquah, Washington; and Northville, Michigan.

#### **101. Purpose**

Recognizing the desire of some citizens to use their residence for business activities, [the local government] is interested in supporting this economic development tool to improve the social, environmental, and economic health of the community. At the same time, [the local government] also recognizes the

need to protect the surrounding neighborhood from adverse impacts generated by these business activities. Using the approval criteria, it is the intent of this home occupation ordinance to:

- (a) Encourage economic development by allowing flexibility in the workplace and creativity in careers;
- (b) Reduce total vehicle miles traveled by providing opportunities for people to work from their homes;
- (c) Promote the efficient use of public services and facilities while assuring that commercial users do not reduce the municipality's public services and facilities level of service to intended residential users; and
- (d) Maintain and preserve the character of residential neighborhoods and the community by ensuring the compatibility of home occupations with other uses permitted in the underlying zoning district.

### 102. Definitions

As used in this ordinance, the following words and terms will have the meanings specified herein:

**Accessory use.** An activity or land use that is secondary or incidental to the main building or use of land and that is located on the same lot and under the same ownership in all respects.

**Employee.** A partner, assistant, or any other person or family member participating in the operation of the home occupation.

**Home occupation.** A profession, activity, or use that is a secondary or incidental use of a residential dwelling unit that does not alter the exterior of the property or affect the residential character of the neighborhood.

**Operator.** A person who conducts the home occupation, has majority ownership interest in the business, lives full-time in a dwelling on the subject property, and is responsible for strategic decisions and day-to-day operations of the business.

**Vehicle trip.** A vehicular movement either to or from the subject property by any vehicle used in the home occupation, any delivery vehicle associated with the home occupation, or any customer or client vehicle.

### 103. Classification

*Comment: A major question that communities face when deciding on home occupation regulations is whether they should differentiate among classes of home occupations and the provisions that apply to each. Today, many communities prefer to devise specific standards for different use intensities and general zoning districts. They typically divide the standards into either a two- or three-tiered classification system. Each set of standards typically contains varying administrative approval requirements and separate lists of permitted and prohibited uses in addition to various guidelines concerning use intensities.*

*While the zoning administrator and business operator would prefer regulations that are simple and concise, this level of rigor allows for a more permissive ordinance that they can both support. By incorporating more than a single set of standards, local governments are able to increase the flexibility of their regulations. In these cases, the permitted use (and intensity of use) for each zoning district can be conveniently displayed in a table (as in Issaquah, Wash.). Although two or three different classes are generally incorporated into a home occupation ordinance, a community that is dominated by single residential zoning districts (e.g., low-density, single-family) would be well served simply using one set of regulations.*

*Although a detailed set of performance standards or an exclusive list of permitted and prohibited uses may seem to be a great option, many communities have shifted toward using a hybrid set of guidelines. This set includes both basic performance standards and a general list of permitted and prohibited uses in order to cover all bases and increase permissibility. In communities where permits are required, the ordinances tend to rely on performance standards; in communities where no permit is required, the ordinances rely on lists of permitted and prohibited uses (Wunder 2000). Today, the trend among jurisdictions is to use generalized, inclusive lists of permitted businesses along with some relatively simple performance standards. Basically, the permitted and prohibited use lists provide certainty, while the performance standards allow for flexibility and adaptation in the establishment and development of home occupations. This flexibility is very important in communities that want to encourage home occupations while minimizing negative effects on the residential character of the community.*

#### 104. Application/Administrative Review

- (1) "Level A" home occupations are permitted by right and do not require registration with the [local government].
- (2) "Level B" home occupations require administrative approval. The operator must fill out a moderately detailed application prior to being granted a special use permit by the [local government].
- (3) "Level C" home occupations require a public hearing process and must be approved by the [planning commission]. The operator must fill out a detailed application prior to being granted a special use permit by the [local government].

The [local government] may attach additional conditions to ensure the home occupation will not be detrimental to the character of the residential neighborhood.

*Comment: In Portland, Oregon, applicants are required to compose a notice containing certain information about their business. The applicant is then required to distribute this notice to all abutting property owners. The purpose is to notify the neighborhood association and the nearby property owners of the establishment of this type of home occupation, the types of activities that will occur, and the regulations under which the use must operate. The applicant must include information regarding the standards of the ordinance and the number of employees and customers. The applicant is then required to submit a copy of the notice, the addresses of those who were sent the notice, and a signed statement to verify that the public notice requirement has been met.*

#### 105. Location and Space

The home occupation must be conducted within the primary residential structure or permitted accessory structures. It shall use only up to [25 percent] of the gross floor area of the structure(s) or [500] square feet, whichever is greater.

*Comment: The proposed standards allow flexibility in terms of where business may be conducted while also providing sufficient square footage for home occupations in both low- and high-density residential units. Communities may wish to devise different floor percentage and area limits for different home occupation classes. Communities with agricultural or rural residential areas may want to include provisions regarding outdoor land-area limits. Local ordinances generally range from 10 to 50 percent in floor-area percentage limits and 300 to 3,000 square feet in gross floor-area limits.*

#### 106. Employees

- (1) Level A: No person other than the operator may engage in the home occupation.
- (2) Level B: Up to [two] full-time residents of the premises are allowed to conduct the home occupation. Not more than [one] other person shall be employed on the premises in connection with the home occupation unless a special request is approved by the [local government].
- (3) Level C: Up to [two] full-time residents of the premises are allowed to conduct the home occupation and up to [five] on-site employees may be permitted by the [local government]. In reviewing such a request, the [local government] may consider the reason, potential residential impact, parking needs, hours of operation, and other relevant factors.

*Comment: Typically, zero or one nonresident employee is allowed for minor uses, and one or two nonresident employees are allowed for major uses. The discretionary language for Level C occupations provides even more flexibility in the number of acceptable employees. Some local ordinances simply include exceptions to the limitations placed on resident and nonresident employees for certain uses. Other ordinances allow two part-time employees to be considered as a single full-time employee, allow an employee as long as there are no customer visits, prohibit the gathering of employees to be dispatched to another location, and include specific language granting a special review to people with physical handicaps. Employees who are not based at the home occupation are usually exempt from the regulations.*



Marya Morris

*Figure 4.16.1. Some home occupation signs are more makeshift than others.*

#### 107. Signage

One nonilluminated sign of [two] square feet in area or smaller is allowed. The sign must be attached to the dwelling unit and must be compatible with the building architecture and materials.

#### 108. Sales and Display

There may be no sales of products or services that are not produced or provided for on the premises. Any products produced for sale must be either made by hand or grown on the premises, and these on-site sales shall be infrequent. The

assembly of products with the use of automatic manufacturing equipment is prohibited. Furthermore, any retail sales of goods must be entirely accessory to any services provided on the site (such as hair-care products sold as an accessory to hair cutting).

Public display of goods, wares, machinery, or other materials used in the home occupation or profession is not permitted and must not be visible from any public or private way or adjacent properties. Exterior storage or display of goods or equipment is also prohibited.

*Comment: Some ordinances specifically prohibit the use of display racks or shelves. Others require that storage space be counted as part of the total permissible home occupation area.*

### 109. Dwelling Modifications

Any internal or external modifications, either permanent or accessory, that will make the dwelling appear less residential, either in nature or function, are prohibited. The dwelling and site must remain residential in appearance and characteristics.

### 110. Traffic, Parking, and Vehicles

#### (1) General Traffic and Parking

No vehicular traffic may be generated by the home occupation business in greater volumes than would reasonably be expected in the residential neighborhood, nor may it create unreasonable parking or traffic congestion for the residents of the immediate neighborhood. Any parking or traffic of such character, intensity, or continued duration that substantially interferes with the comfortable enjoyment of private homes by persons of ordinary sensibilities shall be considered unreasonable.

*Comment: Some local ordinances include very detailed parking standards, such as screening requirements and specific on- and off-street parking quantity and location provisions.*

#### (2) Customer/Client Visitation

*Comment: Customer/client visitation restrictions are difficult to develop because of the variable nature of home occupations. Some municipalities provide flexibility by allowing exceptions to their normal restrictions. Others simply avoid restricting the number of visits and include language regarding normal traffic loads. Limitations are typically broken down in terms of the total number of daily customer/client visits (e.g., 20), the number of customers/clients visiting at the same time (e.g., three), and the hours of operation (e.g., 8 a.m. to 6 p.m.). These guidelines are usually coupled with traffic and parking standards.*

#### (3) Parking

*Comment: Communities should include a reference to their residential parking standards regarding commercial vehicles and may choose to limit the type, dimensions, and weight of vehicle that can be used for business purposes. Some municipalities do not allow home occupations to use space that would eliminate or constrict the business's number of required parking spaces. For example, garages cannot be used to conduct business or store business materials if this means that an otherwise usable parking space would no longer be readily accessible.*

#### (4) Delivery Vehicles

*Comment: Some communities choose to provide additional guidelines for vehicles in order to preserve the residential character of the neighborhood. The size of the vehicle and the timing and frequency of deliveries are all concerns. The size, type, dimensions, and weight of delivery vehicles can be restricted. The timing of deliveries and pickups can also be restricted for numerous reasons, including safety, congestion, and disruption. Communities typically limit deliveries to between the hours of 8 a.m. and 8 p.m. and also restrict bulk deliveries and tractor-trailers.*

### 111. Nuisances, Materials, and Utility Usage

No equipment, material, or process shall be used in any such home occupation that produces or emits any additional noise; increased vibration; intensified lighting or glare; smoke, dust, or other particulate matter; excessive heat or humidity; blight or unsightliness; gas, fumes, or odor; increased electrical interference; or any other nuisances, hazards, or objectionable conditions detectable at the boundary of the lot, if the occupation is conducted in a detached dwelling unit, or outside the dwelling unit, if conducted in an attached dwelling unit. Explosive or highly flammable materials and toxic or hazardous waste are not permitted. Normal residential utility usages, including trash and recycle

quantities, shall not be exceeded. The home occupation shall not detract from any person's enjoyment of their residence in any way.

*Comment: Some communities may wish to include specific standards for certain nuisances that can be quantified (such as the noise level in decibels).*

## APPENDIX

These lists are provided merely for the purpose of providing examples of uses that various communities permit and prohibit for home occupations. It is up to each community to decide which of these uses may be permitted and under which conditions they may operate.

### (1) Permitted Uses

The following uses are generally permitted as home occupations (under certain conditions):

- (a) Computer-based uses (computer programming, website design, data entry, data processing, Internet services, etc.)
- (b) Normal office activities (answering phones, scheduling appointments, e-mailing, faxing, etc.)
- (c) Professional offices (e.g., accountants, architects, brokers, business administrators, clergy, consultants, engineers, lawyers, insurance, real estate and travel agents, writers, editors, and publishers)
- (d) Instructors (tutors, private music lessons, etc.) and counselors
- (e) Salespersons
- (f) Selling of agricultural products
- (g) Studios for artists (painters, sculptors, photographers, etc.), cartographers, and designers (art, fashion, landscape, etc.)
- (h) Studios for craftspeople (weavers, quilters, tailors, seamstresses, dressmakers, etc.)
- (i) Garage sales, yard sales, and other temporary sales, though sales are limited to [three] times each year, may take place for only [three] consecutive days, may operate only between the hours of [8 a.m. and 6 p.m.], and must involve only the sale of household goods, none of which was purchased for the purpose of resale.

### (2) Additional Uses Requiring Special Conditions

- (a) Baking
- (b) Catering
- (c) Cleaning services
- (d) Mail order businesses (e.g., eBay sales)
- (e) Barber shops and beauty parlors/salons
- (f) Small repair shops (small appliances, electronics, small engines, etc.)
- (g) Massage therapists
- (h) Personal trainers
- (i) Chauffeur services
- (j) Recording studios
- (k) Animal services (vet clinics, animal hospitals, breeders, pest control, bird-keeping facilities, pet grooming, kennels, stables, etc.)

### (3) Other Uses

The following uses are generally not addressed in home occupation regulations and are usually covered in a separate section of the zoning ordinance:

- Family day-care centers and babysitting services
- Bed and breakfasts; other rooming and boarding facilities
- Adult family homes
- Home schools

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## Model Policy Promoting Complete Streets



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Provide a variety of transportation choices
- Foster distinctive and attractive places
- Create walkable neighborhoods

The intent of a model complete streets policy is to require safe accommodation of all users of a street and to eliminate barriers to bicycling and walking. Complete streets are thoroughfares that serve all users moving by car, truck, transit, bicycle, wheelchair, or foot. Complete streets allow all users to travel in a safe and welcoming way. (See [www.completestreets.org](http://www.completestreets.org) and [www.thunderheadalliance.org](http://www.thunderheadalliance.org).)



*Figure 4.17.1. Complete streets serve all users whether moving by car, bicycle, transit, or foot.*



*Figure 4.17.2. Traffic calming measures provide a street and landscape design toolbox for mitigating the impact of automobile traffic on a community's transportation infrastructure.*

A model complete streets policy can remedy the plethora of incomplete streets that exist in communities across the United States. Incomplete streets lack sidewalks, few accommodate bicyclists well, most encourage traffic to travel too close and fast, many do not have curb ramps at intersections or across driveways, and so on. These types of streets are less safe, less functional, and a hindrance to healthy communities and people.

Adoption of a model complete streets policy means a change in everyday planning practice and procedure so that a community approaches solutions to transportation problems comprehensively and proactively. For many years, communities turned to traffic calming techniques to remedy many of the problems rendered by incomplete streets. However, traffic calming measures are largely intended to address unforeseen problems that arise after roadways are constructed. While traffic calming can be included in the initial design of streets, the specific treatments are a function of very localized circumstances (Sacramento Transportation and Air Quality Collaborative 2005). A complete streets approach, on the other hand, requires every transportation project to go through a scoping process that includes all users, potential users, and other stakeholders from the beginning. Completing the streets is about changing procedures, problematic definitions, and institutions. Communities can achieve complete streets if they commit to proactive planning.

To better understand the evolution of complete streets policy, it is imperative to briefly define and explain the concept of traffic calming. Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for nonmotorized street users (Lockwood 1997).

Traffic calming encompasses both a conceptual framework and a useful street and landscape design toolbox for mitigating the impact of automobile traffic on a community's transportation infrastructure. Traffic calming supports smart growth by encouraging nonautomobile users, such as cyclists, pedestrians, and transit riders, to use streets by creating a greater sense of safety.

The traffic calming movement evolved from reactive solutions to specific traffic problems in isolated locations to a more comprehensive approach to smart design for communities' road networks. David Engwicht, an Australian advocate for safer streets and better public places, originally coined the term "traffic calming" and initially took a broader, cultural perspective toward streets as public spaces for all users (Engwicht 1993). Hoyle (1995) described traffic calming as a form of traffic planning that seeks to equalize the use of streets among drivers, bicyclists, walkers, and children at play. In 1999, the Institute of Transportation Engineers collaborated with the Federal Highway Administration to produce the first definitive report on the subject, replete with the latest best practices of traffic calming from around the United States (Ewing 1999). A 2005 update describes some of the ways in which the traffic calming initiatives have matured:

- Traffic calming programs are now a mainstream function of transportation or public works departments.
- There is less apparent public controversy.
- Many physical improvements are funded privately.
- The public is more involved in planning.
- The tool is no longer being used beyond local streets.
- The range of tools in the traffic calming toolbox has broadened beyond speed control measures.

The latest update is Ewing and Brown (2009).

In recent years, there has been a growing movement to develop more proactive planning for streets to accommodate all users before construction begins (Engwicht 1999). Rather than wait until there is a traffic problem and then implement design techniques to calm the traffic, an increasing number of communities seek to design streets for all users before pouring the concrete. Though North American cities have yet to embrace some of the more radical psychological traffic-calming experiments described by Engwicht (2005), a more comprehensive approach to traffic management and transportation planning has evolved through the complete streets policy initiative. Complete streets reflect a proactive, smart growth approach to road network design that provides more structured guidance for communities.

The overall recommendation is for communities to adopt a complete streets policy authorized through their municipal code. This model policy itself may be adopted as such but may also be adopted through internal procedures, and citizen advisory committees have worked on them. In other cases, public bodies have adopted resolutions or passed legislation (see [www.completestreets.org/policies.html](http://www.completestreets.org/policies.html)). Several organizations, including Complete the Streets, the Thunderhead Alliance, the U.S. Department of Transportation, and the New York Department of Transportation offer model policy language. The cities of Seattle and Colorado Springs provide recently approved code language to authorize complete streets policies.

#### **Model Complete Streets Policy Statement**

A complete streets policy ensures that transportation agencies routinely design and operate the entire right-of-way so pedestrians, bicyclists, motorists, and transit riders of all ages and abilities can safely move along and across a street. A complete streets policy should reverse previous policies and practices of transportation agencies. Such agencies must ensure that all road projects result in a complete street appropriate to local context and needs. Design plans that do not achieve this must be justified prior to approval or denied.

*Comment: Many communities that adopt a complete streets policy already have a traffic-calming policy in place. Communities with an existing traffic-calming policy do not need to abandon it in lieu of a complete streets policy. Rather, such communities should try to integrate both policies. (Such cities include Seattle; Charlotte, N.C.; Sacramento, Calif.; Colorado Springs, Colo.; and Portland, Oregon.) For cities that do not currently have a traffic-calming policy/toolbox or a complete streets initiative, both approaches could be adopted simultaneously. It is important for communities to realize that traffic-calming tools are more specific remedies to very local traffic problems and that a complete streets policy establishes the broader framework of road network design and retrofits to accommodate all users.*

This complete streets policy is intended to guide the actions of the [city or county] to ensure that it:

- Specifies that the term “all users” includes pedestrians, bicyclists, transit vehicles and users, and motorists of all ages and abilities;
- Aims to create a comprehensive, integrated, connected network;
- Recognizes the need for flexibility: that all streets are different and user needs will be balanced;
- Is adoptable by all agencies to cover all roads;
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations for the entire right of way;
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions;
- Directs the use of the latest and best design standards;
- Directs that complete streets solutions fit in with context of the community;
- Establishes performance standards with measurable outcomes;
- Makes complete streets a prerequisite for funding; and
- Includes a compelling case statement.

*Comment: A compelling case statement should highlight all potential benefits from complete streets to serve as a positive motivator for the community to adopt the policy.*

## MODEL COMPLETE STREETS POLICY RESOLUTION

AN ORDINANCE amending the transportation strategic plan to include planned roadways approved as part of land development actions, to include planned roadways incorporated in the [city or county] comprehensive plan, and to include recommendations concerning “complete streets.”

WHEREAS, the [city or county] council, with the [local elected official] concurring, adopted a resolution that defines the complete streets policy; and

WHEREAS, [city or county] policy as stated in the transportation strategic plan and the [city’s or county’s] comprehensive plan is to encourage walking, bicycling, and transit use as safe, convenient, and widely available modes of transportation for all people; and

WHEREAS, the [city’s or county’s] complete streets guiding principle is to design, operate, and maintain the city’s streets to promote safe and convenient access and travel for all users—pedestrians, bicyclists, transit riders, and people of all abilities, as well as freight and motor vehicles—particularly on major roadways that have been planned to accommodate newly developing areas of the [city or county] and to serve communitywide transportation needs; and

WHEREAS, other jurisdictions and agencies nationwide have adopted complete streets legislation, including the U.S. Department of Transportation (USDOT), numerous state transportation agencies, San Francisco, Sacramento, San Diego, Boulder, Chicago, and Portland; and

WHEREAS, the [city or county] department of transportation (DOT) will implement complete streets policy by designing, operating, and maintaining the transportation network to improve travel conditions for bicyclists, pedestrians, transit, and freight in a manner consistent with, and supportive of, the surrounding community; and

WHEREAS, designing and constructing complete streets that accommodate all users meets the policies and strategies of the comprehensive plan; and

WHEREAS, transportation improvements will include an array of facilities and amenities that are recognized as contributing to complete streets, including: street and sidewalk lighting; pedestrian and bicycle safety improvements; access improvements for freight; access improvements, including compliance with the Americans with Disabilities Act; public transit facilities accommodation including, but not limited to, pedestrian access improvement to transit stops and stations; street trees and landscaping; drainage; and street amenities; and

WHEREAS, the [city or county] DOT will implement policies and procedures with the construction, reconstruction, or other changes of transportation facilities on arterial streets to support the creation of complete streets, including capital improvements, rechannelization projects, and major maintenance, recognizing that all streets are different and in each case user needs must be balanced.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY AS FOLLOWS:

**SECTION 1.** The [city or county] DOT will plan for, design, and construct all new city transportation improvement projects to provide appropriate accommodation for pedestrians, bicyclists, transit riders, and persons of all abilities, while promoting safe operation for all users, as provided for below.

**SECTION 2.** The [city or county] DOT will incorporate complete streets principles into: the comprehensive plan; transportation strategic plan; transit plan; pedestrian and bicycle master plans; intelligent transportation system strategic plan; and any other plans, manuals, rules, regulations, and programs as appropriate.

**SECTION 3.** Because freight is important to the basic economy of the [city or county] and has unique right-of-way needs to support that role, freight will be the major priority on streets classified as major truck streets. Complete street improvements that are consistent with freight mobility but also support other modes may be considered on these streets.

**SECTION 4.** Except in unusual or extraordinary circumstances, complete streets principles will not apply:

- To repairs made pursuant to the pavement opening and restoration rule;
- To ordinary maintenance activities designed to keep assets in serviceable condition (e.g., mowing, cleaning, sweeping, spot repair, and surface treatments such as chip seal or interim measures on detour or haul routes);
- Where the director of transportation issues a documented exception concluding that application of complete street principles is unnecessary or inappropriate because it would be contrary to public safety; or
- Where other available means or factors indicate an absence of need, including future need.

**SECTION 5.** Complete streets may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities over time. It is the [mayor’s, council’s, or other authority’s] intent that all sources of transportation funding be drawn upon to implement complete streets. The [city or county] believes that maximum financial flexibility is important to implement complete streets principles.

**SECTION 6.** This ordinance shall take effect and be in force [30] days from and after its approval by the [mayor, council, or other authority] but if not approved and returned by the [mayor, council, or other authority] within [10] days after presentation, it shall take effect as provided by [city or county] code.

**SECTION 7.** Council deems it appropriate that this ordinance be published by title and summary prepared by the [city or county] clerk and that this ordinance shall be available for inspection and acquisition in the office of the [city or county] clerk. ■



For example, complete streets not only increase opportunities for walking and bicycling but also offer the potential for cleaner air, improved public health, reduced traffic congestion, more livable communities, and less reliance on fossil fuels.

### Policy Elements

The following are key elements of a model complete streets policy (see [www.fhwa.dot.gov/environment/bikeped/design.htm#d4](http://www.fhwa.dot.gov/environment/bikeped/design.htm#d4)):

(1) Bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:

(a) Bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right-of-way or within the same transportation corridor.

(b) The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as exceeding 20 percent of the cost of the larger transportation project.

(c) Sparseness of population or other factors indicate an absence of need. For example, the Portland Pedestrian Guide requires “all construction of new public streets” to include sidewalk improvements on both sides, unless the street is a cul-de-sac with four or fewer dwellings or the street has severe topographic or natural resource constraints (Portland 1998).

**Comment:** There is debate about whether to include exceptions in a complete streets policy. The community’s objective should be to craft a policy that strongly encourages or requires complete streets; the community does not want to encourage the proliferation of a street network that does not support all users. However, it is unrealistic to demand that all streets be complete according to policy guidelines without respect to context. This element expresses model language for common exceptions.

There may also be debate about the use of subjective language and descriptors such as “excessively disproportionate” and “severe constraints” in a complete streets policy. Such terms can invite communities to open the dialogue on the financial costs of implementation and the overall cost of nonimplementation of the policy. Every community is different, and each community needs to craft the variation of the model complete streets policy that is most suitable for its particular situation.

(2) In rural areas, paved shoulders should be included in all new construction and reconstruction projects on roadways used by more than [500] vehicles per day. Paved shoulders have safety and operational advantages for all road users, in addition to providing a place for bicyclists and pedestrians to operate. Rumble strips are not recommended on roads with paved shoulders unless there is a minimum clear path of four feet in which a bicycle may safely operate.

**Comment:** Communities must determine which roads are considered “rural” and which roads are considered “urban.” Note that the 500 vehicles per day standard does not distinguish rural from urban but rather rural roads that merit a complete streets policy from those that may not. (See, for example, Wisconsin Department of Transportation 2004, pp. 2-6.) Urban roads may be defined by traffic count or may also be classified as roads within a U.S. Census–designated urban area. The determination is left to the community, but must be applied consistently through a jurisdiction as part of the complete streets policy.

(3) Sidewalks, shared use paths, street crossings (including over- and under-crossings), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways shall be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.

**Comment:** Pedestrians include those who may use bicycles or transit for a portion of their trip. To encourage multimodal trips, design for pedestrians should be mindful that many pedestrian segments of trips may originate from transit vehicles or bicycles or even private automobiles. Pedestrians should be able to safely and seamlessly transfer from other modes of transportation within a complete street environment.

(4) The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

(a) Plan projects for the long term. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in item 1, above, should anticipate



**Figure 4.17.3.** The design and development of transportation infrastructure should improve conditions for walking and bicycling through long-term investments like this bicycle lane.



## IMPLEMENTATION OF A COMPLETE STREET POLICY

Communities may wonder how to pay for the implementation of a complete streets policy. Charlotte, North Carolina, offers one approach. Charlotte's transportation planning staff identified the Urban Street Design Guidelines portion of the city's Transportation Action Plan as the key provider of more traffic calming tools and Charlotte's new complete streets policy (Hoyle 1995). The Charlotte City Council raised property taxes to generate an additional \$250 million per year, a significant portion of which will go toward improving Charlotte's transportation infrastructure. (The Transportation Action Plan calls for \$3.57 billion in total spending between 2006 and 2030.) With the additional funds, Charlotte's Neighborhood Traffic Management Program can support its complete streets policy objectives:

- Improve safety and neighborhood livability, foster economic development, promote transportation choices, and meet land-use objectives through all future transportation projects.
- Complete at least 150 miles of bikeway facilities within the city by 2015, and an additional 350 miles by 2030.
- Construct of more than 625 miles of new sidewalks by 2030.
- Implement traffic calming in an effort to improve safety and neighborhood livability, promote transportation choices, and meet land use objectives.

likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years might be built with sufficient width for safe bicycle and pedestrian use in anticipation that facilities will be available at either end of the bridge, even if that is not currently the case.

(b) Address the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.

(c) Approve exceptions at a senior level. Exceptions for the noninclusion of bikeways and walkways shall be approved by a senior manager and be documented with supporting data that indicate the basis for the decision.

(d) Design facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used (e.g., AASHTO 2004).

*Comment: Communities may wish to have proposals for exceptions to the complete streets policy approved by a design committee or the planning commission. While a senior manager may oversee the review process, it may not be acceptable to a community to have just one person determine which streets do not have to comply with the complete streets policy.*

### Policy Implementation

An effective complete streets policy should prompt transportation agencies to:

- Restructure their procedures to accommodate all users on every project.
- Rewrite their design manuals to encompass the safety of all users.
- Retrain planners and engineers in balancing the needs of diverse users.
- Create new data collection procedures to track how well the streets are serving all users.
- Rewrite manuals that are commonly used by highway designers—covering roadway geometrics, roadside safety, and bridges—to incorporate design information that integrates safe and convenient facilities for bicyclists and pedestrians, including people with disabilities, into all new highway construction and reconstruction projects.

In addition to incorporating detailed design information, such as the installation of safe and accessible crossing facilities for pedestrians, or intersections that are safe and convenient for bicyclists, these manuals should also be amended to provide flexibility to the highway designer to develop facilities that are in keeping with transportation needs, accessibility, community values, and aesthetics. For example, the *Portland Pedestrian Design Guide* (1998) applies to every project that is designed and built in the city, but the guide also notes that:

site conditions and circumstances often make applying a specific solution difficult. The Pedestrian Design Guide should reduce the need for ad hoc decision by providing a published set of guidelines that are applicable to most situations. Throughout the guidelines, however, care has been taken to provide flexibility to the designer so she or he can tailor the standards to unique circumstances. Even when the specific guideline cannot be met, the designer should attempt to find the solution that best meets the pedestrian design principles described.

In the interim, these manuals may be supplemented by stand-alone bicycle and pedestrian facility manuals that provide detailed design information addressing on-street bicycle facilities, fully accessible sidewalks, crosswalks, shared use paths, and other improvements.

*Comment: A good example of a policy implementation manual is the Best Practices for Complete Streets booklet (Sacramento Transportation and Air Quality Collaborative 2005). The authors have three main purposes:*

- To provide suggested street standards for use when designing new streets and developments and when planning for future transit corridors
- To provide guidance when dealing with a constrained right-of-way

- To illustrate local examples of streets that work or do not work for various user groups.

The booklet focuses on urban and suburban streets; rural roads warrant a different type of evaluation and a different set of standards. The booklet provides some suggestions on traffic-calming features that can be built into street designs, but its primary focus is on the broader topic of complete streets rather than an exhaustive toolbox of traffic-calming techniques.

Also, the Florida and New Jersey departments of transportation have integrated bicycle and pedestrian facility-design information into their standard highway designs. Many states and localities have developed their own bicycle and pedestrian facility-design manuals.

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## Grayfield Redevelopment Model Approaches



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Direct development toward existing communities
- Mix land uses

Grayfields are vacant or derelict former commercial sites, such as shopping centers and commercial strips. Shuttered military installations are also considered grayfields. These sites are economically and physically ripe for major redevelopment and also represent a prime opportunity to stem sprawl through high-density, compact infill development. Untouched grayfields not only represent an enormous loss of potential tax revenue but also send a signal of disinvestment and decline of the immediate area.

Grayfields are distinct from brownfields in that they are typically not beset with environmental contamination. (The U.S. EPA defines brownfields as real property whose expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. See [www.epa.gov/swerosps/bf/index.html](http://www.epa.gov/swerosps/bf/index.html).) More likely causes of disinvestment in grayfields are an overbuilt retail sector, loss of anchor stores, changing demographics in the trade area, and emerging competitive retail formats, such as lifestyle centers and shopping/entertainment complexes. The average grayfield is approximately 45 acres in size. Grayfield malls are generally eight to 10 years older than nongrayfield malls and have significantly lower occupancies than other malls of the same type. The Congress for the New Urbanism defines grayfields, in part, as sites that have fewer than \$150 in sales per square foot. A viable mall has sales per square foot of \$250 or more (CNU and PriceWaterhouseCoopers 2001).

Successful grayfield redevelopment projects share a common trait: they were viewed by local officials and residents as a potential asset rather than a liability. Grayfields provide an opportunity to reshape the physical design of the site to create a new destination and unique sense of place. The redevelopment process often results in breaking up the superblock design of the existing property and reshaping the site to be part of the area's existing neighborhood and street system.

### **Grayfields to Mixed Use**

Mixed use development features a variety of uses, including retail space, residential units, public spaces, office space, and civic uses. Redeveloping grayfields for mixed use helps a community maximize the value of its resources and capitalize on its advantages: environmental sustainability, access to a ready market, existing infrastructure, and proximity to transit and existing transportation networks.

As more communities approach buildout, grayfields provide an important redevelopment opportunity. Grayfields are typically located on major commercial corridors, which offer excellent visibility and access. They often include large tracts of land under single ownership. This eliminates the challenge of assembling several small parcels and makes the sites ideal for large mixed use redevelopment projects. Grayfields also offer a good location in a well-established transportation system, often with public transportation opportunities, existing infrastructure, the potential for significant densification, and a viable retail and commercial trade area.

### **Challenges**

Although grayfields are typically less difficult to redevelop than brownfields, they present their own set of challenges. One of the major problems with grayfields is that simple redevelopment often will not halt the decline of the site. Simply replacing tenants or renovating outdated malls typically does not increase productivity at the site. In the case of former military bases, straightforward redevelopment is not possible: a base cannot be replaced by another base. Also, depending upon the military operations, it may actually be a brownfield and require cleanup. Grayfields require creative redevelopment solutions in order to maximize their potential.

Another challenge is cost. Demolition of large commercial buildings is expensive, and the sites are often covered quite extensively with pavement. This surface parking must be removed or significantly reconfigured, at great expense, for successful redevelopment. Regulatory and financial incentives can help offset these costs, particularly for properties that are in less than ideal locations or are otherwise difficult to market.

Although mixed use development may offer the greatest long-term value, it will not be feasible in every situation. Other redevelopment options include reinvestment in the mall, single-use development, and adaptive reuse. It is imperative that local market conditions be well understood prior to committing to a particular redevelopment strategy.

Finally, grayfields redevelopment requires a high degree of public-private partnership, which can be a challenge in many communities. Community members and leaders are generally eager to see positive change at grayfield sites. However, that does not necessarily translate into ready acceptance of a specific project proposal. Strong stakeholder participation throughout the planning process is critical.

### **Benefits**

Grayfields conversion to mixed use development has a variety of benefits for the community. The enthusiasm for these projects is rooted in the fact that such projects can achieve a number of smart growth principles, including:

- Increasing access to employment centers and employees;
- Boosting economic diversity and sustainability;
- Strengthening the real estate markets and property values;
- Renewing existing neighborhoods and housing stock; and
- Making better use of existing infrastructure by encouraging compact development.

Grayfields redeveloped as mixed use developments can create a strong pedestrian environment and expand transportation choices. Pedestrian-friendly design and placement of buildings directly benefit air and water quality in addition to supporting a physically active, healthy lifestyle. A reduction in the number of vehicle miles traveled and the number of trips made could favorably affect the environment because of the associated reductions in pollutants that degrade air quality and water quality. Local governments can increase their tax base through grayfields redevelopment by reallocating land use and existing infrastructure into higher-density residential and mixed commercial use. The cost of public services (transit, water, sewer, schools, public safety, etc.) is lower in grayfields redevelopment because these sites are already linked to existing infrastructure and service networks.

### **Redevelopment Process**

There are some general considerations that apply to these projects:

- Identify potential grayfield sites for redevelopment;
- Evaluate marketability and environmental impacts;
- Prepare an urban site analysis;
- Involve stakeholders throughout the process and make sure everyone is engaged;
- Assess obstacles and potential benefits of redevelopment;
- Create a multidisciplinary team; and
- Identify appropriate implementation regulations.

### **Regulatory Tools**

Grayfields are implemented via form-based codes, subarea plans, planned unit development regulations, special district regulations, mixed use zoning districts, pedestrian overlays, town center regulations, or a combination



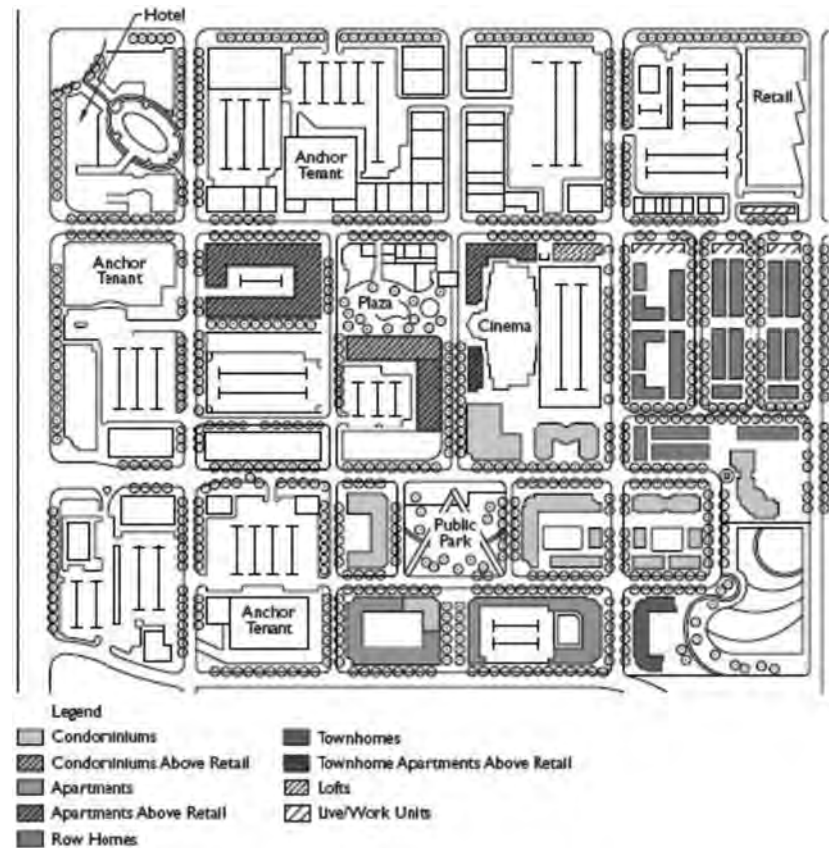
thereof. Town center designs frequently require revisions to zoning codes and related regulations. Prior shopping-center developments often have specialized zoning or permits in place. In these situations, the new regulatory mechanism is an amendment of an existing permit.

### Grayfield Redevelopment in Practice

Grayfield redevelopment can take many forms. Belmar in Lakewood, Colorado, and the Glen in Glenview, Illinois, are two successful models.

**Belmar.** In 1966, when Villa Italia opened in Lakewood, a suburb just 10 minutes from downtown Denver, it was the largest mall in the nation west of Chicago. It thrived for decades. By the 1990s, however, occupancy diminished to just 30 percent, and sales began to falter, aided by the loss of anchor stores. The city worked closely with a multifirm development team to modify the existing PUD that governed Villa Italia's land use and urban design (Lakewood 2002), which outlines the approval for the site-specific development plan and the development agreement between the City of Lakewood and the developers. Under the new regulations, the former 1.4-million-square-foot enclosed regional mall was transformed into Belmar.

Figure 4.18.1. Belmar site plan.



Source: American Planning Association. 2006. *Planning and Urban Design Standards*. Hoboken, N.J.: John Wiley and Sons.

Belmar is now a highly successful mixed use development on a 106-acre site. Opened in 2003, Belmar includes 960,000 square feet of retail space, 1,300 rental and for-sale housing units, and 760,000 square feet of office space, a multiscreen cinema, grocery store, and nine acres of plazas, parks, and other open space. The site is also home to city hall and the city's per-

forming arts center. Belmar is designed around a new street system that uses small blocks to integrate the site with surrounding neighborhoods. Along with the new buildings sited to frame the public plazas, the new street system helps create a strong sense of place and a true center where one did not exist before. In addition to being pedestrian-friendly, Belmar also has a strong transit orientation. The site is connected to a light-rail station and is served by several buses, including two express lines.

Like other successful grayfield redevelopment efforts, Belmar’s success is tied directly to strong stakeholder support fostered by the city. The city engaged citizens by creating an advisory group that represented a cross section of the community. The city also formed an architectural control committee that included a mix of representatives selected by both the city and the development team.

**The Glen.** For almost 60 years, the Glenview Naval Air Station was an integral part of the Village of Glenview, a suburb twenty miles north of Chicago. When the base was recommended for closure in 1993, the village saw the site as an opportunity rather than a liability. Assuming the role of master developer, community leaders ensured that all future decisions about the site would be made at the local level.

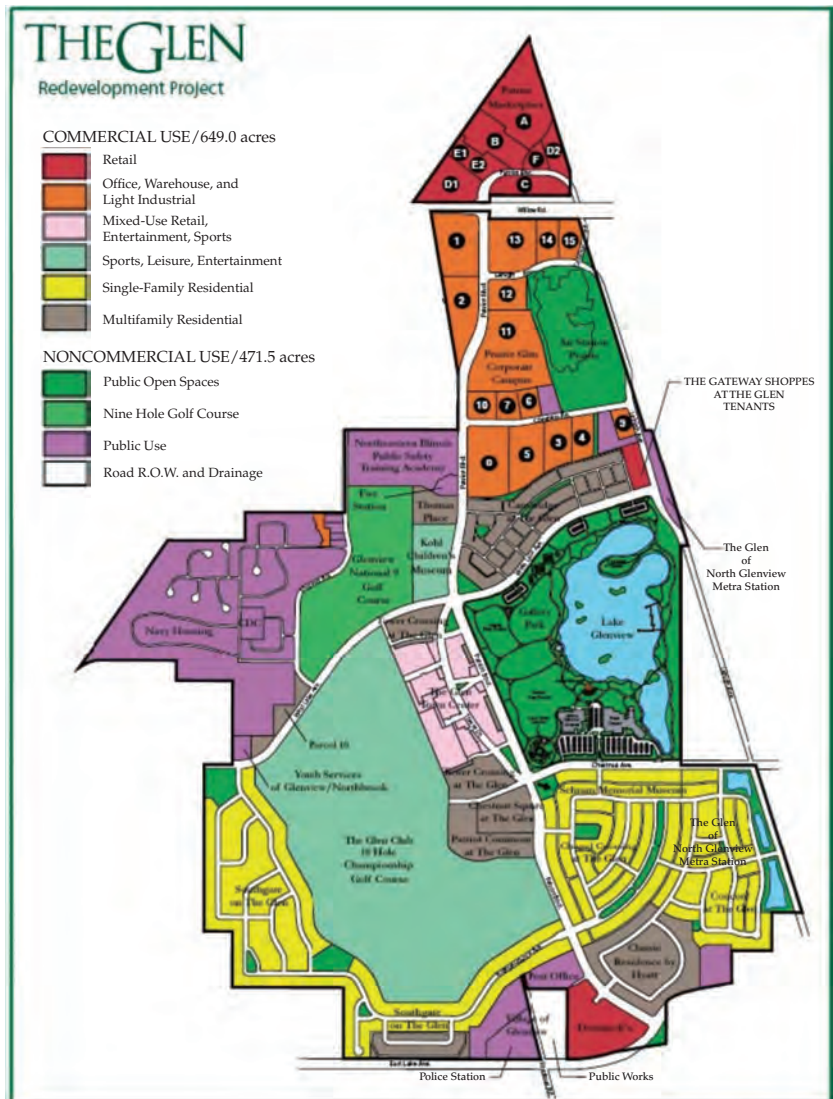


Figure 4.18.2. The Glen development map as of December 31, 2006.

The Glen, approximately 1.5 square miles in size, comprises approximately 15 percent of the land area in Glenview. Redevelopment required the removal of more than 100 buildings and 1.5 miles of runways. In their place is a new mixed use community that has been carefully designed and integrated with the existing village. Today much of the Glen has been completed, including a main street with ground-floor retail and offices and apartments on upper stories; new single-family attached housing; several large-scale, freestanding office buildings; open space and recreational amenities; and a commuter rail station.

With the goal of redeveloping and integrating the site into the rest of the community, the village coordinated an extensive public process resulting in a Consensus Reuse Plan, which was adopted by the Village Board in 1995. That plan served as the “preferred alternative” for redevelopment of the base in the navy’s Environmental Impact Statement, which was followed by a May 1996 Record of Decision by the navy to dispose of the base in accordance with the reuse plan and a Memorandum of Agreement between the village and the navy to complete the transfer.

In 1998, the reuse plan was further refined and became a master plan and design guidelines. Renamed “The Glen” the following year, the redevelopment effort has allowed the village to address long-standing community needs and concerns such as providing sites for stormwater drainage and storage, a community center, and a middle school. The master plan and design guidelines have served as the key documents for guiding implementation. This document contains guidelines for every aspect of development in the Glen:

- Chapter 1. Introduction
- Chapter 2. Background and Consensus Reuse Plan
- Chapter 3. Design Guidelines Introduction
- Chapter 4. Street System Guidelines
- Chapter 5. Open Space Guidelines
- Chapter 6. Residential Guidelines
- Chapter 7. Commercial, Sports, and Entertainment Guidelines
- Chapter 8. Hangar One Guidelines
- Chapter 9. Office/Industrial Campus Guidelines
- Chapter 10. Public Building Guidelines
- Chapter 11. The Signage System Guidelines

The street and sidewalk network created in the new residential neighborhoods were designed to connect people and neighborhoods. New neighborhoods are about a five-minute walk from park and retail amenities. The residential street network connects to adjoining neighborhoods and encourages pedestrian activity. Homes are oriented toward the street. Design guidelines and varied densities have been used to create a spectrum of housing choices.

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## Form-Based Code Overview and Model Approaches



**PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:**

- Foster distinctive and attractive places
- Create walkable neighborhoods
- Direct development toward existing communities

Form-based codes (FBCs) are a regulatory approach that communities use to control the form, size, and siting of proposed buildings. Form-based codes emphasize the appearance and quality of the built environment. They support smart growth principles such as mixed use, compact development, increased density, and distinctive community character. They codify development patterns typical of neighborhoods built before World War II.



FBCs differ greatly from conventional zoning codes. Whereas conventional zoning codes are primarily concerned with land use and density, FBCs are primarily concerned with the form of the built environment. In practice, land use may be regulated in an FBC but as a secondary consideration to form. FBCs allow communities to focus on what they want from the built environment because they are *prescriptive* (they state the desired physical environment) rather than *proscriptive* (stating what is prohibited).

The standards included in an FBC typically establish these parameters:

- Building height (minimum and maximum)
- Building orientation (placement of structure in relation to fronting streets and adjacent building lots)
- Permissible uses (stated in general terms)

Optional parameters that may be set by an FBC include:

- Landscape standards for the type, quantity, and placement of trees, shrubs, and groundcover
- Architectural standards that dictate specific architectural styles, building materials, exterior colors, and construction techniques.

Communities interested in developing an FBC begin with a charrette. This is, on average, a weeklong event in which members of the public work side by side with planners, architects, transportation and traffic engineers, economists, and others to create a vision for the design of the area. The design experts translate the vision into architectural renderings of key nodes, buildings, street cross sections, public gathering places, and other important elements. The planning team works in a public space (a storefront office within the planning area, for example), where the public is encouraged to drop in to see the plan taking shape. Scheduled sessions, called pin-ups, also happen during the charrette week. These evening events give the public an opportunity to see how the plan is progressing and give the experts feedback on how their ideas are being borne out on paper.

### **The Regulating Plan**

The regulating plan is critical to the implementation of an FBC; it is comparable to a zoning map, with one key difference: a regulating plan provides a vision of future development on vacant parcels. The plan contains detailed information on the development standards for each lot, particularly as future buildings relate to public space and surrounding properties. New street and sidewalk configurations are also included.

A regulating plan classifies sites according to street, block, and district characteristics and includes easy-to-follow illustrations of the core regulatory concepts, which are build-to lines (in contrast to conventional setback lines), building footprints, location of public spaces, allowable building types specific to each site, and a defined public space that is created by the building stories that abut the sidewalk on either side of the street, combined with the sidewalk, parkway, roadway width, and on-street parking lanes. The hallmark of the FBC is that it contains significantly more visual information than text; many feel that FBCs are easier to understand than conventional zoning codes.

### **Applications**

Although most action on FBCs takes place at the local level, some states have weighed in on the issue as well. In July 2004, California became the first

state to authorize legislatively adopted development plans for geographic subareas, such as FBCs for certain districts. Connecticut, Wisconsin, and Pennsylvania have since also adopted legislation that explicitly enables communities to adopt FBCs.

Form-based regulations can also be applied in a variety of formats:

- Form-based code
- SmartCode
- Form district zoning
- Hybrid code
- Composite code
- Reverse zoning

### Form-Based Code

Because FBCs are still relatively new and represent quite a departure from conventional zoning codes, most are applied to a specific district, corridor, or subarea, not communitywide. This is approach taken by communities like Santa Clarita, California, which uses an FBC for a 20-block area known as Downtown Newhall. Some communities—Cotati and Sonoma, California, are examples—have adopted codes that apply to the entire city, but such examples are rare. In addition to limiting the applicable area of the FBC, communities also distinguish whether adherence to the FBC will be mandatory or voluntary. If voluntary, incentives such as density bonuses or tax credits are typically offered to encourage developers to participate.

**Case Study: Arlington County, Virginia.** Columbia Pike in Arlington County runs 3.5 miles from the Pentagon to the border of Fairfax County. Its initial purpose, to serve as a rail corridor, was never realized and the corridor was left without a guiding purpose for 40 years. Limited development occurred in the corridor, but it was all of a certain type, including drive-through businesses, fast-food restaurants, laundromats, and currency exchanges. By early 1998, the Arlington County Board was pushing to revi-



*Figures 4.19.1a, b, and c. Columbia Pike's FBC is based on a vision that includes a pedestrian, mixed use district with retail, residential, and office uses. Here are shown the existing "Safeway block" (a), the permitted "Administrative Exception" (b), and the envisioned mixed use result (c).*

talize Columbia Pike in order to give the area more cohesion and character. The board faced some opposition from some of the existing local business owners concerned about being pushed out; however, by February 2003 the board had garnered the support necessary to adopt the Columbia Pike Special Revitalization Form-Based Code.

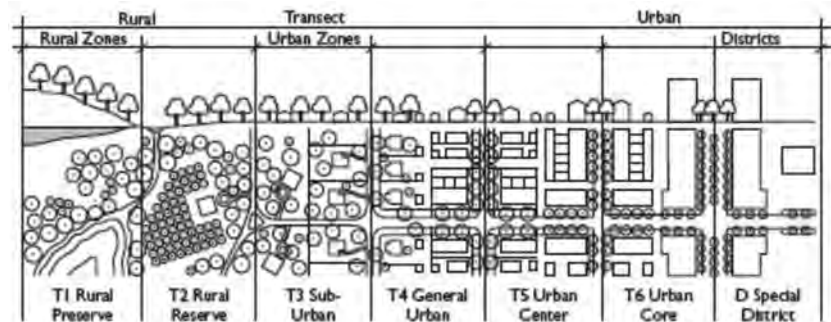
This FBC was based on a vision that included a pedestrian-oriented, mixed use district with retail, residential, and office uses. The district is an optional overlay over the existing zoning and is encouraged through incentives, such as an expedited permitting process for buildings with fewer than 40,000 square feet, modified tax increment financing, rehabilitation tax credits, and relaxed parking requirements. In return, the code sets controls on the type and form of buildings that can be built in the area. The FBC has a number of components including definitions; a regulating plan; standards for siting, streetscape, and architecture; building envelope standards to determine building forms; and administrative guidelines. The regulating plan provides detailed information on each parcel that is included in the code and states the allowed development.

The Columbia Pike FBC has been amended a total of six times, most recently in November 2006. Since it was implemented the code has generated \$30 million in approved development and another \$300 million of development that is in varying stages of planning and negotiation. The FBC has been praised for its clarity and streamlined review process. The biggest challenge associated with it is that many developers are unfamiliar with the code's standards, including build-to lines and parking standards. Also, since many standard development prototypes do not comply with the FBC, developers have been forced to develop new prototypes.

### The SmartCode

The SmartCode, originally published in 2003, is a model code developed by architecture and planning firm Duany Plater-Zyberk and Company (DPZ). The SmartCode differs from other form-based applications in that it is rooted in the concept of the "transect." The transect system is based on the idea that some building forms belong only in certain places. The transect organizes a series of ecozones, or "habitats," along a continuum ranging from Rural Preserve (T-1) to Urban Core (T-6), with categories of varying density and intensity in between. Each community decides whether and where to designate each of the six zones. The SmartCode provides design guidelines for streets, open spaces, buildings, and blocks.

Fig. 4.19.2. The transect.



Source: American Planning Association. 2006. Planning and Urban Design Standards. Hoboken, N.J.: John Wiley and Sons.

**Case Study: Petaluma, California.** The Central Petaluma Specific Plan, adopted in June 2003, is based on the SmartCode. The plan applies to a 400-acre area adjacent to historic downtown Petaluma. The site was previously used for manufacturing, warehousing, shipping, and other industrial uses but is now home to a mixed use development containing housing, offices, and a movie theater.

A key environment-friendly feature of the Central Petaluma Specific Plan is that there is no mandatory on-site parking, which reduces impervious surface area and encourages alternative forms of transportation. The plan is intended to encourage mixed use development via the following principles:

- Neighborhood size reflective of a five-minute walking distance from edge to center, where center is defined as the downtown or a transit stop;
- A mix of uses including shops, workplaces, residences, and civic buildings in proximity;
- Streets that equitably meet the needs of pedestrians, cyclists, and automobiles;
- Public open spaces that provide places for recreation and social activity; and
- Building frontages that define the public space of each street.

The plan is offered as an alternative to the existing conventional zoning code. Developers opting to follow the plan are excused from the regular development approval process and only have to participate in design review. This streamlined process benefits local government by reducing the number of planning staff needed for project approval. The process benefits developers because they can save time and therefore money. Most important, the process benefits the community, which sees the outcome of the revitalized district sooner rather than later.

### Form District Zoning

This technique defines districts according to distinguishable development patterns or desired formal characteristics, such as building form and orientation, street grid, proximity to transit, and streetscape. Current applications of form district zoning use a two-tiered approach to incorporate existing zoning regulation. This approach leaves existing zoning regulations in place and uses form-based regulations to achieve or maintain desired community characteristics typically within a specific district. One of the benefits of form district zoning is that it may be successfully merged with conventional zoning models, making rezoning entire areas possible.

*Case Study: Louisville and Jefferson County, Kentucky.* Form district zoning is a relatively new concept. It is being implemented by Louisville and Jefferson County through their joint Cornerstone 2020 plan, which was adopted in 2003. Cornerstone 2020 uses 11 form districts summarized in Table 4.19.1, page 230.

Louisville and Jefferson County have implemented such a two-tiered system wherein form district zoning is being used in concert with the preexisting 39 conventional zoning districts. The metro area chose to maintain its existing use and density regulations in order to avoid rezoning the entire region.

### Hybrid Zoning

Form-based codes may be impractical to institute on a widespread basis because of time issues and financial constraints. It is also quite complex to entirely change over a conventional zoning system to an FBC. In response, some communities are creating a hybrid zoning code that retains features of the conventional system and incorporates form-based attributes. Hybrid codes are in many cases modeled in part on the SmartCode.

*Case Study: Saratoga Springs, New York.* Saratoga Springs, an upstate resort community, struggled for several years to spur appropriate new development along its main downtown corridor. The existing thoroughfare

**TABLE 4.19.1. CORNERSTONE 2020 FORM DISTRICTS**  
*(Louisville and Jefferson County, Kentucky)*

Conventional Neighborhood	A residential area with compact development that supports shops and allows open space or greenways. Can include older urban neighborhoods as well as new neighborhoods.
Village	A type of neighborhood with open space or farmland at the edge. A village center has shops, services, and civic space.
Town Center	A community-serving center with retail, office, governmental, cultural, and residential uses.
Conventional Marketplace Corridor	Neighborhood-serving shops and services along major roadway. Reinforces bicycling, transit, and pedestrian use.
Neighborhood	A compact residential area integrated with public spaces—such as parks, playgrounds, or schools—and shops located at certain intersections.
Traditional Workplace	Older industrial and employment centers.
Regional Marketplace Center	A region-serving, mixed-use activity center characterized by shopping, offices, and hotels.
Suburban Workplace	Large-scale industrial and employment centers buffered from surrounding uses.
Suburban Marketplace Corridor	Community-serving shops and services along a major roadway. Rules will encourage pedestrian, bicycling, and transit use through creative design.
Downtown	The heart of the city and the economic cultural center of the region.
Campus	Master-planned areas with a mix of office or educational uses, support services, and a common square or plaza.

Source: Adapted from Cornerstone 2020. Available at [www.louisvilleky.gov/PlanningDesign/Cornerstone+2020.htm](http://www.louisvilleky.gov/PlanningDesign/Cornerstone+2020.htm).

had many unique building elements, encouraged pedestrian activity, and created a strong sense of place. It was imperative that any new development be in keeping with the existing development pattern. The city adopted a hybrid FBC in 2003. The form-based regulations are contained primarily in Article II of the city's conventional zoning code. The FBC applies only to the downtown and the commercial and mixed use areas surrounding it. The hybrid code uses three transect zones (T-6 urban core, T-5 urban center, and T-4 general urban) in conjunction with the underlying conventional zoning to achieve the desired density and mix of uses. The form-based regulations, as well as the zoning code as a whole, are designed to work in concert with the goals of city's comprehensive plan.

### **Composite Zoning**

Composite zoning uses the conventional Euclidean zoning format to integrate form standards with uses. Land-use components and the flexibility to mix these components create an effective framework for conventional standards, contemporary standards, or any other standards desired by the community. The components need only to be defined and calibrated to reflect community standards, development practices, and the comprehensive plan. The legal basis for composite zoning is from the landmark zoning case *Village of Euclid v. Ambler Realty Co.*, as the Village of Euclid's zoning ordinance (which was upheld as constitutional) was a composite ordinance of sorts, with six use districts, three height districts, and four area districts.



**Case Study: Leander, Texas.** Leander, a suburb of Austin, enacted one of the first composite zoning ordinances in 2005 as a simple and flexible way to integrate FBC principles into a conventional zoning code. The decision to create a composite zoning ordinance was based on the desire for more flexibility but also more control over the location of land uses. Leander’s composite zoning ordinance has three different components: use, site, and architecture. Each parcel of land in the city is assigned a use component (of which there are 11), which is associated with site and architectural components. There are five site components and four architectural components. For example, a parcel that is designated a “Single-Family Urban” use is allowed to choose from site components 1, 2, and 3 and architectural components A and B. The specifications for these different components can be found in Leander’s ordinance and are meant to provide choices for developers.

### Reverse Zoning

Reverse zoning is another alternative to conventional zoning that deals with some of the same issues as FBCs. The goal of reverse zoning is to control sprawl by imposing maximums and minimums for zoning standards that typically are not set with such limits. For example, under reverse zoning, maximums may be set for lot area or width, yards and setbacks, street pavement, right-of-way widths, number of off-street parking spaces, and the amount of open space on-site. Minimums may be set for building height, the number of dwelling units per acre, floor area ratio (FAR), and lot coverage.

There are many advantages to using reverse zoning as a way to modify existing zoning. For one, it builds on the existing zoning already in place in the community. The existing responsibilities and power structures are unchanged. Reverse zoning is also based on conventional zoning, which is legally rooted in years of case history. Reverse zoning also gives developers a range of options for the abovementioned aspects of a site. The lack of stringent design codes allows for natural variability in a neighborhood.

**Case Study: Barberton, Texas.** Barberton used reverse zoning to set maximum lot widths, lot areas, FARs, and lot coverage. Barberton’s Traditional Neighborhood Overlay District regulations set maximum lot widths in residential areas and provide for minimum building height standards and FARs in most commercial and office districts. These restrictions apply in addition to the existing district requirements. The goals of the regulations are:

1. Offer an alternative living environment for newly developing areas of Barberton and surrounding Summit County;
2. Encourage well-defined neighborhoods with concentrated centers of activity in each;
3. Promote the more efficient use of land and the provision of common neighborhood open spaces made possible thereby; and



*Figure 4.19.3. The composite zoning code of Leander, Texas provides five site components and four architectural components for developers to choose from.*



4. Encourage energy conservation, the reduction of air pollution, and social interaction by allowing short neighborhood trips to be made more easily by walking or bicycling.

### Challenges

An FBC controls the building type, scale, orientation, and appearance of development. It implements the design vision that comes out of a community charrette and the subsequent regulating plan. The dimensional standards that are adopted as part of the regulating plan and code are by-right requirements that are to be applied with a minimal amount of discretion by the plan commission or zoning board. This firm rather than flexible approach to applying the code can be jarring for decision makers, who may have not understood or had it adequately explained to them that their opportunity to affect the outcome of future development came at the time the regulating plan and code were created and adopted.

### Benefits

Whereas conventional zoning codes tend to prohibit mixing of uses, an FBC enables compatible uses to be mixed, either in a single structure or throughout a district. Most development projects that were planned using a form-based approach feature upper-story apartments and condos above ground-floor retail. Mixed use development expands housing opportunities, encourages pedestrian activity and an active lifestyle, promotes economic and social diversity, and preserves open space. FBCs can also help reduce auto-dependency, which can have positive environmental impacts by reducing the number of vehicle miles traveled and the associated air pollutants.

### Sample Form-Based Codes

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## Lot Size Averaging Model Ordinance

Lot size averaging is a zoning tool that allows a wider range of housing types and a more environmentally responsible design than traditional subdivision standards permit. Where variable lot sizes are permitted in subdivisions, the developer has greater flexibility in establishing lots on properties of irregular shape or topography (New Jersey Smart Growth Gateway). Lot size averaging allows some lots to be smaller than the minimum lot size for the applicable zoning district, provided the average overall lot size for the subdivision meets distinct guidelines. Although somewhat similar to cluster development, lot size averaging is best used for smaller tracts of land (up to 40 acres), does not require the more complex review process typically associated with clustering (Hillsdale County, Mich.), can be used to provide infill development (Snohomish County, Wash.), and encourages a range of housing types. By allowing variable lot sizes, different sized structures can be built that fit better with a community's character or environment (New Jersey Smart Growth Gateway).



PRIMARY SMART GROWTH  
PRINCIPLES ADDRESSED:

- Create a range of housing choices
- Preserve open space and farmland

The Hillsdale, Michigan, ordinance requires, to the maximum extent feasible, any land division proposed for lot size averaging shall be designed and arranged to ensure that disturbance as a result of the development to any sensitive environmental areas and the plants and wildlife inhabiting those areas shall be minimized through the use of natural area buffers, scenic easements, and creative lot arrangement. Similarly, Holmdel Township, New Jersey, recommends that developers using lot size averaging should locate less intensive development in those areas that exhibit sensitive environmental features or that contain active or prime agricultural lands or mature woodlands. It also provides that such designs may include easements of rights-of-way for pathways, bikeways, and trails along proposed greenways and linkages to other subdivisions, in addition to providing for preserved farmland or permanent open space.

#### **101. Purpose**

In order to encourage the efficient use of land, certain variations in minimum lot area requirements for subdivision proposals are permitted in an effort to:

- (1) Protect the site's existing natural areas and features, especially those that are sensitive or unique, placing a special emphasis on critical areas: frequently flooded areas, geologic hazard areas, critical aquifer recharge areas, wetlands, and fish and wildlife habitat conservation areas;
- (2) Provide a variety of housing types and sizes;
- (3) Mitigate harmful environmental effects associated with conventional subdivision design;
- (4) Retain open space for public or private (passive or active) recreational use;
- (5) Preserve agricultural land;
- (6) Maintain a healthy relationship with neighboring parcels; and
- (7) Minimize adverse aesthetic effects of development.

#### **102. Area Regulations**

Lots may be reduced to an area not less than [80 percent] of the minimum lot area requirement for the applicable zone, provided the average lot area for the entire subdivision meets the requirements established by the base zoning. A maximum of [25 percent] of the lots in a new subdivision may contain less than the minimum lot area allowed in the applicable zone. The maximum number of lots created on a tract under the lot averaging option shall be no more than that for which the tract would be eligible under terms of the base zoning in the respective districts.

*Comment: Lot size reduction allowances in municipal zoning ordinances tend to range between 11 and 30 percent, with up to a 50 percent reduction possible at the discretion of the planning board (Washington Township, Mo.). Instead of expressing this value as a percentage, many communities outline specific square footage (or acreage) requirements for each applicable district in a table in the zoning ordinance. Although most zoning ordinances do not provide restrictions regarding the maximum percentage (or number) of lots allowed to be smaller than the minimum lot size, those that do typically cite a figure between 10 and 30 percent for 10,000 square-foot lots.*

*Under these regulations, a new subdivision zoned R-10K could consist of the following scenario: 25 percent of the lots are 8,000 square feet (80 percent of the minimum lot area), 50 percent of the lots are 10,000 square feet (the minimum lot area), and 25 percent of the lots are 12,000 square feet (to balance the overall average lot area).*

*Also, some communities impose a minimum or maximum tract area standard (or specify the minimum or maximum number of lots allowed) in the subdivision in their lot size averaging regulations. Some local governments include minimum average frontage provisions (in addition to minimum average lot width standards) to allow developers even greater flexibility in lot design. Unique (e.g., cul-de-sac and corner) lots may be recipients of special exemptions related to lot size average and average lot frontage standards, such as reduced minimum frontage or setback requirements and staggered setback allowances.*

#### **103. Calculations**

Roads, detention/retention facilities, critical areas and their buffers, and open space or recreational areas shall be subtracted from gross area calculations when determining the number of parcels allowed on a single tract of land. All computations showing lot area and the average resulting through this technique shall be indicated on the drawing accompanying the land division application.

*Comment:* Many local governments have different stipulations for calculating the average lot size in the subdivision. For example, some local ordinances do not allow the area of corner lots to be less than the minimum required for the applicable zoning district and do not include these lots when calculating the average lot area.

#### 104. Further Subdivision

No lot of such size as to be capable of further subdivision under the district regulations shall be included in determining the average lot area unless the possibility of such further subdivision is eliminated by a deed restriction.

#### 105. Approval

Approval of a lot averaging land division under this section shall be conditioned upon recordation of appropriate conservation easements, deed restrictions, or other instruments for the purpose of providing for long-term maintenance and preservation of private roads, open space areas, wooded areas, or other areas with natural resources or features to be preserved on the property.

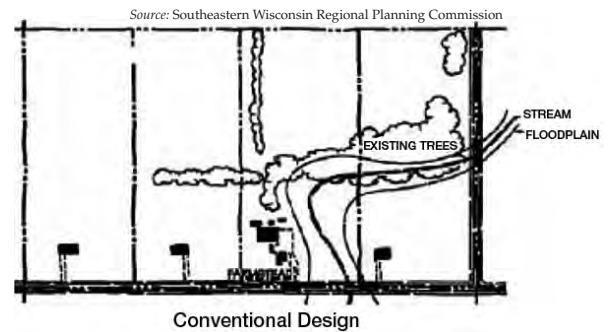
#### 106. Lot Size Averaging for Agricultural and Open Space Preservation

*Comment:* Lot size averaging can also be used to preserve farmland and open space with the inclusion of more flexible development standards. These allowances are generally used when a landowner is interested in creating a small number of residential parcels (Washington County, Wisc.). It is important to include language aimed at preserving the natural or agricultural character of the area by considering the relationship between adjacent tracts. Furthermore, land preservation goals can be achieved by requiring a deed restriction to the land to prohibit further subdivision. Here is an example of how lot size averaging can be used to preserve agricultural land:

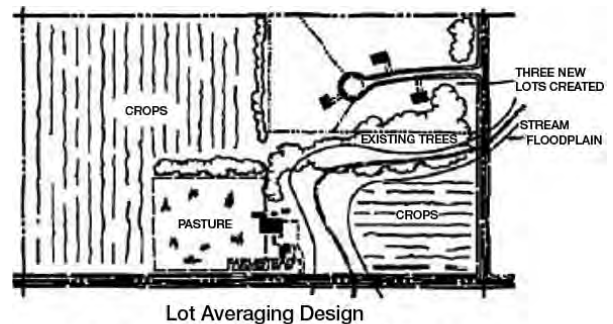
*“Pat Landowner” owns a 16-acre tract of land that is zoned RR-4 (rural residential, four-acre minimum lot size). Conventional zoning would restrict Pat to constructing four homes, each of which would be on a four-acre lot. If Pat had the option of lot size averaging (with greater flexibility than the proposed standards), she could concentrate a few of the houses on a small plot of land to allow agricultural use of the majority of the tract. Lot size averaging (assuming a 50 percent maximum reduction without parcel limits) would allow Pat to build three homes on two-acre lots and a farmstead with farmland on the remaining 10 acres. Under this scenario, the average lot size still satisfies the minimum requirement while allowing for agricultural use on the majority of the original tract.*

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*Figure 4.20.1. Comparison of conventional and lot averaging designs for a minor land division.*



Note: Farmland remains in private ownership but is deed-restricted to prevent further subdivision.



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## **Innovative Approaches to Encourage Meaningful Citizen Participation in the Development Process**



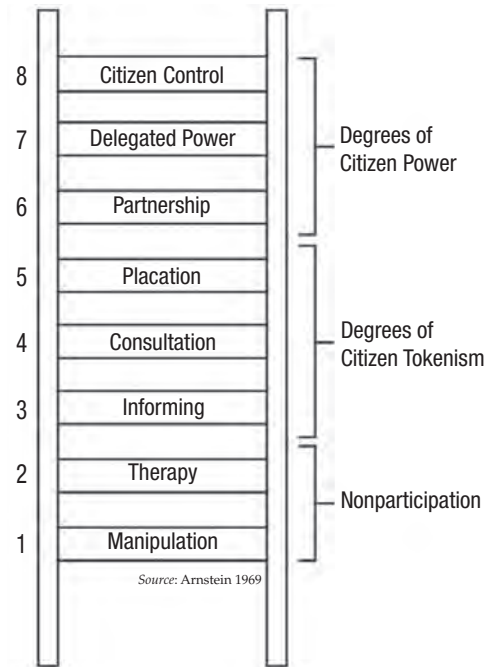
**PRIMARY SMART GROWTH  
PRINCIPLE ADDRESSED:**

- Community and stakeholder collaboration in development decisions

In the context of planning, design, and development, “community participation is the involvement of people in the creation and management of their built and natural environments” (APA 2006, p. 46). Among the purposes of participation are to provide a mechanism for citizens to be involved in a meaningful way so that their efforts will lead to solutions to problems, and to provide citizens with a voice in plans and decision making to improve their overall environment and quality of life. Those citizens who have an interest in the outcome of a planning process are called “stakeholders,” denoting persons with a “stake” in the issue at hand (APA 2006, pp. 49–50).

As Sherry Arnstein described in her groundbreaking article, “A Ladder of Citizen Participation” (1969), there are three general levels of participation, ranging from nonparticipation (manipulation and therapy) to degrees of tokenism (informing, consultation, and placation) to degrees of citizen power (partnership, delegated power, and citizen control).

*Figure 4.21.1. Arnstein’s ladder of citizen participation.*



While Arnstein’s theory was developed in the era of heavy-handed federal actions, citizen participation in the decision-making process is as important, and as expected by the public, as ever, when it comes to guiding future growth and development of a community.

With the increase in citizen awareness of and involvement in planning—most notably through the development of neighborhood associations, community development corporations, and neighborhood-based planning—many urban areas have well-established mechanisms for meaningful participation. Much of this is the legacy of Paul Davidoff, who developed the concepts of advocacy and equity planning in the mid-1960s to engage planners in the social and economic struggles of the civil rights movement by working more directly with the disadvantaged segments of society, particularly the urban poor. Davidoff’s ideas resulted in the field of equity planning and, more recently, environmental justice.

Among the cities known for neighborhood planning are Minneapolis; Seattle; Portland, Oregon; and Austin, Texas. This approach to planning, often called empowerment planning or community-based planning, shifts the planner’s role from general advocate to facilitator, and it looks to the community for knowledge and leadership, with the planner using his or her expertise to guide the process.

However, when viewed from a regulatory perspective, citizen participation requirements for development review have not evolved much since Arnstein’s work was published in 1969. As noted throughout this report, public notices, hearing requirements, and decision-making criteria are common to nearly all development review processes. For many communities, the opportunity for citizen participation comes primarily at public hearings, the rules and procedures of which are dictated by state statute and local ordinances. Because public hearings are typically held near the end of a process and are more informative than interactive in nature, considering them a participation mechanism is often a stretch.

### CITIZEN PARTICIPATION IN THE DEVELOPMENT PROCESS

When considering the level of public involvement in the development process, generally there are three levels of scrutiny that a project might undergo:

1. No scrutiny: If a project is allowed under the current regulations, it is allowed by right, and no public evaluation is required.
2. Minor scrutiny: If a project requires a variance from the current regulations, such as a deviation from the dimensional requirements of the ordinance (e.g., height, bulk, or setbacks), it is typically reviewed by a zoning board or plan commission, whose process and decision is public record.
3. Major scrutiny: If a project requires a significant deviation from current regulations, such as a special exception (approving a use that is not allowed under the current zoning) or a zoning amendment to change the zoning for an area, then a more public process usually occurs.

Depending upon the level of scrutiny, the degree of transparency will vary. It has been argued that the development review process is not very transparent from the perspective of the public sector. Transparency is defined here as the stage at which the public is informed of a public decision, the degree to which public opinion is sought in that decision, and the availability of public officials to the public to discuss the decision.

### INNOVATIVE PARTICIPATION APPROACHES

Under a smart growth strategy, citizen participation operates on the upper rungs of Arnstein's ladder, with the public working in partnership with local government and developers to achieve an outcome that benefits all parties. This chapter presents some examples of communities that have developed innovative approaches to ensure meaningful stakeholder involvement in the development process.

First addressed is the leadership role that communities can and should take regarding stakeholder involvement in civic decisions. Ashland, Oregon, has a system for stakeholder involvement in all community decisions, and Madison, Wisconsin, has guidelines for public involvement in the development process for negotiable projects. (See below.)

Second is a model citizen participation plan ordinance, developed from three examples from across the country. This ordinance requires preparation of a citizen participation plan for certain types of projects, describes what that plan must include (such as the area to be notified, the possible impacts of the project, and the methods to be used to obtain public input), and a written report documenting the outcomes of the plan.

Third is commentary on two approaches that move the role of citizen participation squarely onto the "citizen control" rung: community benefits agreements and good-neighbor agreements. These two tools, which are increasing in popularity, shift the balance of power from the local government and toward the citizenry.

The material included here is informational only, to provide some examples on ways that communities may improve their participation requirements. As planning and development decisions are local in nature, so, too, should a participation scheme be created with the culture of the local jurisdiction in mind.

### CITIZEN PARTICIPATION PRINCIPLES, POLICIES, AND PRACTICES

To ensure meaningful and early public involvement with negotiable development proposals or public decisions, communities may wish to formally adopt such a policy. Programs from two communities that have done so are summarized below.



The Walker Collaborative

*Figure 4.21.2. Fostering community engagement is a critical part of implementing a plan.*

*Case study: Ashland, Oregon.* Ashland has a citizen participation plan, adopted in 2000, that extends beyond development projects (City of Ashland 2000). The city sees citizens as playing a key role in forming better solutions to civic issues, and citizen participation mechanisms need to result in decisions that reflect community opinions. The citizen participation plan includes a “menu of choices” of processes to follow, including focus groups, charrettes, surveys, and advisory committees, among other approaches.

As defined by the plan, successful citizen participation requires:

- Genuine intent and attitude by the city and its citizens to engage in a public process to help make better decisions;
- A clearly defined process that identifies participant roles;
- A variety of ways to participate and influence decisions;
- That it occur early enough in the process to influence the outcome;
- Effective communication throughout the process, including identification of assumptions about the issue, disclosing rationale for one’s opinions, and being willing to consider the merit in others’ opinions;
- Identifying and inviting people who are affected or interested in the issue to be part of the process;
- That dialog and deliberation be a part of the process;
- That all participants work hard, listen to all sides, and attempt to understand opposing viewpoints; and
- Considering the “public good” perspective on all issues, especially when personal interests differ.

The plan discusses the expectations and responsibilities of citizens, as well as the roles and responsibilities of elected officials and city staff. It outlines a 12-phase public involvement process:

1. **Generate an issue:** Federal, state, or local government or community members identify an issue of concern.
2. **Identify the issue or opportunity:** The city defines the scope of the problem, generates a preliminary list of stakeholders, and documents the history of the issue or opportunity.
3. **Identify process parameters:** The city articulates nonnegotiable elements to focus the process.
4. **Clarify decision makers:** The city identifies the authority with final decision-making power.
5. **Determine goals and timeline:** These should be derived from a review of time limitations, costs, staff availability, technical complexity, public interest and political climate, and the size and nature of stakeholder groups. This phase also includes assignment of responsibilities.
6. **Determine citizen participation process:** Methods to engage citizens are determined in this phase and are presented in a public participation plan designed for the particular project. It includes the tools to be used for outreach, the timeline, and the feedback mechanism. A schedule and detailed methodology for communicating progress to decision makers and interested parties is also outlined in the plan.
7. **Establish procedural foundation and start information gathering:** The issue or opportunity is clarified, as are the tasks to be accomplished by

the involved parties. Operational guidelines for involved groups are also developed in this phase. These guidelines describe the information to be collected as part of the process and ways in which community members will be educated on the issue and invited to participate.

8. **Launch the process:** At the start of this phase, a feedback loop should be established in which Phases 1 through 7 are reviewed and key decision makers are queried to see if new information has become available, laws have changed, or a new set of stakeholders or perspectives has emerged.
9. **Complete the project:** The citizen engagement process is carried out according to the plan developed in Phase 6. Communication with all involved parties, including general citizens, the news media, and affected agencies, continues throughout the process, as decided upon in Phase 7.
10. **Make decisions:** The decision-making authority reviews the outcome and either accepts it or requests revisions; the outcome and the rationale behind it are communicated to the public.
11. **Implement:** The outcome is implemented.
12. **Evaluate:** The public participation process and the outcome of the decision-making process is evaluated.

Ashland has used this process in a number of instances:

- The Planning and Community Development Department used it in Phase I of the downtown plan.
- The Public Arts Commission used it in preparation of a master plan for public art.
- The Public Works Department used it in the redesign and reconstruction of Siskiyou Boulevard, the city's main arterial street and gateway.
- The Planning and Community Development Department plans to use it in the next comprehensive plan update.

It is important to note that the plan acknowledges that citizen participation is not a substitute for city decision making; rather, it is "a very important influence" on this process. As the plan notes, "shared decision-making is not a cure for conflict because it does not mean the final decision will make everyone happy. It lets everyone know the reasons for a decision in the hope that all or most participants will accept that decision, even if they do not agree with it" (City of Ashland 2000).

**Case Study: Madison, Wisconsin.** To foster better dialogue between developers and neighborhood residents during the development review process, Madison developed a best-practices guide (City of Madison 2005). This guide is written specifically to address proposals that are not permitted by right under the zoning regulations and therefore require some degree of public review by one or more city commissions, full review by certain city departments, a public hearing, and input from neighborhood residents. The guide discusses involvement of neighborhood associations, alderpersons, and adjacent owners and residents in two different ways: the preapplication process prior to the formal project review, and an informal review process.

**Preapplication process.** Developers are encouraged to meet with the neighborhood association, alderperson, and nearby owners and residents before submitting their plan to city departments. In addition, as required by ordinance, developers must notify the neighborhood association and





*Figure 4.21.3. "Citizen planners," shown here in Midway, Georgia, bring important local perspectives to development discussions.*

alderperson 30 days before filing their applications. After the concept plan is presented to the city, the city then provides it to the neighborhood association. A neighborhood meeting may occur at this stage, and the city then incorporates comments into the application. The application then follows the formal procedure, including public notice and public hearings.

**Informal process.** Under this approach, the developer has one or more meetings with the neighborhood association, alderperson, and neighbors regarding his or her proposal. The neighborhood association then communicates its position(s) to the developer, the alderperson, and city staff.

This guide does not take an adversarial position on developers; rather, it assumes that developers seek to build worthwhile projects that will benefit the community. Much of the guide focuses on educating the public on the point of view of developers and on how residents can help to make a proposal as beneficial to the community as possible prior to the formal process.

Written for both developers and residents, the guide takes the reader through the entire process. It provides guidelines on how neighborhood associations can be most effective in the preapplication discussions and strongly suggests adopting a clear procedure for meeting and commenting on proposals.

The guide also provides general information on how development is guided and regulated in the city, including the comprehensive plan, neighborhood plans, and the zoning ordinance. For those not familiar with planning, it includes a glossary of planning and development terms.

### **MODEL CITIZEN PARTICIPATION PLAN ORDINANCE**

The model citizen participation plan ordinance provided here is intended to be used by jurisdictions that want to formalize the public participation process. As the model notes, the plan is not intended to produce complete consensus on all applications; that would be impossible to accomplish. It does, however, establish a process for informed decision making.

This ordinance was developed from three existing citizen participation ordinances or guidance documents:

- **City of Glendale, Arizona, 1997.** Often cited as the first example of a local ordinance requiring a citizen participation plan, the Glendale ordinance formalizes a participation process and requires applicants to make good-faith efforts to involve citizens in development review. It also requires a citizen participation report, documenting the process.
- **Minnesota Planning and Biko Associates, 2000.** This document includes a model ordinance that is similar to the Glendale ordinance but also includes commentary on the purpose of and benefits of requiring a citizen participation plan.
- **City of Encinitas, California, 2002.** This citizen participation plan ordinance is based on the Glendale ordinance but goes beyond it in three ways: it allows the community to identify specific examples of projects that are excluded from the requirement; it requires the plan to be prepared prior to the public hearing or public review process; and it allows for a fee to be charged.

These ordinances are included in an appendix, below.

#### **101. Purpose**

- (1) The purpose of a citizen participation plan is to:
  - (a) Ensure that applicants pursue early and effective citizen participation in conjunction with their applications, giving them the opportunity to understand and try to mitigate any real or perceived impacts their application may have on the community;

- (b) Ensure that stakeholders have an adequate opportunity to learn about applications that may affect them and to work with applicants to resolve concerns at an early stage of the review and decision-making process;
  - (c) Facilitate ongoing communication between the applicant, stakeholders, city staff, and elected officials throughout the application review process; and
  - (d) Encourage applicants to be good neighbors throughout the process.
- (2) The citizen participation plan is not intended to produce complete consensus on all applications but rather establish a process for informed decision making.

#### 102. Definitions

*Comment: Terms that may be included here (or incorporated in a comprehensive definitions section elsewhere in the municipal or county code) may include "applicant," "stakeholder," "charrette," and others.*

#### 103. Applicability

(1) Every application [for development or construction] that requires [a public hearing/discretionary permit/administrative review] shall include a citizen participation plan that must be implemented prior to the first public hearing or notice of public review and comment period on an administrative application.

[(2) Every city-sponsored capital improvement project shall also include a citizen participation plan that must be implemented before final approval or award of a construction bid.]

(3) When in compliance with all other ordinances and regulations, the following projects are exempted from the other provisions of this chapter:

*Comment: Include here any exceptions to the provisions here, such as projects that do not require discretionary review, administrative review, variance, or special exception.*

#### 104. Required Plan Contents

The citizen participation plan shall include the following information:

- (a) Which residents, property owners, interested parties, political jurisdictions, and public agencies may be affected by the application;
- (b) How those interested in and potentially affected by an application will be notified that an application has been made;
- (c) How those interested and potentially affected parties will be informed of the substance of the change, amendment, or development proposed by the application;
- (d) How those interested and potentially affected parties will be provided an opportunity to discuss the applicant's proposal with the applicant and express any concerns, issues, or problems they may have with the proposal in advance of the public hearing or public review and comment period;
- (e) The applicant's schedule for completion of the citizen participation plan;
- (f) How the applicant will keep the [planning department] informed on the status of his or her citizen participation efforts.

*Comment: Many communities have highly diverse populations, and not all of them are English speaking. Consideration should be given to requiring that the citizen participation plan be translated into other languages spoken in the area.*

#### 105. Target Notification Area

(1) The level of stakeholder interest and area of involvement will vary depending on the nature of the application and the location of the site. The applicant will determine the target area for early notification after consultation with and approval of the [planning department]. At a minimum, the target area shall include the following:

- (a) Property owners within the public hearing notice area required by other sections of the [municipal ordinance].
- (b) Representatives of homeowners associations, neighborhood associations, or other recognized community groups within the public notice area required by other sections of the [municipal ordinance].

- (c) Other interested parties who have requested that they be placed on a notification list maintained by the [planning department].
  - (d) The applicant shall notify any other persons, organizations, or agencies as deemed appropriate after consultation with the [planning department].
- (2) In no case shall the notification area be less than that required in other sections of the [municipal ordinance].
- (3) These requirements apply in addition to any public notice provisions required elsewhere in the [municipal ordinance].

#### **106. Implementation**

At the applicant's discretion, a citizen participation plan [along with the required processing fee] may be submitted and commenced after the required preapplication meeting and consultation with the [planning department/community development department] staff and before a formal development application has been submitted.

#### **107. Citizen Participation Report**

- (1) When a citizen participation plan is required, the applicant shall create a written citizen participation report that documents the results of the citizen participation effort. The applicant will submit this report to the [planning director] for his or her review and approval prior to the notice of public hearing or notice of public review and comment period on the application. This report will be attached to the planning department's public hearing report and be made a part of the administrative record.
- (2) The citizen participation report shall describe the methods the applicant used to involve the public, including:
- (a) Dates and locations of all meetings where stakeholders were invited to discuss the applicant's proposal;
  - (b) Dates mailed, number of mailings conducted, and the content of all public notifications related to the proposal, including letters, meeting notices, newsletters, and other writings;
  - (c) A description of where stakeholders and other interested parties who received notices, newsletters, or other written materials are located; and
  - (d) The number of people who participated in the process.
- [(e) Types of meetings or processes used, including but not limited to surveys, focus groups, charrettes, workshops, and other techniques.]
- (3) The citizen participation report shall include a summary of concerns, issues, and problems expressed during the process, including:
- (a) The substance of the concerns, issues, and problems;
  - (b) How the applicant has addressed, or intends to address, the concerns, issues, and problems expressed during the process; and
  - (c) Which, if any, concerns, issues, or problems the applicant is unwilling or unable to address and why.

*Comment:* In addition to the content suggested above, Minnesota Planning and Biko Associates (2000) recommends the plan also be tailored to fit the community's culture by

- Considering the differing information needs and potential concerns of various segments of the public;
- Providing a variety of outreach and involvement opportunities; and
- Defining indicators of successful public participation.

### **COMMUNITY BENEFIT AGREEMENTS AND GOOD-NEIGHBOR AGREEMENTS**

The approaches discussed so far focus on the reaching the "partnership" rung of Arnstein's participation ladder, with perhaps a touch of "delegated power." However, in many communities today a tool is emerging that moves citizen participation in the development process almost completely onto the "citizen control" rung. These two approaches are community benefit agreements and good-neighbor agreements. Increasing in popularity, these tools shift the balance of power from the local government and toward the citizenry.

### Community Benefit Agreements

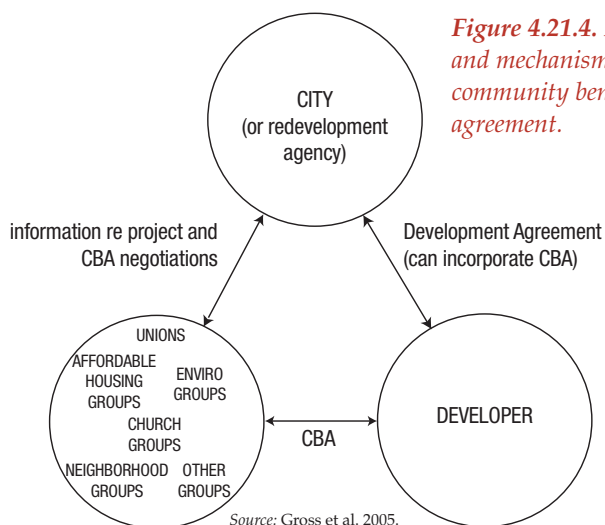
Community Benefit Agreements (CBAs) are contracts signed by community groups and developers that set forth a range of community needs that the developer agrees to address as part of a development project. A CBA is the result of a negotiation process between the developer and organized representatives of affected communities that occurs *before* the proposal goes in front of the local governing body for approval. Under the CBA, the developer agrees to shape the development in a certain way or to provide specified community benefits. In exchange, the community groups promise to support the proposed project before government bodies that provide the necessary permits and subsidies.

Among the many issues that CBAs in effect today address are:

- Jobs
- Training opportunities
- Affordable housing
- Green building practices
- Parks
- Child-care centers
- Access to transit

Starting in the Los Angeles, San Diego, and East Bay regions in California, the community benefits movement has increased in popularity in recent years, with community groups in Denver, Milwaukee, Minneapolis/St. Paul, Miami, Atlanta, Boston, Seattle, New York City, Chicago, and Washington, D.C., establishing such agreements.

**Purpose.** The purpose of a CBA is twofold: it is a way to achieve mutually beneficial objectives, and it is a mechanism to enforce both sides' commitments. From the community's perspective, these deals "are safeguards to ensure that affected residents share in the benefits of major developments. They allow community groups to have a voice in shaping a project, to press for community benefits that are tailored to their particular needs, and to enforce developer's promises" (Gross et al. 2005, p. 3). In exchange, developers get support from community groups prior to submitting their project to governing bodies for approval. For local governments, CBAs may help to reduce the amount of time spent addressing conflict between community groups and developers and to promote economic development that is more beneficial



*Figure 4.21.4. Purposes and mechanisms of a community benefits agreement.*

to the community. In general, CBAs work best when ensuring “bricks-and-mortar” improvements.

**Benefits.** CBAs can greatly improve the development approval process by promoting the following values (Gross et al. 2005):

- *Inclusiveness.* The negotiation process provides a mechanism to ensure that community concerns are heard and addressed, especially those of residents of low-income neighborhoods, non-English-speaking areas, and communities of color.
- *Enforceability.* CBAs put the developer’s promises regarding community benefits in writing, making them legally enforceable.
- *Transparency.* With benefits documented, all stakeholders can understand and assess the specific commitments made by a developer and compare those benefits to others provided in similar projects and to those offered by other developers for the same parcel.
- *Coalition building.* The negotiation process encourages the building of new alliances among community groups to ensure all parties receive benefits. By addressing many issues and encouraging broad coalitions, the CBA process can help to counter “divide-and-conquer” approaches that often benefit only select groups.
- *Efficiency.* Community groups usually express their concerns at public hearings, when the project is up for government approvals. The result is either project approval over community objections; project rejection without modifications; or project delay to address community concerns and needs. CBAs encourage early negotiation between developers and the community, leading to a cooperative relationship among all parties and getting project approval without delays.
- *Clarity of outcomes.* CBAs provide local governments with a tool to collect and manage information to show that the promised benefits were delivered.

**Drawbacks.** While many of the above values are important to strive for, discussions with planning directors in cities where CBAs or similar tools have been proposed or used indicate that there are drawbacks to such a high level of citizen empowerment prior to local government involvement. Specifically:

- Citizens may work with a developer to create a plan and not approach the city to seek the advice and input of the planning department at the appropriate stage to ensure that the project meets the regulatory requirements.
- While the CBA process has an increased transparency for the public and for developers, from the local government perspective the process is not always open. Because meetings occur between the public and the developer without the local government at the table, the meetings and decision making may not be held to the same standard as a public hearing (no public record and no due process, for example).
- The agreement terms between citizens and the developer may be unenforceable for the city, such as hiring commitments or other long-term promises, due to lack of staff capacity to monitor or enforce.
- Not all of the affected local parties may be at the table during the discussions with the developer, so the benefits may be conferred only to a select few and may not actually benefit the entire community.

For CBAs to truly be effective, the local government needs to be a party to the discussion early in the process and before the contract is struck, to ensure that the promises made by the developer can reasonably be met. Also, the agreement terms may be best limited to bricks-and-mortar activities, such as park enhancements, which the city can reasonably perform and enforce. Other goals can be achieved, though less easily.



### Good-Neighbor Agreements

Similar to CBAs, good-neighbor agreements (GNAs) are negotiated agreements between a community and a private-sector entity to achieve a desired outcome from a development. While CBAs often address a multitude of community needs, GNAs typically focus on environmental impact mitigation, specifically control of pollution, toxins, and hazardous materials from industrial facilities. Also, GNAs are often negotiated for existing facilities, rather than as part of a proposed development.

*The process.* Creating a GNA involves the following three general steps (Lewis and Henkels 1996):

1. Members of a citizens group meet with the plant manager to discuss and define the issues the community members would like to resolve with the company and potential solutions to those issues. This step may also involve identifying additional stakeholders who should be included in the process, such as organized labor, other civic organizations, and community leaders.
2. Over a series of meetings, the citizens group and the company conduct a joint assessment of the situation, further clarifying issues and pertinent details, with the goal of forming principles and provisions to include in a formal agreement.
3. The parties agree to the terms of the agreement, sign and ratify the contract, and then either implement the terms or continue to enforce them if already in practice.

*Key provisions in the agreement.* While GNAs vary in their specific details, Lewis and Henkels (1996) have identified seven key terms that communities have sought or negotiated.

1. **Community access to information.** Includes information required to be filed under state and federal law, environmental safety audits and inspection results, plant safety manuals and procedures, corporate annual reports and SEC filings, and a list of the plant's workers, with their addresses.
2. **Right to inspect the facility.** An inspection clause that gives community members the right to inspect a plant, accompanied by an expert and a plant worker of the community's choice.
3. **Accident preparedness.** Covers procedures the company will follow in the event of an accident. Also often requires this plan to be made available for public review and input.
4. **Pollution prevention.** Addresses the company's plan to reduce toxic chemical use, toxic waste production, and toxic emissions over a specific period of time. Community groups can use experts to survey plants and produce recommendations for pollution prevention.
5. **Employment.** Communities may require the company to recruit local people for job openings and make efforts to allow the workforce to unionize if it has not already.
6. **Local economic development needs.** Related to CBAs. The GNA may include language committing the company to establish a special community benefits fund to provide financial resources (the spending of which to be determined and overseen by community stakeholders) toward local infrastructure provision.
7. **Citizen group concessions.** In response to commitments described here, the citizen group may agree to settle current disputes with the company (and even agree to generate positive publicity about the company) and to not disclose any company trade secrets.



Most GNAs are legally enforceable agreements. In some cases, a GNA is connected to a local government permit approval process. It may also be part of a settlement agreement following an industrial accident. If disputes arise, some GNAs require that alternative dispute resolution be the mechanism used; others have specified litigation and forum-selection clauses as enforcement tools. And many GNAs require both parties negotiate and perform their obligations in “good faith.”

**Benefits.** Perhaps the greatest benefit from GNAs is the increased empowerment it gives communities over what happens within them. Rather than just accepting that with industry comes pollution and exposure to emissions, communities now have a mechanism to work with industry. GNAs create a dialogue between communities and industry, increasing the level of empowerment within communities, particularly those that have been disenfranchised in the past.

**Drawbacks.** A problem with GNAs may be enforcement. While they are most commonly executed as legally binding agreements, there may be some agreements that are nonbinding, based on past or emerging relationships with industry staff. If the personnel who enter into these agreements leave, it is likely that the terms of the agreement leave with them.

In addition, even if the agreement entered into is legally binding, that does not necessarily mean that the industry will be a “good neighbor” and comply. If the industry is a large corporation, there may be little incentive for it to meet the terms of the agreement. Communities must use whatever leverage they have to create a “bottom line” reason why corporations should comply. Connecting the agreement to established enforcement tools such as permits and approvals will give the community more power.

Also, while GNAs provide residents with access to important information, there is no guarantee that the information received is accurate. Agreements need to have some mechanism to ensure that the information has not been distorted in any way by the industry.

Finally, in addition to the community and the industry, there is a third party to involve: the workers. Lewis and Henkels (1996) note, “for agreements to yield the greatest possible benefits, workers participation must be secured.” And in most instances, the workers need to be part of a unionized workforce. “The presence and active participation of a union appear to be a necessary precedent,” say Lewis and Henkels.

## **APPENDIX: THREE SAMPLE CITIZEN PARTICIPATION PLAN ORDINANCES**

### **1. Glendale, Arizona, Municipal Code**

#### **Sec. 31-26. Citizen Participation Plan**

- (a) Every application which requires a public hearing shall include a citizen participation plan which must be implemented prior to the first public hearing.
- (b) The purpose of the citizen participation plan is to:
  - (1) Ensure that applicants pursue early and effective citizen participation in conjunction with their applications, giving them the opportunity to understand and try to mitigate any real or perceived impacts their application may have on the community;
  - (2) Ensure that the citizens and property owners of Glendale have an adequate opportunity to learn about applications that may affect them and to work with applicants to resolve concerns at an early stage of the process; and
  - (3) Facilitate ongoing communication between the applicant, interested citizens and property owners, city staff, and elected officials throughout the application review process.
- (c) The citizen participation plan is not intended to produce complete consensus on all applications, but to encourage applicants to be good neighbors and to allow for informed decision making.

(d) At a minimum the citizen participation plan shall include the following information:

- (1) Which residents, property owners, interested parties, political jurisdictions and public agencies may be affected by the application;
- (2) How those interested in and potentially affected by an application will be notified that an application has been made;
- (3) How those interested and potentially affected parties will be informed of the substance of the change, amendment, or development proposed by the application;
- (4) How those affected or otherwise interested will be provided an opportunity to discuss the applicant's proposal with the applicant and express any concerns, issues, or problems they may have with the proposal in advance of the public hearing;
- (5) The applicant's schedule for completion of the citizen participation plan;
- (6) How the applicant will keep the planning department informed on the status of their citizen participation efforts.

(e) The level of citizen interest and area of involvement will vary depending on the nature of the application and the location of the site. The target area for early notification will be determined by the applicant after consultation with the planning department. At a minimum, the target area shall include the following:

- (1) Property owners within the public hearing notice area required by other sections of the ordinance codified in this section;
- (2) The head of any homeowners association or registered neighborhood within the public notice area required by other section of the ordinance codified in this section;
- (3) Other interested parties who have requested that they be placed on the interested parties notification list maintained by the planning department.

(f) These requirements apply in addition to any notice provisions required elsewhere in the ordinance codified in this section.

(g) The applicant may submit a citizen participation plan and begin implementation prior to formal application at their discretion. This shall not occur until after the required preapplication meeting and consultation with the planning department staff. (Ord. No. 1952, § 8, 7-22-97)

#### **Sec. 31-27. Citizen Participation Report**

(a) This section applies only when a citizen participation plan is required by the ordinance codified in this section.

(b) The applicant shall provide a written report on the results of their citizen participation effort prior to the notice of public hearing. This report will be attached to the planning department's public hearing report.

(c) At a minimum, the citizen participation report shall include the following information:

- (1) Details of techniques the applicant used to involve the public, including:
  - (i) Dates and locations of all meetings where citizens were invited to discuss the applicant's proposal;
  - (ii) Content, dates mailed and numbers of mailings, including letters, meeting notices, newsletters and other publications;
  - (iii) Where residents, property owners, and interested parties receiving notices, newsletters, or other written materials are located; and
  - (iv) The number of people that participated in the process.
- (2) A summary of concerns, issues and problems expressed during the process, including:
  - (i) The substance of the concerns, issues, and problems;
  - (ii) How the applicant has addressed or intends to address concerns, issues and problems expressed during the process; and
  - (iii) Concerns, issues and problems the applicant is unwilling or unable to address and why. (Ord. No. 1952, § 8, 7-22-97)

## **2. Minnesota Planning and Biko Associates Model Citizen Participation Ordinance**

### **XX.010 Purpose**

Every application requiring a public hearing shall include a citizen participation plan that must be implemented prior to the first public hearing. The purpose of the citizen participation plan is to:

- A. Ensure that applicants pursue early and effective citizen participation in conjunction with their applications, giving them the opportunity to understand and try to mitigate any real or perceived impacts their application may have on the community;
- B. Ensure that the citizens and property owners of Model Community have an adequate opportunity to learn about applications that may affect them and to work with applicants to resolve concerns at an early stage of the process.
- C. Facilitate ongoing communication between the applicant, interested citizens and property owners, city staff, and elected officials throughout the application review process.

The citizen participation plan is not intended to produce complete consensus on all applications, but to encourage applicants to be good neighbors and to allow for informed decision making.

### **XX.020 Information Required**

At a minimum the citizen participation plan shall include the following information:

- A. Which residents, property owners, interested parties, political jurisdictions and public agencies may be affected by the application.
- B. How those interested in and potentially affected by an application will be notified that an application has been made.
- C. How those interested and potentially affected parties will be informed of the substance of the change, amendment, or development proposed by the application.
- D. How those affected or otherwise interested will be provided an opportunity to discuss the applicant's proposal with the applicant and express any concerns, issues, or problems they may have with the proposal in advance of the public hearing.
- E. The applicant's schedule for completion of the citizen participation plan.
- F. How the applicant will keep the planning department informed on the status of their citizen participation efforts.

### **XX.030 Target Area**

The level of citizen interest and area of involvement will vary depending on the nature of the application and the location of the site. The target area for early notification will be determined by the applicant after consultation with the Planning Department. At a minimum, the target area shall include the following:

- A. Property owners within the public hearing notice area required by other sections of the ordinance codified in this section;
- B. The head of any homeowners association or registered neighborhood within the public notice area required by other sections of the ordinance codified in this section;
- C. Other interested parties who have requested that they be placed on the interested parties notification list maintained by the Planning Department.

These requirements apply in addition to any public notice provisions required elsewhere in the ordinance.

### **XX.050 Phasing**

The applicant may submit a citizen participation plan and begin implementation prior to formal application at their discretion. This shall not occur until after the required pre-application meeting and consultation with the Planning Department staff.

### **XX.060 Citizen Participation Report**

This section applies only when a citizen participation plan is required by the ordinance codified in this section.

- A. The applicant shall provide a written report on the results of their citizen participation effort prior to the notice of public hearing. This report will be attached to the Planning Department's public hearing report.

B. At a minimum, the citizen participation report shall include the following information:

1. Details of techniques the applicant used to involve the public, including:
  - a. Dates and locations of all meetings where citizens were invited to discuss the applicant's proposal;
  - b. Content, dates mailed, and numbers of mailings, including letters, meeting notices, newsletters and other publications;
  - c. Where residents, property owners, and interested parties receiving notices, newsletters, or other written materials are located; and
  - d. The number of people that participated in the process.
2. A summary of concerns, issues and problems expressed during the process, including:
  - a. The substance of the concerns, issues, and problems;
  - b. How the applicant has addressed or intends to address concerns, issues and problems expressed during the process; and
  - c. Concerns, issues and problems the applicant is unwilling or unable to address and why.

**3. Encinitas, California, Municipal Code, Citizen Participation Plans  
Chapter 23.06, Citizen Participation Plans (Ord. 2002-11)**

**23.06.010 Purpose**

The purpose of the citizen participation plan is to:

- A. Ensure that applicants pursue early and effective citizen participation in conjunction with their applications, giving them the opportunity to understand and try to mitigate any real or perceived impacts their application may have on the community;
- B. Ensure that citizens have an adequate opportunity to learn about applications that may affect them and to work with applicants to resolve concerns at an early stage of the review and decision-making process;
- C. Facilitate ongoing communication between the applicant, interested citizens, city staff, appointed and elected officials throughout the applicant review process.
- D. The citizen participation plan is not intended to produce complete consensus on all applications, but to encourage applicants to be good neighbors and to allow for informed decision-making.

**23.06.020 Applicability**

- A. Every application for development or construction that requires a discretionary permit or administrative review shall include a citizen participation plan that must be implemented prior to the first public hearing or notice of public review and comment period on an administrative application. Every City-sponsored capital improvement project shall also include a citizen participation plan that must be implemented before final approval or award of a construction bid.
- B. When in compliance with all other City ordinances and regulations, the following projects are exempted from the other provisions of this Chapter:
  1. Construction of one single-family detached dwelling, not within the Coastal Appeal Zone, provided that no discretionary permit or administrative review is required other than a Coastal Development Permit.
  2. Signs.
  3. Sign Programs.
  4. Certificates of Compliance.
  5. Extension Requests.
  6. Lot Line Adjustments.
  7. Ministerial Applications.

**23.06.030 Plan Contents**

- A. The Citizen Participation Plan shall include the following information:
  1. Which residents, property owners, interested parties, political jurisdictions and public agencies may be affected by the application;
  2. How those parties identified in paragraph (1.) above will be notified that an application has been made;

3. How those parties identified in paragraph (1.) above will be informed of the substance of change, amendment, or development proposed by the application;
  4. How those identified in paragraph (1.) above will be provided an opportunity to discuss the applicant's proposal with the applicant and express any concerns, issues, or problems they may have with the proposal in advance of the public hearing or public review and comment period;
  5. The applicant's schedule for completion of the Citizen Participation Plan;
  6. How the applicant will keep the Community Development Department informed as to the status of his/her citizen participation efforts;
- B. The level of citizen interest and area of involvement will vary depending on the nature of the application and the project's location. The applicant will determine the target area for early notification after consultation with and approval of the Community Development Department.
1. In no case shall the notification area be less than that required in other sections of the Municipal Code.
  2. The applicant shall notify registered neighborhood or homeowners' associations within the public notice area required by other sections of the Municipal Code.
  3. The applicant shall notify other interested parties who have requested in writing that they be placed on the interested parties notification list maintained by the Community Development Department.
  4. The applicant shall notify any other persons, organizations or agencies as deemed appropriate after consultation with the Community Development Department.
- C. These requirements apply in addition to any notice provisions required elsewhere in the Municipal Code.
- D. At the applicant's discretion, applicant may submit a citizen participation plan, along with the required processing fee, and begin implementation prior to the formal application submittal. However, this shall not occur until after the required pre-application consultation with Community Development Department staff.

#### **23.06.040 Citizen Participation Report**

- A. When a Citizen Participation Plan is required, the applicant shall provide a written report, satisfactory to the Director of Planning and Building, documenting the results of the citizen participation effort prior to the notice of public hearing or notice of public review and comment period on the application. This report shall be made [*sic*] a part of the administrative record. (Ord. 2003-08).
- B. The Citizen Participation Report shall describe the methods the applicant employed to involve the public, including:
1. Dates and locations of all meetings where citizens were invited to discuss the applicant's proposal;
  2. The content, dates mailed, and number of mailings, including letters, meeting notices, newsletters and other writings;
  3. A description of where residents, property owners and other interested parties receiving notices, newsletters, or other written materials are located; and
  4. The number of people who participated in the process.
- C. The report shall summarize the substance of concerns, issues and problems expressed during the process.
- D. The report shall describe how the applicant has addressed, or intends to address the concerns, issues and problems expressed during the process.
- E. The report shall identify which concerns, issues and problems the applicant is unwilling or unable to address, if any, and shall state why.

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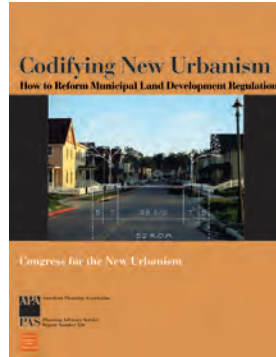


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## Codifying New Urbanism

PAS 526. 2004. 97 pp. \$48.

Heavily illustrated and in full color, this report explains new urbanism essentials, the steps to putting new urbanism to work in your community, and the successes of 12 communities that have followed the approaches described in the report. Written by the Congress for New Urbanism, it also contains an extensive interview with a practitioner about his experience in championing and implementing new urbanism. Finally, it includes a survey of communities using new urbanism.

## Too Big, Boring, or Ugly

PAS 528. Lane Kendig. 2005. 103 pp. \$48.

Cookie-cutter boxes line up like plastic houses on a Monopoly board. Brawny new construction shoulders into established neighborhoods. Monster houses crowd together in new subdivisions. Today's bigger, faster, cheaper home-building methods are changing the character of communities, but there are ways to both preserve character and meet market demand. This report offers planning and design tools to tame the too big house, shake free of monotonous development, and negotiate the political minefield of teardowns.



## Project Rating/Recognition Programs

PAS 538. Douglas R. Porter and Matthew R. Cuddy. 2006. 48 pp. \$44.

What is smart growth? Communities that want to implement smart growth need criteria and standards for evaluating the extent to which proposed developments qualify as smart growth. Learn how to create project rating systems that help turn smart growth principles into built projects. This report describes ratings systems used by various organizations and evaluates their effectiveness. It also explains how such systems can be used to educate the public and officials about smart growth, and how to use them in recognition and awards programs.



## Fair and Healthy Land Use

PAS 549/550. Craig Anthony Arnold. 2007. 159 pp. \$64.

Lawsuits challenging the disproportionate effects of government decisions on low-income and minority communities are on the rise. Studies show that low-income families and racial minorities are more likely to suffer from health issues related to pollution. As a result, environmental justice groups are fighting the siting of LULUs (locally unwanted land uses) in low-income and minority communities on the basis of environmental justice principles. Find out what these principles are and learn how to incorporate them into your planning processes.

