

## APPENDIX A

# A Primer on Growth Management Tools and Techniques



Traditional elements in the growth management process include:

- Planning, such as preparing a comprehensive plan, which may include specific small area plans such as a downtown plan or a commercial corridor plan, and specific functional elements or plans such as housing, open space, historic preservation, recreation, and transportation elements;
- Implementing regulations and strategies, such as zoning regulations, subdivision ordinances, and land acquisition programs; and
- Capital improvements planning and budgeting, and scheduling future investments in public facilities such as streets, sewer collection and transmission lines, and parks.

The growth management process can involve the following:

1. Determination of community goals, objectives, and policies;
2. Analysis of the community's existing or *de facto* growth policies;
3. Inventory of available growth management tools and techniques;
4. Adaptation of appropriate tools and techniques for the community;
5. Synthesis of selected tools into a system for managing growth; and

6. Continued monitoring of and refinements to the system over time.<sup>1</sup>

The effect of implementing growth management tools and changing market conditions creates the need to reevaluate and modify the land use plan, which in turn leads to further refinements to the various growth management tools. This process varies considerably from place to place and rarely proceeds in the orderly manner intended: growth management tools are often implemented long before plans are adopted; permit decisions are made that undermine local plans.

### Planning

"Land use planning" is a broad term. According to the American Planning Association:

Planning is a comprehensive, coordinated and continuing process, the purpose of which is to help public and private decision makers arrive at decisions which promote the common good of society. This process includes:

- (1) Identification of problems or issues;
- (2) Research and analysis to provide definitive understanding of such problems or issues;
- (3) Formulation of goals and objectives to be attained in alleviating problems or resolving issues;
- (4) Development and evaluation of alternative methods (plans and programs) to attain agreed upon goals and objectives;
- (5) Recommendation of appropriate courses of action from among the alternatives;

- (6) Assistance in implementation of approved plans and programs;
- (7) Evaluation of actions taken to implement approved plans and programs in terms of progress towards agreed upon goals and objectives; and
- (8) A continuing process of adjusting plans and programs in light of the results of such evaluation or to take into account changed circumstances.<sup>2</sup>

Ideally, a local comprehensive plan is a product of this planning process. Additionally, a comprehensive plan is not static, but must be updated regularly in response to the effect of growth management strategies and changing community conditions.

A comprehensive plan should embody a community's vision of what it wants to become and how it intends to get there.\* This vision should serve as an overall policy guide for public and private decisions that affect community development, including the implementation of land use regulations and other growth management strategies.

In fact, however, this process rarely proceeds as rationally as intended. Zoning ordinances and other growth management strategies are often revised or implemented without the benefit of prior revision to a comprehensive plan. Permit decisions that undermine community plans and goals are common. However, the degree of inconsistency between plans and other growth management techniques varies considerably from state to state and community to community.

A representative table of contents for a plan for a small community might include the following elements:

- Description of the planning process;
- Statement of community goals, objectives, and policies;
- Inventory of the community's natural and cultural assets, and assessment of possible threats to these assets;
- Description of existing community conditions, with special focus on the downtown, principal commercial corridors, and other key areas of the community;

\* "Comprehensive plans" are referred to by various terms including "plan of development," "master plan," and "community plan." Traditional comprehensive plans are of the "physical" variety, i.e., they specifically identify appropriate land uses for individual parcels of land. Alternatively, some communities have adopted so-called "policy plans," which enumerate long-range objectives intended to guide future community development and serve as broad guidelines for specific land use regulations. A common approach is to merge the physical and policy approaches into a hybrid overall plan.

- Description of existing and projected:
  - Land use patterns;
  - Transportation and traffic circulation conditions;
  - Public safety conditions and facilities;
  - Housing supply, mix, and future housing demand;
  - Utility service conditions and facilities (water, sewer, solid waste, and energy);
  - Open space and natural resource conditions;
  - Recreation conditions and facilities;
  - Economic conditions and assets, and economic development and redevelopment prospects;
  - Historic preservation efforts;
- Projections of how development at permitted densities will affect the community's appearance, character, natural resources, cultural assets, economic development, fiscal conditions, and public services;
- Description of environmental constraints to development; and
- Description of future capital facilities planning and budgeting.

In many states, the minimum contents of local plans are mandated by state statute. While qualitative measures of the adequacy of local plans are difficult to legislate, evaluation of the adequacy of a comprehensive plan should focus on such questions as:

- Are planning goals, objectives, and policies clearly articulated with priorities set forth?
- Are the goals, objectives, and policies internally consistent? Is there coordination between the various elements?
- Is the plan based upon the results of a broad and meaningful public participation process?
- If maps are included, do they clearly identify land uses and the other geographic aspects of the plan? Do the maps accurately capture local geography and existing physical conditions?
- Are the economic, environmental, and public service assumptions underlying the plan clearly identified? Are they realistic?

### Specific Growth Management Techniques

Planning is but one of the numerous local tools available to manage growth. The preparation and adoption of a comprehensive plan is, in fact, only the beginning of the growth management process.<sup>3</sup> Plans are not self-executing, they can be implemented only through land use regulations, capital facilities spending, land

acquisition, and other strategies. These growth management techniques can be grouped into four basic categories:

- Land use regulations;
- Public spending and taxing policies;
- Land acquisition; and
- Private voluntary preservation and development techniques.

Although the techniques commonly appear as discrete options, most successful growth management programs, in fact, combine several separate techniques. Successful communities continually experiment with adapting various complementary strategies and techniques to meet their particular needs, which are constantly evolving.

## LAND USE REGULATIONS

The authority for local land use planning and regulation is derived from the "police power" that authorizes states to enact laws to protect the public health, safety, and general welfare. States have delegated substantial portions of this broad regulatory authority to local governments. The most important and promising regulatory techniques for managing growth include zoning (in its numerous permutations); height limits; cluster zoning and planned unit development; subdivision regulations; exactions; adequate public facilities ordinances; transfer of development rights; and moratoria.

### Zoning

Zoning is the most commonly used local device for regulating the use of land. Initially developed in the early part of this century basically to insulate residential neighborhoods from the negative impacts of industrial development, the essence of the traditional "Euclidian" zoning ordinance remains the physical separation of potentially incompatible land uses.\*

Zoning regulates the use of land and structures—for example, commercial versus residential—and the dimensional characteristics of permitted uses, such as minimum lot sizes, the placement of structures on lots (i.e., minimum setbacks from street or property lines), the density of development, and the maximum height of buildings. In addition, zoning ordinances increas-

ingly regulate nondimensional aspects of development such as landscaping, architectural design and features, signage, traffic circulation, and storm-water management.

Zoning ordinances consist of a text and a zoning map. The text describes permitted uses in the various districts, establishes standards for uses within these districts, and provides for administration and enforcement. The map divides the jurisdiction into districts. Changes to a zoning ordinance text or map occur through an amendment process that is initiated either by the local government, a landowner, or, in some cases, by local residents.

Conventional zoning promotes strict segregation of uses and predictable dimensional and density regulations. From this orderly and static pattern, land use regulation has evolved into a system of numerous techniques designed to balance the predictability of conventional zoning with administrative flexibility, discretionary review of individual developments, and specialized techniques to meet particular local needs.

**Special Permits.** Special permits (also referred to as conditional uses or special exceptions) are the most widely used device allowing individual review and approval of proposed developments that require individual scrutiny to avoid or alleviate particular problems. In most zoning ordinances, uses are permitted within a district either "by right," with no individual discretionary review of the proposed development, or by special permit, in which case a zoning board reviews individual proposals in accordance with standards set forth in the ordinance. The special permit is available if the proposal adequately complies with the provisions in the ordinance, which typically deal with traffic and other impacts of the proposal.

A special permit should be distinguished from a variance, which is an individual exemption from zoning requirements. Variances typically are allowed when the impact of a zoning requirement would impose an undue hardship on a landowner due to unique conditions of the individual parcel. In many cases, variances may be granted from dimensional standards, but not use limitations.

**Floating Zones.** Floating zones serve the same purpose as special permits, but provide the locality with more discretion. The standards for a floating zone are set forth in the text of a zoning ordinance, but the district is not mapped; rather the district "floats" above the community until a second, later ordinance amendment brings the zone to the ground. The second ordinance affixes the floating zone to a particular par-

\* So named because the zoning ordinance of the Village of Euclid, Ohio, was the subject of an early landmark decision from the U.S. Supreme Court that upheld the validity of zoning. *City of Euclid v. Ambler Realty Company*, 272 U.S. 365 (1926).

cel that meets the standards set forth in the zoning text for the district.

The floating zone technique gives a locality greater discretion over a proposed use than does a special permit. A decision on a proposed rezoning to apply the floating zone is a legislative function in most states and is rarely overturned by the courts; while a special permit application is an administrative function and must be granted if the proposed use is shown to meet the stated criteria.

*Conditional Zoning and Development Agreements.* Sometimes a landowner may seek a rezoning, but the locality is unwilling to permit the whole range of uses or densities that the proposed zoning classification would allow. Instead of denying the rezoning, the local government may wish to impose conditions on the prospective rezoning. With conditional zoning, a local government may make rezoning conditional on an applicant's acceptance of concessions or conditions that are not otherwise imposed in the proposed zoning district. The applicant makes a unilateral commitment to these concessions in exchange for the rezoning; however, the local government makes no reciprocal obligation to rezone the property. Many states have upheld the use of conditional zoning, while several others have rejected its use.

Contract zoning also permits a locality to impose individual conditions on a rezoning, but—unlike conditional zoning—the municipality, in exchange, enters into an enforceable agreement to grant the desired zone change. In many states, contract zoning has been held invalid, because the locality bargains away its police power without state enabling legislation to do so.

A growing number of states (including California, Maine, Hawaii and others) have enacted legislation authorizing contract zoning or "development agreements" to regulate large-scale development. Development agreements typically are enforceable agreements between a developer and a local government, which lay out precisely the land uses and densities a developer may place on a large parcel and the public benefits the developer must provide as a condition of approval. The use of development agreements allows a single "master" approval for a large-scale, phased development. This approach provides developers and lending institutions the certainty of knowing early in the development process the amount and type of development authorized. Development agreements often also provide that the developer's right to complete all phases of a project vests earlier than it would in the absence of the agreement, which benefits developers when arranging financing. In exchange for this regulatory certainty, the local government may negotiate

with the developer for a better package of public benefits than it could otherwise obtain.

*Bonus or Incentive Zoning.* Bonus or incentive zoning allows a developer to exceed a zoning ordinance's dimensional limitations if the developer agrees to fulfill conditions specified in the ordinance. The classic example is when an ordinance authorizes a developer to exceed height limits by a specified amount in exchange for providing open spaces or plazas adjacent to the building.

*Overlay Zones.* This zoning technique differs from conventional mapped zoning districts. An overlay zone applies a common set of regulations and standards to a designated area that may cut across several different preexisting conventional zoning districts. These regulations and standards apply in addition to those of the underlying zoning district. Two common examples of overlay zones are the flood zones created under the National Flood Insurance Program and many historic districts.

Flood zones often are described in local zoning ordinances, but are not initially mapped on the zoning map. Rather, the ordinance provides that the flood district regulations apply to areas within the 100-year floodplain, as designated in federal Flood Insurance Rate Maps. An overlay flood zone may allow the uses and densities permitted in the underlying zone, but impose additional construction and flood-proofing requirements.

Overlay historic districts often permit the uses and densities permitted in the underlying zone, but require that structures within the historic district be built or maintained in conformance with regulations to ensure historic compatibility.

*Large Lot Zoning.* Large lot zoning or minimum lot size zoning—requiring that lots in a residential zone be at least, for example, 5 acres and in some cases as much as or more than 40 acres—is often used to reduce the density of residential development. The environmental and economic effects of large lot zoning vary with the specific situation. When used judiciously in areas with significant development constraints, large minimum lot size zoning can effectively reduce the negative impacts of development on sensitive landscapes or natural resources. To work effectively, large lot zoning must usually be used in combination with regulations that accommodate market demand in other more suitable areas. Overreliance on large lot zoning, however, often encourages land consuming and inefficient low-density sprawl.

*Agricultural Zoning.* Agricultural zoning establishes minimum parcel sizes large enough to ensure

that each parcel can sustain a viable agricultural operation. Some districts require minimum lot sizes of as much as 160 acres. Agricultural districts often also prohibit land uses that are incompatible with agriculture. (This technique is discussed in chapter 1, *Agricultural Land*.)

**Zoning Based on Performance Standards.** Zoning regulations often use performance standards to regulate development based on the permissible effects or impacts of a proposed use rather than simply the proposed dimensions. The complexity and sophistication of these standards vary widely, depending on the objectives of the program and the capacity of the locality to administer a complex program. Performance zoning may supplement or replace traditional zoning districts and dimensional standards. Under performance zoning, proposed uses whose impacts would exceed specified standards are prohibited.

Performance standards are widely used to regulate noise, dust, vibration, and other impacts of industrial zones, and are increasingly used to regulate environmental impacts, such as the limiting of storm-water runoff resulting from development.

**Point Systems.** Some communities use performance standards in combination with point systems. A proposed project must amass a minimum number of points in order to receive a permit. As opposed to the self-executing nature of conventional zoning, where a landowner can determine if a project is permissible by reading the zoning map and text, point systems require case-by-case review to determine if a specific land use is permissible. Permissible uses and densities of a parcel are determined at the time of permit application, with the applicant providing documentation that the proposal will comply with the various standards. Breckenridge, Colorado, has implemented a well-known development point system.

### **Height Limits**

Localities limit building heights either townwide or by zoning district. In addition, height restrictions are sometimes used in conjunction with site-specific standards to prohibit structures that would be visible from scenic points or would block scenic views. (This technique is discussed in chapter 4.)

### **Cluster Zoning and Planned Unit Development**

"Cluster zoning" (also known as "open space zoning") and the "planned unit development" (PUD) describe land use control devices that allow flexible design and clustering of development in higher densities on the most appropriate portion of a parcel in order to pro-

vide increased open space elsewhere on the parcel. These techniques, which exist in many forms, have become increasingly popular as more communities realize that conventional zoning and subdivision regulations often result in unsightly low-density sprawl with no intervening open space. These alternative clustering techniques can offer several benefits relative to conventional zoning, including:

- Limiting encroachment of development in and adjacent to environmentally sensitive areas;
- Reducing the amount of open land disturbed by development, thereby encouraging the preservation of agricultural lands, woodlands, and open landscapes;
- Reducing the amount of roads and utility lines needed for new development, which can reduce the cost of housing and public services.

Cluster development techniques typically do not allow increased overall development density, but simply rearrange development to preserve open land and improve site design. The concept can be demonstrated by a simple example of cluster development: a developer has 100 acres in an area zoned for one-half-acre residential lots, which could be developed into around 200 buildable lots, using up the entire 100 acres. Under a cluster zoning program, the developer could cluster the 200 units on 50 acres, for example, and permanently dedicate 50 acres of open space for public use.

A recent publication of the Center for Rural Massachusetts, *Dealing with Change in the Connecticut River Valley: A Design Manual for Conservation and Development* (cited at the end of this appendix), provides excellent demonstrations of clustering techniques and shows with aerial graphics how cluster development improves the landscape relative to development under conventional zoning regulations.

### **Subdivision Regulations**

Subdivision regulations are widely used to regulate the conversion of land into building lots. In rural communities, they are often the principal or only means by which a community regulates residential development.

Subdivision regulations were originally enacted primarily to facilitate land transfer by providing a method for landowners to file a subdivision plat with numbered lots, rather than with the traditional metes and bounds lot descriptions. In the 1920s and 1930s, cities began to use these regulations to manage the quality of streets, storm drainage systems, lot layout, and the adequacy of utility services. Typically, subdivi-



vision ordinances articulate design standards and materials for streets and utility systems, site topography, sidewalks, curbs and gutters, storm-water management, landscaping, open space, and recreational facilities. More recently, subdivision regulations have been widely used not only to improve the engineering and physical design of on-site public improvements, but also to require the provision of dedicated recreational lands, off-site road improvements, and other public services.

#### ***Development Exactions and Impact Fees***

"Development exaction" is a generic term that describes a variety of mechanisms by which communities require dedication of land or facilities or payment of a fee in lieu of land or facilities. Exactions are referred to by many names, including "dedications," "linkage requirements," "mandatory tithing," and "mitigation requirements." Exactions are either explicitly mandated in development regulations or imposed informally on a case-by-case basis in rezoning or special permit negotiations. Impact fees require a developer to pay an amount of money determined by a uniform formula rather than by negotiation or tradition.

Traditionally, exactions have required subdivision developers to provide on-site infrastructure such as roads, parks, sewer lines, and drainage facilities. Realizing that to require certain on-site improvements such as parks might be inefficient or inequitable, many communities began to require developers to pay fees in lieu of improvements in certain situations. These fees are then earmarked for providing those facilities to serve the development.

Recently, municipalities have begun imposing impact fees to finance an expanding variety of public facilities and services in virtually all regulatory contexts. Martin County, Florida, for example, has enacted a Beach Impact Fee Ordinance, which requires developers to contribute to a fund, based upon the projected recreational demand resulting from the proposed development, to purchase and maintain public beachfront property.

Financially strapped large cities have been most aggressive in imposing development exactions, requiring developers of large projects to pay impact or linkage fees for numerous public services. San Francisco, for example, requires developers of large-scale downtown projects to pay impact fees for affordable housing, transit, public parks, and child care. Boston imposes fees for both housing and job training. In Honolulu, developers of large projects commonly must pay for off-site sewer improvements, park land and facilities, on-site and off-site road and transportation system improvements, police and fire protection

facilities, school sites and buildings, on-site or off-site affordable housing, water supply infrastructure (perhaps including reservoirs), and employment programs for area residents. San Diego finances capital facilities for suburban development through "flexible benefits assessments," which combine impact fees and special assessments. These fees finance parks, roads, libraries, schools, utilities, drainage systems, transit service, and police and fire protection. (The legal limitations on the use of exactions and impact fees are discussed in chapter 2.)

#### ***Adequate Public Facilities Ordinances***

This type of ordinance conditions development approval upon a finding that adequate public facilities are available to serve proposed development. The ordinance sets quantitative standards for required public service levels and links development approval to the ability of public services that serve the proposed development to comply with these standards. The public services that have the most significant impact on development decisions are water, sewer, and the traffic circulation network. Other public services sometimes linked to development approval are storm-water management facilities, parks and recreational lands, emergency response time, and mass transit. Florida requires all local governments to adopt adequate public facilities standards. After the state approves a local plan and development regulations, the local government cannot issue development permits unless public services can be provided for the development at the established level of service.

#### ***Transfer of Development Rights***

Transfer of development rights (TDR) is an innovative growth management technique based on the concept that ownership of land gives the owner many rights, each of which may be separated from the rest and transferred to someone else. One of these separable rights is the right to develop land. With a TDR system, landowners are able to retain their land, but sell the right to develop the land for use on other property.

Under a typical TDR program, a local government awards development rights to each parcel of developable land in the community or in selected districts, based on the land's acreage or value. Persons can then sell their development rights on the open market if they do not want to develop their property or are prohibited by regulation from developing the property at a desired density. Land from which development rights have been sold cannot be developed.

There are many possible variations on TDR, but a system can work in the following way. Suppose A owns four acres of land that has been allocated two development rights. If local regulations require A to

have one right per acre in order to fully develop the land, A has three choices. A can develop just two acres and expend all the development potential for the parcel; A can buy two development rights on the market and develop the entire four acres; or A can sell the two rights at a market-determined price and preclude any development of the property. If the land is in an agricultural or historic district, regulations may restrict development of the parcel, in which case A can only develop the parcel at a low density and sell the balance of the development rights for use on another site.

TDR can reduce substantially the value shifts and economic inequities of restrictive zoning. For example, it can allow the market to compensate owners whose land cannot be developed because of its environmental, scenic, or historic significance. By selling development rights, a landowner can receive profit from property appreciation without developing the parcel.

TDR requires a high level of staff expertise to design and administer. The novelty of the TDR concept and the sophistication required to make it work properly reduces its attractiveness and political acceptance in many communities.\*

#### ***Moratoria and Interim Development Regulations***

Moratoria and interim regulations are designed to substantially restrict development for a limited period. They can impose a complete temporary moratorium on all development or on specific types of intensive development. A moratorium can apply to zoning approvals, subdivision approvals, and building permits.

Restrictive interim regulations must generally relate to one of two permissible goals. Either they must relate to planning—used to restrain development until a plan can be developed or a permanent growth management program implemented—or necessary to protect public safety, health, or the environment by preventing potentially hazardous overburdening of community facilities (such as a sewage treatment facility). The duration of a moratorium should be specified when enacted, and should be tied to the time period necessary to develop a plan, implement a growth management program, or upgrade public facilities related to the relevant safety or environmental problem.

#### **LOCAL SPENDING AND TAXING POLICIES**

Although not traditionally viewed as methods of managing development, local expenditure and property taxation policies may have significant impacts on land

use. Public facilities such as roads, water systems, sewers, and public transit can especially influence the level and characteristics of development in a community. A local growth management strategy is incomplete unless it accounts for these influences.

#### ***Capital Improvements Programming***

The provision of municipal services is an important local tool for managing development. A municipal decision whether to extend or expand public utilities or facilities strongly influences the economic feasibility of most large private development projects. The extension of municipal services is generally governed by a city's capital improvements program (CIP), a timetable by which a city indicates the timing and level of municipal services it intends to provide over a specified duration. Generally, the CIP covers a five- to ten-year period, although it may be shorter or longer depending upon the municipality's confidence in its ability to predict future conditions.

Capital programming, by itself, influences land development decisions. By committing itself to a timetable for expansion of municipal services, a locality influences development decisions to some extent, especially in areas where on-site sewage disposal or water supply is unusually expensive or infeasible. A capital program may also be used effectively as part of a more comprehensive program to manage development. By properly coordinating its utility extension policy with its planning and growth management program, a community can control the direction and pace of development. Using a comprehensive plan to delineate the location and type of development desired and a capital program to schedule the provision of services, a locality can inform developers when development of a particular parcel will be encouraged and the type of development that will be allowed. In addition, a municipality can regulate the pace of development to coincide with the availability of adequate public services.

#### ***Preferential Assessment***

Most states have enacted preferential or use-value property tax assessment programs for farmland and open space land. With use-value assessment, property taxes for a parcel are based upon the value of the parcel only considering its current use, rather than its value based upon the property's development potential. Use-value assessment can reduce the property tax assessments for lands whose value for development purposes exceeds its value for agricultural or forestry uses. Reduced property tax assessments can lessen the need to sell or develop sometimes caused by high property taxes. (These programs as they relate to agricultural resources are discussed in chapter 3.)

\* Montgomery County, Maryland, has implemented perhaps the most successful TDR program with approximately 20,000 acres preserved for farmland due to the program. The program is described in a profile in chapter 1.

**Special Assessments**

The special assessment is the local taxation technique that has the greatest potential impact on growth management policy. A special assessment, while not technically a tax, is a method of raising revenue in which all or part of the cost of a facility is charged to a landowner who derives a special benefit from the facility. Special assessments are often used for road improvements, street lighting, off-street parking, sewers, and water systems. The fee is usually proportionate to the distance the facility abuts a parcel, the area of the land served by the facility or improvement, or the value added to the land served.

**Improvement Districts**

Special improvement districts have been created in many forms to raise revenue for traffic circulation improvements, aesthetic improvements, or other public improvements within a limited area. Landowners within a specified district are levied a special tax or assessment (sometimes through tax increment financing), which is used to make public improvements that benefit that district.

**LAND ACQUISITION**

Local governments enjoy broad authority under state enabling legislation to acquire real property interests, either through voluntary sale or condemnation, for any legitimate public purpose. Land acquisition is an important supplement to land use regulations as a means of managing growth and protecting critical resources. Although localities generally use land acquisition to directly control the use of the specific parcel acquired, several communities have used land acquisition to influence the community's general growth policies. For example, Boulder, Colorado, has used the proceeds of local bond issues and a local sales tax to acquire a large amount of land in the foothills and farming districts surrounding the city to prevent environmentally destructive and fiscally unsound development of these areas. (This program is discussed in chapter 1.)

Local land acquisition programs are generally funded either by local property taxes, sales taxes, or real estate transfer taxes. Bond issues backed by one of these taxes are commonly used. Nantucket, Massachusetts, and Block Island, Rhode Island, for example, impose a 2 percent conveyance tax on most transfers of real estate to fund local open space acquisition programs. (The federal Land and Water Conservation Fund and, more recently, state land acquisition programs have also been important revenue sources for recreational land acquisition and improvement programs.)

**Fee Simple Acquisition**

The ownership of land is often analogized to ownership of a "bundle of rights," including, for example, the right to control access to the land, the right to develop property, the right to mine coal from beneath the land, the right to hunt on the land, and so forth. (Each of these are subject to reasonable police power regulations.) When one person owns all the rights associated with a parcel (the entire bundle), this person is said to own the land "in fee simple"; however, these rights can be owned separately, in which case an owner is said to own a "less-than-fee interest."

Local governments generally acquire fee simple ownership for parks and other property needed for municipal uses, such as for schools or landfills. Fee simple acquisition provides the greatest level of control over the use of a parcel; however, it is also usually the most expensive method of land acquisition. In addition to the substantial acquisition costs, fee simple acquisition removes property entirely from local tax rolls and can result in significant maintenance costs. For these reasons, localities and land trusts often prefer alternative land protection techniques to full ownership in fee.

**Acquisition of Easements**

The acquisition of easements constitutes a particularly useful tool for many local governments and land trusts. Easements are effective devices for preserving sensitive lands, providing public access along rivers or greenways, and allowing landowners to obtain income, estate, and property tax benefits for land stewardship while they continue to live on their land.

Easements are among the distinct property rights that may be sold separately from the other rights (in other words, "separated from the fee"). Easements can be divided into two categories: affirmative or negative. The owner of an affirmative easement has the right to do something with or on property belonging to someone else. An affirmative easement, for example, may authorize a utility company to place electric lines across someone's property or may authorize the public to pass over property to a riverside fishing spot.

The owner of a negative easement has the right to prohibit certain activities on property belonging to someone else. A negative easement may prohibit a landowner from constructing a building that would interfere with a scenic view from a neighboring parcel. A negative easement—for instance, an easement that prohibits development but allows a landowner to continue to farm and live on a parcel—may provide many of the same public open space benefits as full fee acquisition, but can generally be acquired at a substantially lower cost than a fee interest. In addition, management costs are usually assumed to a large de-



gree by the private landowner, rather than by the public agency or land trust that holds the easement. Another fiscal advantage of easements is that the land remains on the tax rolls, albeit at a reduced value. Negative easements, however, may create long-term administrative, enforcement, and maintenance costs.

Easements may also be characterized as "appurtenant to the land" or "in gross." An appurtenant easement benefits one parcel of land (the "dominant estate") at the expense of another parcel (the "servient estate"). Usually these parcels are adjacent. For example, an appurtenant easement may grant the owner of the dominant estate access over an adjoining parcel to a county road. An easement in gross exists for the benefit of the person who owns the easement, regardless of whether that person owns any nearby land that is benefited. There is a strong presumption that if an easement is not clearly in gross, it is appurtenant.

The rules governing conveyance of appurtenant easements often differ from those governing easements in gross. When a parcel benefited by an appurtenant easement is sold, the benefits of the easement pass with the land to the new owner, even if the deed does not mention the easement. The benefits created by an easement in gross do not, by comparison, pass automatically to a new owner when the property is transferred. In some states, easements in gross are not recognized or are not transferrable to another person. Under traditional legal doctrines in many states, easements, and especially easements in gross, were difficult to enforce for various reasons. Because of these difficulties, almost all states have passed specific statutes authorizing conservation easements.

**Conservation Easement Statutes.** Conservation easement statutes clarify the ambiguities and remove the barriers to enforcement of certain easements. These statutes set forth rules governing the definition, creation, transfer, and enforcement of easements created to conserve land or buildings. Although conservation easement statutes vary from state to state, some of the more important provisions typically found in conservation easement statutes include the following:

- **Definitions.** Most states define conservation easements to include a broad spectrum of property interests that restrict the development, management, or use of land. Typically, easements may be created to retain land in its natural condition, to provide recreational access, or to preserve and maintain the land's historic or architectural character.
- **Creation and Transfer.** Conservation easements must be created in writing. Some states require that conservation easements must be held by govern-

mental agencies or be approved by a central authority (for example, the secretary of environmental affairs in Massachusetts) and that conservation easements held by nonprofit corporations or trusts be approved by the relevant local government.

- **Permitted Holders.** Many states authorize only certain types of entities to hold conservation easements. These entities usually include governmental agencies, land trusts, corporations, and other entities whose purposes include conservation or preservation.
- **Enforcement.** The most important benefits of conservation easement statutes involve granting clear validity to conservation easements and eliminating most of the technical barriers to enforcement of conservation easements.
- **Relation to Nonstatutory (Common Law) Easements.** Some statutes are more comprehensive than others. If a state statute does not address a common law defense to enforcement, a conservation easement would still be subject to the defense, such as the defense that an easement in gross cannot be transferred.

#### PRIVATE VOLUNTARY LAND PROTECTION TECHNIQUES

Land acquisition and conservation techniques available to local governments or private nonprofit organizations can provide an important complement to local regulatory and public spending measures. A public or private land trust can use a range of land acquisition and conservation techniques, singly or in combination, to meet local conservation and growth management objectives. In towns such as Nantucket, Massachusetts, Block Island, Rhode Island, and Davis, California, municipalities have established local land trusts as municipal or quasi-municipal entities. These land trusts participate in the private real estate market as representatives of the public interest and use the range of voluntary land conservation techniques available to private land trusts.

The two most important private land protection techniques used by land trusts to protect land or historic buildings are fee simple acquisition and acquisition of easements.

Although land or easement acquisition are the conservation techniques most commonly employed by land trusts, there are many other private voluntary land protection tools to consider.\*

\* This section is comprised, in part, of material reprinted by permission of the California State Coastal Conservancy, from Stephen F. Harper, *The Nonprofit Primer: A Guidebook for Land Trusts* (Oakland, CA: California State Coastal Conservancy, 1984).

of a parcel, it may be wise for its deeds and other title documents to provide for transfer of the title to a public agency or to a larger local, regional, or national land trust if the trust itself ceases to exist or is unable to manage its holdings.

### **Limited or Controlled Development**

Increasingly employed by innovative land trusts, this technique typically entails clustered development or other limited development of a portion of a parcel in order to finance acquisition and preservation of the balance of the parcel. Development is generally limited to nonsensitive or previously disturbed portions of a parcel. Limited development (also called "controlled development" or "creative partial development") can permit land stewardship and substantial resource protection in situations when donation is not possible and acquisition for full preservation is not financially feasible. Limited development is often feasible because building lots or houses adjacent to restricted open space are frequently more valuable than otherwise.

This tool often lends itself to the formation of a partnership for joint development between the trust and a landowner. In such partnerships, the latter provides the land and the land trust provides planning and land protection expertise, community goodwill, assurance that the open space portions of the property will be permanently protected from development, and development capital. (See the profile of the Housatonic Valley Association in chapter 2 for an example of successful limited development.)

When considering limited development, a land trust should obtain professional assistance from bankers, builders, real estate agents, and other development professionals to determine whether development at the density necessary to finance the acquisition is feasible from a financial perspective. This tool is only appropriate for parcels of sufficient size and with appropriate conditions to allow creative partial development without endangering the resources that are worthy of protection. Finally, before undertaking limited development, a land trust should ensure that its proposed actions will not endanger its mission and public reputation as a conservation organization. The public that volunteers time and donates money may not readily accept the limited development concept, especially without an educational effort by the land trust.

### **Conservation Investment**

Many real estate development ventures are financed through syndications, in which numerous individuals or entities join together to finance a project. In return, the investors receive some combination of periodic

income, capital gain upon resale, and, perhaps, significant tax benefits. This technique can be adapted for land conservation. Although the Tax Reform Act of 1986 reduced the income tax advantages of most types of real estate investments, creative tax-saving arrangements are still possible.

In some cases, a land trust may sell property subject to appropriate deed restrictions or conservation easements to a buyer looking for an aesthetically pleasing place to live or own a vacation home. In other cases, "charitable investors" may be persuaded to invest in a working farm, fishing preserve, or ranch with deed restrictions to allow only agriculture, forestry, or other open space uses. Investors would receive a percentage of the operation's income and tax benefits (for example, through depreciation of capital assets, deductions for business expenses, or deductions for mortgage interest payments) as well as the satisfaction of knowing they have helped conserve open land.

## **INFORMATION RESOURCES**

Babcock, Richard F., and Charles L. Siemon. *The Zoning Game Revisited*. Boston: Lincoln Institute of Land Policy, 1985.

Updated version of a classic book on zoning and the land use regulation process. Provides case studies of 11 local and regional land use programs, their origins, development, legal aspects, and political history.

Brower, David J., Candace Carraway, Thomas Pollard, and C. Luther Propst. *Managing Development in Small Towns*. Chicago: American Planning Association Press, 1984.

Provides a comprehensive overview of the use of growth management measures in small towns, including techniques based upon local land acquisition, public spending, taxation, and regulatory powers. Provides tangible guidance in assessing the need for growth management and in implementing specific techniques.

Chapin, F. Stuart, and Edward J. Kaiser. *Urban Land Use Planning*. 3d ed. Urbana: University of Illinois Press, 1979.

A leading land use planning textbook.

Clark, John. *The Sanibel Report: Formulation of a Comprehensive Plan Based on Natural Systems*. Washington, D.C.: The Conservation Foundation, 1976.

Explains the process leading to the development of a performance-based comprehensive planning

process and overlay zoning program for Sanibel Island, Florida. The basis for the program is mitigating the impacts of development on vegetation, wildlife, coastal process, geology, or hydrology of the barrier island.

Conservation Foundation. *Groundwater Protection*. Washington, D.C.: The Conservation Foundation, 1987.

This book contains the final report of the National Groundwater Policy Forum and a guide to problems, causes, and government responses to groundwater pollution.

Diehl, Janet, and Thomas S. Barrett. *The Conservation Easement Handbook: Managing Land Conservation and Historic Preservation Easement Programs*. Trust for Public Land and Land Trust Exchange, 1988. Available from Land Trust Exchange, 1017 Duke Street, Alexandria, VA 22314.

Authoritative and well-written book that provides solid information about establishing and managing easements programs.

Hoose, Phillip M. *Building an Ark: Tools for the Preservation of Natural Diversity Through Land Protection*. Covelo, CA: Island Press, 1981.

Provides an overview of private techniques to preserve open space and important wildlife and plant resources. Includes chapters on conducting natural heritage inventories, private land protection techniques, and lobbying state government to protect our natural heritage.

Kusler, Jon A. *Regulating Sensitive Lands*. Washington, D.C.: Environmental Law Institute, 1980.

This thorough book discusses regulatory programs to protect floodplains, lake and stream shores, coastal zones, wetlands, rivers, areas of scientific interest, and similar sensitive areas. It discusses state resource protection programs and cases.

Land Trust Exchange. *Organizing a Land Trust: Starting a Land Conservation Organization in Your Community*. Available from Land Trust Exchange, 1017 Duke Street, Alexandria, VA 22314.

The Land Trust Exchange publishes this handout and others about land trusts.

McHarg, Ian. *Design With Nature*. Garden City, N.Y.: The Natural History Press, 1969.

A pioneering introduction to regional land use planning based upon the development constraints and opportunities presented by natural systems. Contains case studies showing how en-

vironmental and scenic inventories can be combined to indicate where development should be directed.

Meshenberg, Michael J. *The Administration of Flexible Zoning Techniques*. Planning Advisory Service Report No. 318. Chicago: American Society of Planning Officials, 1976.

Provides an introduction to and analysis of flexible zoning techniques, including PUDs, special permits, floating zones, overlay zoning, tract zoning, incentive zoning, exactions, and TDR.

Sanders, Welford. *The Cluster Subdivision: A Cost-Effective Approach*. Planning Advisory Service Report No. 356. Chicago: American Planning Association, 1980.

Provides detailed guidance on the design of cluster subdivision ordinances. Includes legal guidance and excerpts from several local zoning ordinances.

Smith, Herbert H. *The Citizen's Guide to Planning*. Chicago: American Planning Association, 1979.

A lay person's general introduction to planning written by a veteran planner. Provides overviews of the planning process; the role of the local planning commission; the relationship between plans and regulations; and the connection between capital improvements and planning.

Smith, Herbert H. *The Citizen's Guide to Zoning*. Chicago: American Planning Association, 1983.

Provides a basic primer on all aspects of zoning and zoning administration, the citizens' role in zoning hearings, frequent problems with zoning, and emerging zoning techniques.

Thurow, Charles, William Jones, and Duncan Erley. *Performance Controls for Sensitive Lands: A Practical Guide for Local Administrators*. Planning Advisory Service Report Nos. 307, 308. Chicago: American Society of Planning Officials, 1975.

An early, comprehensive discussion of the use of performance standard regulations to protect environmental resources, including streams and lakes, aquifers, wetlands, woodlands, and hill-sides. Includes excerpts of illustrative performance control ordinances.

Whyte, William H. *The Last Landscape*. Garden City, New York: Doubleday and Company, 1970.

An early, but still valuable look at both the politics of planning and land use regulation and how specific techniques can be employed to protect specific resources.

Yaro, Robert D., et al. *Dealing with Change in the Connecticut River Valley: A Design Manual for Conservation and Development*. Amherst, MA: Center for Rural Massachusetts, University of Massachusetts, 1988.

This valuable publication discusses the advantages of clustered development, provides practical planning standards for preserving distinctive lo-

cal character while accommodating economic development, includes sample ordinance language for clustered development, and includes excellent aerial graphics showing various landscapes before development, after conventional development, and after creative site-sensitive development. This book builds a convincing argument for clustered development regulations.