PLANNING COMMISSIONERS
Journal
REPRINTS

Taking a Closer Look

Basic Planning Tools

A PLANNING COMMISSIONERS JOURNAL SPECIAL COLLECTION

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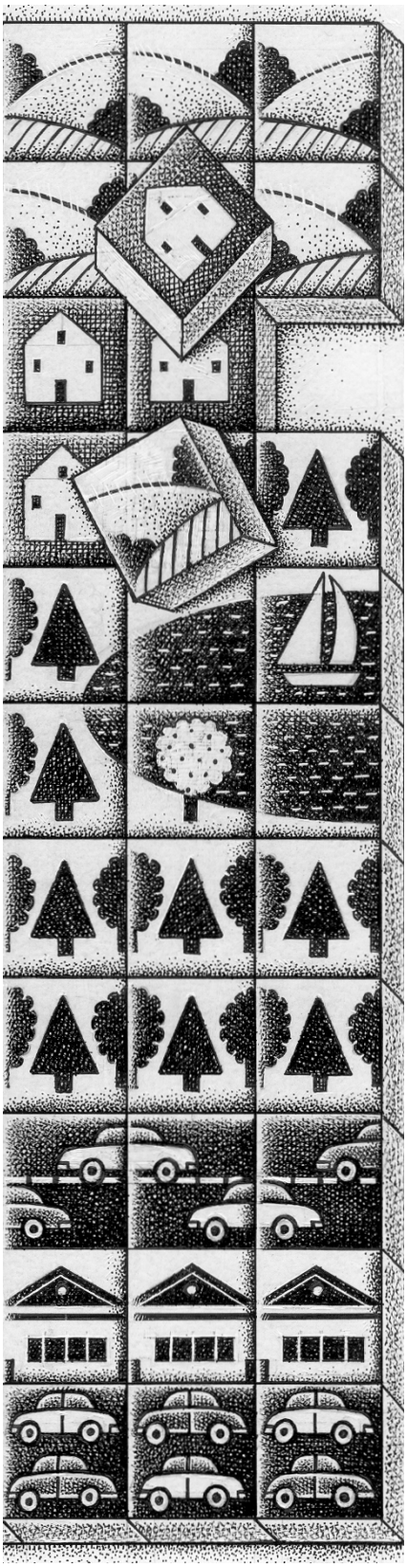
BASIC PLANNING TOOLS



A Closer Look At:

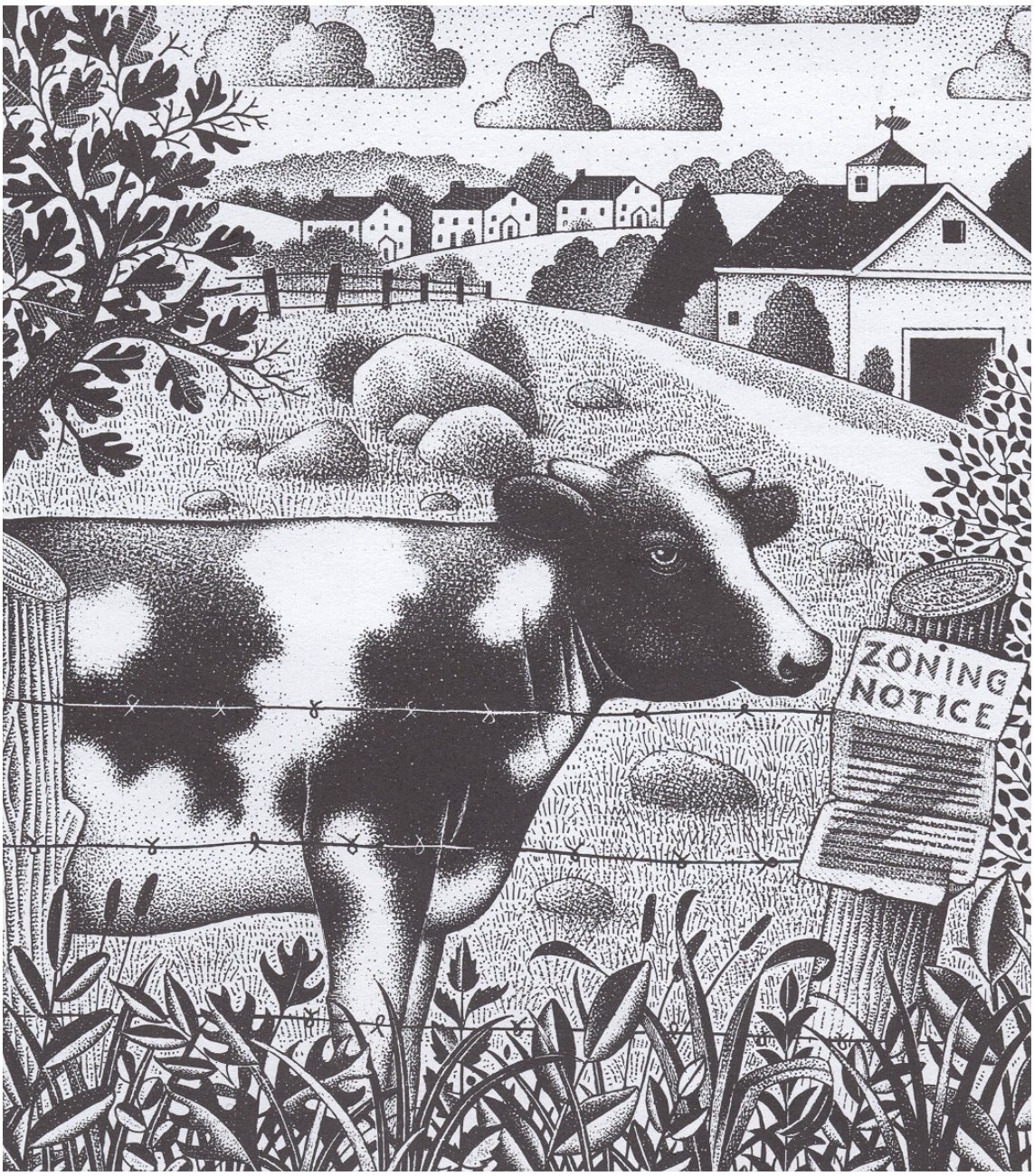
Basic Planning Tools

For planning to be meaningful, citizens must be involved in the process. Planners, regardless of their personal talents and capabilities, working in isolation and apart from the clients of planning, will not be able to craft plans communities will embrace.

-- Michael Chandler, from "The 21st Century Plan"

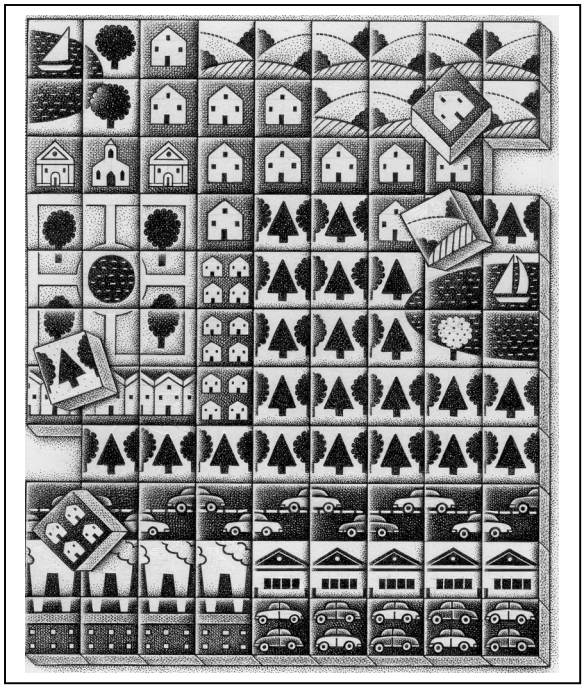
Zoning is merely a tool. It can be used constructively as a positive force for community good or it can be misused. Zoning is what you make of it. It works best when it is based on a vision and closely tied to the comprehensive plan.

-- Edward McMahon, from "What's So Bad About Zoning?"



This collection of articles from the *Planning Commissioners Journal* reviews the purposes and history of zoning, and provides an overview of some of the tools and techniques planners and planning commissioners use.

Zoning Basics



An overview of the purposes and structure of zoning ordinances, and an introduction to the principal players in the zoning universe.

Zoning

The first modern American public land use zoning restriction was enacted in San Francisco in 1867 to constrain the location of obnoxious uses. Los Angeles, in 1909, applied land use controls to an immense area it had annexed, sparking a series of lawsuits that culminated in the U.S. Supreme Court's 1915 ruling in *Hadacheck v. Sebastian*. The Court upheld the City's prohibition of brickyards in a residentially zoned district, despite the fact that the brickyard in question predated the residential development.

While California cities explored land use controls, in the East the focus was on control of building height, bulk, and yards. Actions to limit the height of buildings and to vary these heights by zones taken in Massachusetts were found to be constitutional by the Supreme Court in *Welch v. Swasey* in 1909. This was followed three years later by the Court's clearly implied approval of building setback controls in *Eubank v. Richmond*.

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Brick plants and yards were among the uses controlled by early land use regulations. Photo of brick plant in Willamina, Oregon, taken in 1912.

In the early decades of the 20th century, New York City was faced with construction of tall buildings that cut off light and air to the streets below and to surrounding buildings. It also experienced an invasion of manufacturing uses into areas that were predominantly residential and business in character. In response, in 1916, New York enacted the first "comprehensive zoning code." It utilized the three geographically zoned elements that the U.S. Supreme Court previously acted on (building height, setbacks and yards, and land use) and combined them in a single ordinance that included the entire area of jurisdiction. This combination of factors still defines "comprehensive zoning."

Most communities hesitated to follow New York's lead in adopting comprehensive zoning because the circumstances of the *Hadacheck* case included an immediate threat to public health as well as the land use zoning issue. Would the Court have approved the Los Angeles zoning if the brickyard in question had not also been a direct threat to the health of neighbors? In 1926, in *Euclid v. Ambler*, a case without a direct health threat issue, the Supreme Court supported comprehensive zoning, including the creation of single-family residential districts. With the Court's ruling, comprehensive zoning spread across America, and single-family-only districts became the preferred zoning for new residential development.

Spatial segregation of uses over ever-increasing distances became a major characteristic of zoning. This often resulted in rings of increasingly low density single-family residential zones as one moved outward from the city center, along with widely separated retail and employment areas.

In the past decade (as noted in "Y" is for Youth) a countercurrent has emerged. Zoning codes are increasingly being redesigned to foster development of neighborhoods of mixed land uses and varied life styles and income, often at higher densities.

Also of note, a sort of "parallel universe" of land use controls (that actually predate zoning) has expanded in the form of private covenants and restrictions applied to properties in most new developments. What these rules prohibit may be of greater consequence to many Americans than what is set out in the local zoning ordinance.[1]

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1 Over half of new housing in the 50 largest metro areas is part of a private association. *Community Association Factbook*, 1999 (Alexandria, VA: Community Associations Institute).

Zoning Basics

by Michael Chandler & Gregory Dale

Editor's Note: In the next few issues of the Planning Commissioners Journal we will be running several articles focusing on different aspects of zoning. As most new planning commissioners quickly learn, the local zoning code/ordinance – along with the municipal comprehensive plan – provides the framework for most local land use decisions.

In this issue, Planning Commissioners Journal columnists Mike Chandler and Greg Dale go over the basics of zoning. In our next issue, they will take a look at zoning and neighborhoods. As always, if you have a specific question about how your own community's zoning process operates, please consult with your planning director or legal counsel.

The Origins of Zoning in America

Regulation of buildings in America is as old as the founding of the country. President George Washington on October 17, 1791, for example, issued an order that only brick could be used within portions of what is now Washington, D.C. By 1822 an Act was adopted providing that within the then defined cities of Georgetown and Washington "no frame house intended to be occupied as a blacksmith's shop, factory, or livery stable, shall be erected within fifty feet of any stone or brick house" – not altogether different from the type of regulation found in a modern zoning code![1]

Early codes often, sensibly enough, focused on restricting use of combustible materials. But by the turn of the 19th century, local governments across the United States began to enact ordinances more broadly regulating where certain kinds of businesses could locate and the maximum height of buildings. Examples include an 1885 ordinance regulating the location of laundries in Modesto, California; ordinances regulating building heights in Washington, D.C. in 1899 and Boston in 1904; and a 1909 Los Angeles ordinance governing where industrial plants could be built.

> ZONING REPRESENTS A DEMOCRATIC METHOD FOR SETTING THE GROUND RULES FOR HOW DEVELOPMENT CAN OCCUR WITHIN THE COMMUNITY.

These early ordinances were enacted, in part, to address the social and economic challenges associated with immigration and the rise of the industrial age across much of America. The ordinances sprang from the police power provision embedded in the Constitution which allows government to exercise reasonable controls in order to protect the public health, safety, convenience, and welfare.

With this foundation in place, New York City adopted the nation's first comprehensive zoning ordinance in 1916. The ordinance classified various types of land uses, delineated zones (through a zoning map) and established height and bulk standards for buildings. Other cities followed New York's lead and subsequently adopted zoning ordinances for the purpose of guiding and managing growth. *The Emergence of Zoning, p.* **3.**

Zoning Enabled

In 1922, the U.S. Department of Commerce, under the leadership of then Secretary Herbert Hoover, published the Model Standard State Zoning Enabling Act. The Model Act – which was designed for adoption by states across the country – outlined the role and function of zoning, and set out uniform standards that localities could use to guide land development practices.

The national movement to adopt zoning got a big boost four years later (1926) when the United States Supreme Court ruled in *Euclid v. Ambler Realty* that zoning did not violate the due process clause of the federal constitution. The ruling resulted in the widespread adoption of zoning statutes across the nation. By 1940, zoning had become (and continues to be) the most common means of regulating local land use in the United States.

Zoning Defined

Zoning is a legislative process through which the local governing body (under power delegated it by the state zoning enabling law) divides the municipality into districts or zones, and adopts regulations concerning the use of land and the placement, spacing, and size of buildings. The primary goal of zoning is to avoid or minimize disruptive land use patterns involving incompatible land uses.

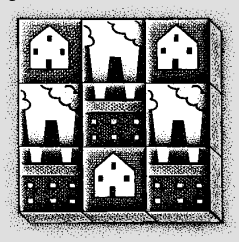
1 Our thanks to Lindsley Williams for informing us about Washington, D.C.'s early building regulations, described in Volume 52 of the Records of the Columbia Historical Society (1989)

The Emergence of Zoning

by Laurence C. Gerckens, AICP

American cities in the year 1900 were a hodgepodge of industrial, warehouse, commercial, and residential uses, frequently closely intermingled without rhyme or reason other than the characteristics generated by chance and individual advantage. It was not uncommon for a party to purchase a residential structure only to find it ringed by odoriferous uses that made occupancy of the structure untenable. Characteristics of entire neighborhoods often changed as uses moved in rapid succession.

The physical separation and isolation of dangerous, odoriferous, or unsightly practices, such as tar boiling, soap making, fat rendering, and dead carcass cremation, was viewed at that time as a reasonable governmental response to the unacceptable impositions of one otherwise legal activity upon another. Both the residences and these businesses had their right to exist, it was held, but not necessarily in close proximity to each other. Thus, the legal separation and isolation of land uses began, creating the foundations for many current zoning practices.



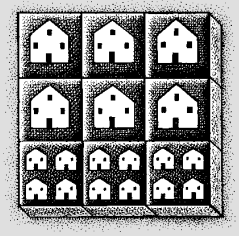
The New York Zoning Code of 1916, America's first "comprehensive" zoning code, relied on a "pyramidal" approach to permitted uses. That is, in the residence zone – considered the "highest" zone classification – nothing but residences were permitted. In the commercial zone, the next lower zone on the pyramid, commercial uses and residences were allowed. At the bottom of the pyramid were the industrial zones, where industrial and commercial and residential uses were all permitted. In effect, industrial zones were really unzoned for all uses.

In the 1920's a number of municipalities expanded on New York's single "residence" district by creating districts limited to development of single-family-detached homes only. The courts upheld these ordinances based on: (1) a public safety rationale (i.e., the risk of fire would be reduced because there would be fewer buildings, located farther apart, housing fewer families per acre); and (2) the premise that single-family-detached residence districts would induce good citizenship through the encouragement of home ownership.

The public safety rationale was constitutionally sound as it was founded on physical conditions capable of being proven to bear a direct relationship to public health and safety – preventing the extreme congestion commonly associated with the practices of apartment and tenement house construction of that era.

However, the second premise, that single-family districts would foster good citizenship by encouraging home ownership, was based on a faulty presumption. It presumed that single family-detached homes would be owner-occupied. But this was not a requirement of single-family-only zoning districts. Moreover, as time would prove, the courts would not look favorably on attempts by municipalities to specify conditions of occupancy (rental, ownership, lease, etc.) in their zoning codes.

Even more significantly, the presumption that single-family-only districts would be solely occupied by home owners has not been borne out. Indeed, in many communities entire neighborhoods of new single-family- detached units have been built and marketed as rental units.



Today, the condominium row house (or townhouse) often represents the principal home ownership option, particularly for young couples and single parents. Ironically, the same arguments made decades ago in favor of public laws promoting single-family-only districts to encourage home ownership could well be marshaled today in favor of promoting townhouse-density attached-unit zoning!

Laurence Gerckens is national historian for the AICP. The above is excerpted from his articles, "American Zoning & the Physical Isolation of Uses" (In PCJ #15), "Single-Family-Only Zones" (in PCJ #23), and "Ten Successes that Shaped the 20th Century American City" (in PCJ #38).

Zoning Basics...

continued

Since the establishment and modification of zoning ordinances is legislative in nature, zoning represents a democratic method for setting the ground rules for how development can occur within the community. Zoning is constrained, however, by the Constitution's "takings" clause which requires compensation when private property is taken for a public use. *[The impact of the "takings" clause is beyond the scope of this article; for a good overview, see "An Introduction to Takings Law" in PCJ #18 and available for downloading on plannersweb.com].*

Linking Zoning with Planning

Zoning depends on planning and planning depends on zoning. Neither can exist without the other. The comprehensive plan can be thought of as a roadmap which captures in pictures and words what a community wishes for itself. Although the plan will talk about land use, it does not regulate land use. This is the role of the zoning ordinance. In short, the comprehensive plan provides the public policy basis for drawing and applying the zoning districts which in turn control what happens on the land.

The subdivision ordinance is another planning tool that is closely linked with zoning. A subdivision ordinance regulates the division of land into building lots for the purpose of sale, development, or lease. The ordinance specifies procedures that are to be followed when land is divided and built upon. Standards governing the platting of building lots and planned improvements, such as roads and utilities, are common to most subdivision ordinances. When used in conjunction with the zoning ordinance and the comprehensive plan, the subdivision ordinance assures that the land development process is accomplished in an appropriate and consistent manner. *See "An Introduction to Subdivision Regulations," in PCJ #5 and 6.*

The Purposes of Zoning

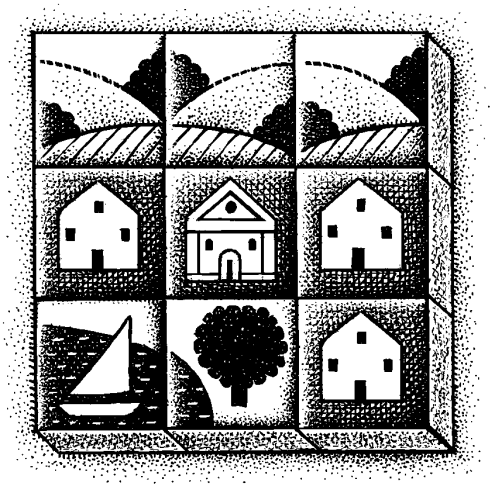
It is important to bear in mind that local zoning authority is derived from

the state. Zoning enabling statutes set out – usually in quite general terms – what local governments can seek to accomplish through zoning. A typical state enabling law might include the following purposes:

1. Provide for adequate light, air, convenience of access, and safety from fire, flood, earthquakes, crime, and other dangers;

2. Reduce or prevent congestion in the public streets;

3. Facilitate the creation of a convenient, attractive, and harmonious community;



4. Facilitate the provision of adequate police and fire protection, transportation, water, sewerage, schools, parks, playgrounds, recreational facilities, and other public requirements;

5. Protect against the overcrowding of land and the undue density of population in relation to existing or available community facilities;

6. Encourage economic development activities that provide desirable employment and enlarge the tax base;

7. Provide for the preservation of agricultural, forested lands, and other lands significant to maintaining the natural environment;

8. Promote the creation and preservation of affordable housing;

9. Protect approach slopes and other safety areas of airports; and

10. Encourage the most appropriate use of land within the locality.

How Zoning Works

A zoning ordinance consists of two parts: a map (or series of maps) and text. The zoning map shows how the community is divided into different use districts or zones. Zoning districts common to most ordinances include residential, commercial, industrial, and agricultural. The zoning map must show precise boundaries for each district. Consequently, most zoning maps rely on street or property lines as district boundaries.

The zoning text serves two important functions. First, it explains the zoning rules that apply in each zoning district. These rules typically establish a list of land uses permitted in each district plus a series of specific standards governing lot size, building height, and required yard and setback provisions. Second, the text sets forth a series of procedures for administering and applying the zoning ordinance. In most cases, the text is divided according to "sections" (or "articles") for ease of reference. Most zoning

continued

Avoiding Spot Zoning

by Robert C. Widner, Esq.

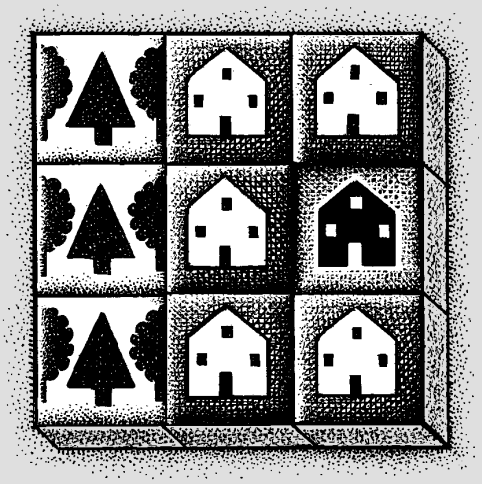
Most planning commissioners have heard the impassioned cry that a particular rezoning decision will constitute an invalid "spot zoning." This allegation typically arises where the community is considering the rezoning of a single lot or small parcel of property held by a single owner and the rezoning will permit land uses not available to the adjacent property.

Because spot zoning often focuses on the single parcel without considering the broader context, that is, the area and land uses surrounding the parcel, it is commonly considered the antithesis of planned zoning. While rezoning decisions that only affect a single parcel or small amount of land are most often the subject of spot zoning claims (as opposed to rezonings of larger areas), a locality can lawfully rezone a single parcel if its action is shown to be consistent with the community's land use policies.

Courts commonly note that the underlying question is whether the zoning decision advances the health, safety, and welfare of the community. A zoning decision that merely provides for individual benefit without a relationship to public benefit cannot be legally supported.

Although courts throughout the nation differ in their specific approaches when reviewing spot zoning claims, the majority consider:

1. the size of the parcel subject to rezoning;



2. zoning both prior to and after the local government's decision;

3. the existing zoning and use of the adjacent properties;

4. the benefits and detriments to the landowner, neighboring property owners, and the community resulting from the rezoning; and

5. the relationship between the zoning change and the local government's stated land use policies and objectives.

This last factor – the relationship of the rezoning decision to the community's land use policies and objectives – is perhaps the most important one. As a result, when a planning commission (or governing body) initially considers a rezoning request it should determine whether the request is consistent with the comprehensive or master plan.

Robert C. Widner is an attorney with the Denver, Colorado, law firm of Gorsuch Kirgis LLP. He also holds a master's degree in urban and regional planning. The above is excerpted from his article, "Understanding Spot Zoning," in PCJ #13.

Zoning's "Achilles Heel"

by Susan G. Connelly, Esq.

Nonconforming uses and structures have been with us ever since zoning first emerged in the 1920's. Since that time, they have represented the "Achilles heel" of planning and zoning. The root of the problem is that nonconformities reduce the effectiveness of what a community is trying to accomplish through its comprehensive plan, as implemented by its local zoning regulations. The continued existence of nonconforming uses, for example, undermines what a community is seeking to achieve when it establishes specific allowable uses for a zoning district.

At the same time, communities – quite understandably – have been reluctant to call for the removal of ongoing businesses and existing structures, reflecting substantial financial investments, just because they fail to comply with current zoning requirements. The "solution" has been to subject nonconforming uses and structures to a diverse assortment of restrictions, all intended to hasten the day when the particular use or structure either "disappears" or comes into compliance with the existing zoning regulations.

The variety of nonconforming situations account for the difficulty in regulating them. Nonconforming uses in residential zoning districts can range from things such as tool sheds in small accessory buildings to bulk storage of gasoline or oil in large buildings suitable only for that specific use. Nonconforming uses can also involve uses in structures designed for conforming uses (such as a manufacturing operation occurring in an office building in a commercial zoning district) or uses in structures which may be adaptable to conforming uses (such as manufacturing in a factory building, in a multi-family residential district, which could be converted to apartments). Obviously, some of these uses are easier to eliminate than others.

As mentioned, zoning ordinances usually seek the eventual elimination of nonconforming uses and structures. This is primarily accomplished by: (1) limiting repair, restoration, additions, enlargements and alterations of the nonconforming structure or of the structure housing the nonconforming use; and (2) restricting or prohibiting the expansion or change of the nonconforming use itself.

Most ordinances specify that once a nonconforming use is discontinued, it may not be resumed. These "abandonment" provisions usually only apply when the discontinuance of the use is "voluntary" – as opposed to when the use is discontinued during bankruptcy or foreclosure procedures. The zoning ordinance will also usually specify a minimum time period before a use is considered to be voluntarily abandoned. In some states, courts will also require proof of an intent to abandon the use.

"Amortization" provisions – through which the local government requires that the nonconforming use or structure be eliminated within a specified number of years – have had mixed results when challenged in court. While the topic of amortizing nonconformities is a complex one, a basic rule of thumb is that amortization provisions are more likely to be upheld when they involve simpler uses or structures whose value can be readily amortized over a few years. Courts will closely examine the extent to which an amortization provision would cause financial hardship or loss to the property owner. Thus, a provision affecting a nonconforming commercial or industrial business facility is much less likely to be upheld than one eliminating a nonconforming advertising sign or fence.

Susan Connelly, AICP, is Vice President of Community Design for McStain Enterprises, Inc., a 35-year old "green" community developer and home builder based in Boulder, Colorado and is a member of the Boulder Urban Renewal Authority. Connelly practiced land use and real estate law in Illinois and Florida for 13 years. The above is excerpted from her article, "Non-Conforming Uses & Structures," in PCJ #2.

Zoning Basics...

continued

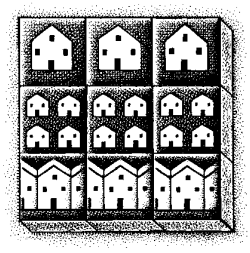
ordinances include the following:

1. *Title, Authority and Purpose.* This section identifies the specific state enabling provision which empowers the locality to adopt zoning. It also spells out, in a "statement of purposes," the community's reasons for adopting the ordinance. The statement of purposes links the rules and regulations listed in the ordinance to the community's values and goals.

2. *General Provisions.* Topics covered in this section usually include definitions of terms used in the ordinance, and a description of the geographic or jurisdictional reach of the zoning ordinance. Definitions are especially important because the general public, as well as the courts, must be able to attach specific meaning to the words and concepts appearing in the ordinance.

With respect to jurisdictional reach, zoning ordinances will typically apply to the territory contained within the political subdivision; meaning the city, county, town, township, or village. In some cases, however, a zoning ordinance may reach beyond a locality's political boundaries. Such "extraterritorial" zoning is permissible if it is authorized by the enabling statute.

3. *Zoning Districts and Regulations.* This section of the ordinance is arguably the most important since it lists and defines each zoning district – as we have noted, the concept of districts stands at the core of zoning. Most zoning ordinances will include – at a minimum – residential, commercial, and industrial districts. Residential districts, in turn, are often broken down further into zones for single-family and multi-family dwellings of varying density.



Similar distinctions, based on intensity of use, are also often found in business and industrial districts (e.g., light industry versus heavy industry).

Other common types of zoning districts are agricultural, conservation, and institutional. Many communities have also crafted a wide variety of "mixed use" districts, allowing blends of uses in some parts of the community.

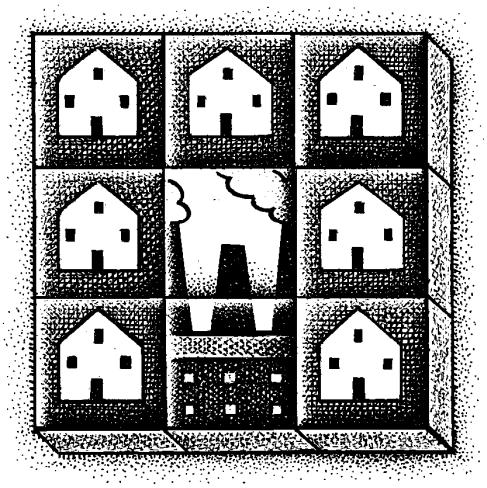
Many zoning ordinances include one or more special purpose zones addressing flood hazard areas, historic properties, and other specialized uses. These special zones are often applied as "overlays" – that is, those geographic areas subject to overlay zones are also within an "underlying" zoning district. For example, a property within a residential zone might also be located within a flood hazard zone. This property would be subject to the regulations of both the underlying zone (in this case, residential) and the overlay zone (flood hazard).

In addition to listing and defining zoning districts, this section of the zoning ordinance sets out rules for the use of land in each district. Most basic is the list of permitted versus special or conditional uses. If a use is deemed permitted (commonly referred to as a "by-right" or "matter-of-right" use), it need only meet the ordinance's dimensional requirements (as described below) and any other "impact standards" (such as parking, landscaping, and signage standards; see point 5 below) to secure a zoning permit.

Other uses may be allowed within a district provided they are granted a special or conditional use permit. The terms special exception, special use, and conditional use permit generally have the same meaning; what term you're familiar with depends on the state you live in. The zoning ordinance will set out the standards which must be met for granting such a permit. *Special Permits.*

Finally, this section of the zoning ordinance includes, for each zoning district, basic development requirements. These primarily involve dimensional standards for setbacks and side yards, minimum lot sizes, and building heights.

4. *Nonconforming Uses, Structures, and Parcels.* When a zoning ordinance is



adopted some existing uses, structures, and parcels may not comply with the regulations of the zoning district in which they are located. These uses, structures, or parcels are then classified as "nonconforming." While they are typically permitted to continue, their future expansion, reconstruction, or conversion is regulated by provisions set out in this section of the zoning ordinance. *Zoning's "Achilles Heel," p. 16.*

5. *Impact Regulations.* Many zoning ordinances include a separate section (or sections) setting out a variety of "impact" regulations or standards. These might include, for example, parking standards, sign regulations, landscape requirements, urban design criteria, historic preservation standards, and various environmental criteria (such as requirements for tree plantings in new developments).

6. *Administration and Enforcement.* This section of the zoning ordinance spells out the duties of those involved in administering the ordinance – the zoning administrator, the governing body, the planning commission, and the board of zoning appeals or board of adjustment. Procedures to be followed when amending the zoning ordinance, as well as standards for assessing penalties and fines for zoning violators, are also included in this section.

Who's Who in Zoning

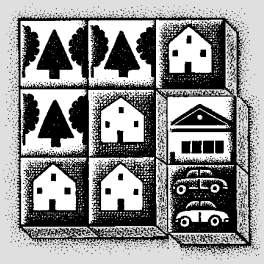
In order to make sense out of the zoning process, it is important to understand the players and their respective

continued

Special Permits

by Neil Lindberg, Esq.

Special permits are approvals given to uses that meet certain standards or conditions which are listed in the local zoning ordinance. The conditions are often designed to ensure that the use will not adversely affect nearby existing uses. Special permits are commonly employed to protect residential neighborhoods against potentially disruptive uses – uses which might generate substantial amounts of noise, odor, or traffic, or which might in some other way be incompatible with the neighborhood. For this reason, uses such as gas stations and convenience stores often require special permits.



Local governments are also increasingly coming to require special permits for major development proposals. This allows the local government, typically through its zoning board, increased flexibility in examining the impacts of large-scale uses, and the ability to impose conditions to lessen adverse impacts. Projects such as shopping centers or office parks are particularly likely to require special permits.

Zoning ordinances must specify the standards by which the special permit application is to be reviewed. Some standards are narrow and fairly objective. For example, the special permit use might be required to maintain a minimum of 35 percent open space.

Standards that are too general are susceptible to challenge in court on the ground that they allow for arbitrary government action, violating individual due process rights. However, courts are becoming more liberal in reviewing special permit standards. There is much variation, nevertheless, and standards upheld in one community might well be struck down in another.

Neil A. Lindberg is an attorney and city planner. He is counsel to the Provo, Utah, Municipal Council and maintains a private practice focusing on planning, zoning, and land use law matters. The above is excerpted from his article, "Special Permits," in PCJ #3.

Watch Out For...

by Greg Dale

1. *When the legislative body is the final decision-maker on everything.* Many elected officials believe that they should have the final say on everything. Their theory is that they were elected and therefore the buck should stop with them. So, for example, many local governing bodies – in addition to acting on zoning ordinance changes – will hear appeals from decisions of the board of zoning appeals; act on conditional use permits and related decisions; and act on site plans.

However, problems can arise. First, when governing bodies act as appeals boards, they often do not perform this function very well. Frequently testimony that was taken by the zoning board of appeals (or planning commission) is reopened, and the matter becomes politicized. Most governing bodies simply are not well suited to act as quasi-judicial decision-makers. Since legislators most often function in an environment where all forms and channels of communication are anticipated, they are also at greater risk of either initiating or being drawn into inappropriate ex-parte communications. Finally, when local governing bodies are involved in administering regulations, they tend to lose sight of the larger policy issues.

2. *When the planning commission acts in a quasi-judicial role.* Planning commissioners should understand the difference between acting in an advisory capacity and in a quasi-judicial capacity. When the planning commission is making a recommendation to the legislative body on a zone change, for example, it is acting in an advisory capacity. However, in many communities the planning commission is also the final decision-maker on certain matters, such as subdivision plat, site plan, and conditional use/special permit approvals.

When acting in this quasi-judicial capacity, fact finding, evidence, and written findings become particularly important. In addition, certain ethical constraints – such as the avoidance of "ex-parte" contacts – come into play.

"Legislative" v. "Quasi-Judicial" Actions, p.19

3. *When planning commissions get caught up in minutiae.* Many planning commissions spend hours going through excruciating details on development proposals, dealing with items over which they have little discretion (at least if they follow the dictates of the zoning code). Particularly in communities with professional staff, there is no need for the planning commission to take on what is essentially a staff responsibility. A planning commission works best when it allows staff to make technical determinations, while focusing its attention on those matters which require discretionary decision making. Of course, this assumes the community has a good zoning code, with well-articulated standards, in place.

4. *When elected officials try to influence the planning commission recommendations.* It is all too common to find elected officials attending planning commission meetings and trying to influence the commission's recommendations. This is perplexing, since one of the principal reasons for planning commission consideration of zoning amendments is to provide the elected officials with their best advice. It is counterproductive for elected officials to try to influence the "independent" advice that the planning commission is supposed to provide them.

5. *When zoning boards grant too many variances.* The consideration of variances is one of the most difficult jobs of a zoning board of appeals. Variances are an important "safety valve" in zoning, but are also often abused. Variances are intended to apply only in unusual circumstances where a literal interpretation of the zoning code creates a hardship, and then only pursuant to standards set out in the code.

The difficulty lies in how "hardship" is interpreted and how facts are considered relative to standards. A zoning board needs to clearly understand what must be proven before a variance can be granted. If the vast majority of variance requests are being granted, it is likely that either the zoning board is not requiring the level of proof required by the zoning regulations, or that the regulations need to be amended.

Zoning Basics...

continued

roles – and the types of decisions they are responsible for making.

The zoning process is similar to the balance of power that we all learned about in Civics class. In zoning, different bodies have different responsibilities that serve as a system of "checks and balances." For the system to work efficiently each role must be played well by the respective body responsible for that role; conversely, it is important for individual bodies to not exceed their designated role.

There are four main types of decision-making functions in the zoning process: *legislative, advisory, administrative,* and *quasi-judicial.*

1. Legislative

The legislative function involves the adoption or amendment of the zoning regulations themselves. The local governing body is comprised of the elected officials in your jurisdiction. This may consist of a city council, county board or commission, village council, township trustees, and so forth. Note that the zoning map is considered to be part of the zoning regulations, which means that a zoning map amendment or "zone change" is a legislative act. In the vast majority of states only the governing body can approve either text or map amendments.

2. Advisory

Before adopting or amending the zoning text or map, the local zoning process will typically call for the planning commission to provide advice on the wisdom of any such adoption or revision. The commission will examine whether the zoning proposal is consistent with the goals and policies of the locality's adopted comprehensive plan. *Avoiding Spot Zoning, p. 15.* Many planning commissions are also involved in drafting proposed zoning ordinances and amendments.

In any zoning adoption or amendment process the local governing body is likely to hear from a variety of "special interests" ranging from local

homeowners and neighbors to builders and developers. These groups are a natural and important part of the process; however, it is equally important to have the independent voice of a planning commission that is focused on the long range public interest of the community as a whole.

3. Administrative

It is sometimes surprising for new planning commissioners to learn that the majority of decisions made in the zoning process are actually made at the administrative level by staff planners, zoning officers, or other municipal employees.

Non-discretionary standards such as lot size, lot width, setbacks, building height, permitted uses, sign height and size, and parking lot standards, can be administered by staff without the need for review by planning commissions or legislative bodies. These decisions often take the form of zoning certificates and certificates of occupancy, and are frequently made as part of the building permit process.

4. Quasi-judicial

No zoning code is perfect, nor can all potential circumstances be anticipated. For that reason, several "safety valves" are built into the zoning process. First, there are occasions when an interested party may simply disagree with the way in which the administrative staff has interpreted the zoning regulations. Second, there are instances where the strict application of zoning regulations creates an unfair situation to a property owner.

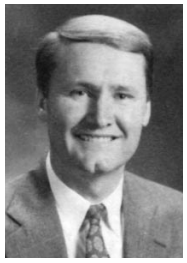
Typically, as part of the zoning process, a board is designated to hear appeals and consider variance requests. This board is usually referred to as either the "board of zoning appeals," "board of adjustment," or some similar title. It generally acts in a "quasi-judicial" capacity because in most states and communities its decision is final (subject only to appeal in the local court system). This means that zoning board decisions must be based on specific factual evidence, and include written findings of fact to support the decision.

Planning commissions in many states sometimes also act in a "quasi-judicial" capacity. *For more on this, see point 2 in the "Watch Out For" sidebar p.* **7**.

Summing Up:

Treatises have been written on zoning. In fact, your planning department or municipal attorney's office may well have one or more of them. Given the constraints of time and space, we have necessarily focused on some of the more basic aspects of zoning (and despite state to state differences, zoning is remarkably similar nationwide). By at least having an understanding of the basics of zoning – and of who's who in the zoning universe – you should have a better feel for your job as a planning commissioner or zoning board member. In the next issue of the *Planning Commissioners Journal,* we'll take a closer look at a constellation of issues related to "zoning and neighborhoods." ◆

C. Gregory Dale is a Principal with the planning and zoning firm of McBride Dale Clarion in Cincinnati, Ohio. Dale manages planning projects and conducts training for planning officials throughout the country. He is also a former President of the Ohio Chapter of the American planning Association.



Michael Chandler is Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Chandler also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops. His column appears in each issue of the Planning Commissioners Journal.

Editor's Note:

Legislative v. Quasi-Judicial Actions

The distinction between the "legislative" and "quasi-judicial" role of a planning commission is one many new planning commissioners are not familiar with. It can be an important distinction, however, because when a commission is acting in a "quasi-judicial" capacity, it typically must follow a range of procedural and ethical standards designed to ensure that property rights are respected. This is mandated by the Constitution's due process clause.

Attorney Gary Powell provided a concise explanation of the two different roles in Issue #2 of the *PCJ:*

"A planning commissioner takes a 'quasi-judicial' role when engaged in determining the rights, duties, privileges, or benefits that relate to a specific property or property owner. This happens, for example, when a planning commissioner is called on to review a conditional use request for a specific parcel, or a subdivision plat. In contrast, the other role planning commissioners often assume involves dealing with 'legislative' type activities. This role is taken when a planning commissioner is engaged in recommending standards that have a general and uniform operation, and which are ultimately decided by the local legislative body. For example, when the planning commission is working on a proposed zoning ordinance that will go to the legislative body for final approval, the planning commissioner is engaging in what is considered to be legislative-type [or advisory] activity."

A more thorough discussion of procedural safeguards (such as adequate notice, the opportunity to be heard and present evidence, and written decisions supported by reasons and findings of fact) needed when a planning commission is acting in a quasi-judicial capacity can be found in Dwight Merriam and Robert Sitkowski's article, "Procedural Due Process in Practice," in *PCJ #33.* For a review of the various ethical issues facing planning commissions in their decision making, see Greg Dale's collected ethics columns in "Taking A Closer Look: Ethics" available from the *Planning Commissioners Journal.*

Zoning & Changing Lifestyles

by Gregory Dale & Michael Chandler

The genesis of zoning can be traced to nuisance theory. The principle underscoring the nation's first comprehensive zoning ordinance, enacted by New York City in 1916, was the belief that the public health, safety, and welfare of the community would be jeopardized if incompatible land uses were allowed to locate in proximity to one another (as seen in garment district manufacturing and warehouse uses beginning to encroach on long-established Fifth Avenue residences). The relationship between nuisance theory and public welfare was solidified in 1922 when the U.S. Department of Commerce, led by Herbert Hoover, published the Standard State Zoning Enabling Act. *Editor's note: for more on the origins of zoning, see Larry Gerckens' "The Emergence of Zoning," PCJ #42, p. 14.*

It is also important to note that the advent of zoning codes correlated with the freedom of movement provided by Mr. Ford's "horseless carriage." Indeed, auto sales rose from 4,000 in 1900 to more than 180,000 in 1910, and to nearly two million in 1920. Development practices soon adjusted to the automobile. Low density housing, sequestered on individual lots and connected to the central city by a network of roads, became the norm in many parts of metropolitan America. Soon thereafter, the idea of single-family homeownership, long the province of only the wealthy, captured the imagination of middle class Americans.

The "Science" of Zoning

Management principles were also changing in the initial decades of the twentieth century. The emergence of automated manufacturing ushered in a new organization development process commonly referred to as scientific management. The premise underlying the concept was that most, if not all, work processes could be studied, analyzed, and calibrated using the steps or methodology long associated with classical scientific inquiry. The goal of the inquiry was the identification of the one best way to efficiently make or produce a product.

> IT BECAME COMMON PRACTICE FOR ZONING ORDINANCES ... TO DIFFERENTIATE RESIDENTIAL USES BY FAMILY CLASSIFICATION.

Principles of scientific management, when combined with the governance reform movement of the early twentieth century, provided the basis for the belief that land settlement practices could be managed scientifically.

This view was championed in a brief filed by planning pioneer Alfred Bettman with the United States Supreme Court in the 1926 *Euclid v. Ambler Realty* case. In his brief, Bettman asserted that the matter of zoning had been studied by "experts" and chronicled in "reports" affirming the view that the segregation of residential, business, and industrial buildings would increase the safety and security of home life, reduce traffic, decrease noise, and preserve a favorable environment for children. Bettman's belief in the power of scientific expertise to shape and form the community helped convince the Supreme Court that zoning was a sufficiently cogent and reasonable practice, which created public benefit.

The *Euclid* ruling effectively sanctioned the practice of separating land uses in order to protect areas from incompatible and potentially injurious uses. A by-product of the *Euclid* decision was the rapid adoption of district-based zoning (residential, commercial, and industrial) throughout much of America. In most instances the zoning ordinances featured, as they do today, a land use hierarchy with residential districts or uses at the top of the land use pyramid, followed by commercial and industrial uses.

The connection between zoning and quality of life was also reflected in the establishment of specific development regulations applicable to each zoning district. Standards governing minimum front, rear, and side yard requirements, as well as parameters concerning building height, lot coverage, and setbacks from the roadway were seen as responding to quality of life concerns. The articulation of development regulations also corresponded to the goal of assuring predictability in land development practices, especially in residential districts.

Ozzie and Harriett Arrive

Ozzie & Harriet at home, 822 Sycamore Road, Hillsdale.

A central goal of zoning from its inception has been the provision of healthy surroundings for family life. After World War II, Americans made a headlong rush to the suburbs in pursuit of what might be called the "Ozzie and Harriett" way of life. To deliver on this lifestyle, it became common practice for zoning ordinances not just to separate residential from commercial and industrial uses, but to differentiate residential uses by family classification.

The term "neighborhood," in many localities, became synonymous with single-family homes. Zoning codes often sought to guarantee this by limiting the number of unrelated persons who could

live together as a family in residential neighborhoods (at least in the predominant low-density residential neighborhoods). The U.S. Supreme Court sanctioned such restrictions in its *Village of Belle Terre* ruling. As the Court noted, "a quiet place where yards are wide, people few and motor vehicles restricted are legitimate guidelines in a land-use project concerned with family needs."

Changing Lifestyles

As the 1950s and '60s have receded, the lifestyles characterized by Ozzie and Harriett Nelson, Ward and June Cleaver, and other icons of our popular culture have also changed. Indeed, the change process has become a dominant and prevailing theme of modern life. In some ways, zoning has had to scramble to keep up.

We know that technology, values, and lifestyles will continue to evolve whether we like it or not, and the resulting changes will impact our culture and our communities. As community planners, we should constantly monitor changing lifestyles and consider the way in which our planning tools need to be adjusted to accommodate those changes. Zoning, like all institutions, must be flexible enough to respond to changes and accommodate altered lifestyles, even while continuing to protect the public health, safety, and welfare.

While there are many examples of how change has had a dramatic impact on our lifestyles, let's take a look at four particular areas:

1. Working from Home

Times have changed. Office work no longer necessarily involves leaving one's home and traveling to a place of employment. In the 1980s, the number of people who worked at home increased by over 50 percent – and the pace has not slowed down. Technological improvements, particularly involving the Internet, now allow for even more work to be conducted at home, with reports, graphics, sound, and video able to be transmitted with relative ease to any number of geographic locations. More and more people can – and are – conducting business from their home.

2. Aging Population

Ours is a nation of aging people. Approximately 15 percent of the population is now over 60 years of age – and this is expected to grow to 25 percent or more by the year 2025 as the entire "baby boom" generation (the 80 million people born between 1946 and 1964) will be over 60 years of age. These changing demographics will have a profound impact on our built environment, with implications for the housing markets and transportation – not to mention our health care and economic systems.

3. Changing Economy

While it is recognized that the economy goes through cycles of ups and downs, our economy has sustained the longest running period of growth in a century. While the economy's growth has temporarily slowed, the increased earning power of our population has fueled changes in the housing market and is changing the face of our communities. Ironically, our very prosperity has raised concerns in many communities as housing prices have skyrocketed and as a growing number of homes in residential areas are demolished and replaced with what have been termed "McMansions" (or "monster homes").

4. Automobile Dependency

Our society has become increasingly dependent on the automobile. While America's population has increased 25 percent in the past 20 years, the use of the automobile has increased much more dramatically: between 1976 and 1996, the number of "vehicle miles" traveled increased by over 75 percent. While much of this is a matter of choice on the part of the consumer, many cities and towns are looking for alternative ways to design communities so as to reduce the dependency on the automobile.

How do these changes relate to zoning issues? The following are some zoning implications.

Home Occupations

Almost all zoning codes have provisions for "home occupations," also known as "home businesses." However, unless your code has been updated in recent years, these provisions probably allow for only limited uses such as insurance salesmen, beauty care product sales, and notaries. It is now possible to operate a wider range of small businesses out of the home, with minimal impact on neighbors. Communities should make sure that their home business regulations meet today's needs, in light of changing technologies

In regulating home businesses and occupations, some communities are using different review procedures, depending on the nature and likely impacts of the home business or occupation. For example, some ordinances specify that if a business does not involve any onsite sales, visitors, or traffic (e.g., a consulting business operated using the

continued on next page

Burlington Eases Review of Home Occupations

by Ken Lerner

All home occupations in Burlington, Vermont, used to require conditional use approval. This meant a time-consuming public hearing before the zoning board, and written findings for every case. With an increasing number of simple, office-type home occupations being processed, it became apparent that this kind of detailed scrutiny was unnecessary – not to mention burdensome for applicants, staff, and the zoning board.

As a result, the City Council – following the Planning Commission's recommendation – amended the zoning ordinance to allow for administrative approval by staff (without public hearing or zoning board review) of home occupations involving simple office or design studio uses – provided that the home occupation involved no visitors, no signs, and no activities visible from nearby homes. In all other cases, a conditional use permit is still required. This allows neighbors to become informed as to the applicant's plans – and provides a forum for addressing any concerns.

Ken Lerner is Assistant Planning Director for the City of Burlington, Vermont.

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Internet) no zoning permit or approval is required. On the other hand, if the home business will include customers or the retail sale of goods, a higher level of scrutiny is called for (e.g., by having standards limiting the amount of traffic or deliveries to the home business, and by reqiring approval as a "conditional use"). *"Burlington Eases Review of Home Occupations," p.17.*

In Sumner, Washington, Invesco Properties' Washington Court development even includes six units especially designed for those home occupations which require more headroom. The residential units can be seen atop the work space.

There are several other considerations to be aware of as you re-examine whether your home occupation regulations are adequate. First, many zoning codes set limits on the amount of area within a home that can be used for business purposes. Similarly, restrictions on number of employees are common (many communities also prohibit employees who are not family members). Signage and parking are important concerns, with many communities requiring nothing larger than a small name plate sign next to the main entry, and parking limited to several spaces.

Senior Housing and Accessory Apartments

There are new housing options for seniors that were not contemplated in older zoning codes. Many zoning codes still allow for elderly housing only in the form of nursing homes. While nursing homes are certainly important, there are other variations of housing designed for older populations that are becoming prevalent.

Assisted living units – those that include some limited communal facilities such as kitchens and community rooms, along with freestanding dwelling units – can be developed with high quality designs that are assets to communities. With good site plan standards that recognize the unique nature of senior facilities, your city or town can accommodate this changing demographic while maintaining community quality.

Second, as more and more people deal with the issue of caring for aging parents, there has been an increased demand for the creation of accessory apartments, sometimes known as "granny flats." Elderly parents often need to live near family, but wish to maintain an independent living arrangement. The result has been a demand for separate dwelling units, either within or detached from a single-family home (e.g., a remodeled garage).

Many communities have found this to be a desirable arrangement, reinforcing the importance of family and providing needed housing options for older residents. On the other hand, once an accessory apartment is established it is difficult, if not impossible, to limit occupancy to family members on a permanent basis.

The key when considering whether or not to allow accessory apartments in certain residential zones is to consider them to be land use issues, regardless of their occupancy. Factors such as the character of the neighborhood, whether accessory apartments would be compatible with surrounding land uses, and the way in which parking is handled, should guide these decisions.

"McMansions"

Our thriving economy has certainly created economic benefits and opportunities. It has also created some unanticipated consequences that have zoning implications. One of these has been the trend in a growing number of communities for buyers to acquire a single-family home, and then demolish the structure and replace it with a substantially larger new home – known as a "McMansion."

In certain neighborhoods large new homes can be out of character, dwarfing and overpowering existing single-family homes. McMansions can also exacerbate housing affordability problems, pricing more people out of the local housing market.

This is a difficult issue to manage from a zoning standpoint. Most zoning regulations have setback and building height restrictions that allow for very

large structures. The way in which some communities have handled McMansions is by instituting design standards for new single-family construction. The standards can address issues such as the structure's location on the lot, and its scale, proportions, shape, and massing – all in an effort to preserve character and compatibility within existing neighborhoods.

The drawback to this approach is that it requires additional staff resources and review procedures, and is often perceived to be an unwelcome and unnecessary intrusion by the local government into private property rights. *Editor's note: For more on developing design standards, see Ilene Watson's "An Introduction to Design Guidelines," in PCJ #41 (Winter 2001).*

Mixed Uses and Density

There is no question that our society has become increasingly dependent upon the automobile. The more difficult issue is understanding the implications of this for local planning and zoning.

One of the causes of automobile dependency can be found in the very way in which most zoning codes isolate different kinds of land uses. Historically, zoning districts were designed to keep incompatible land uses from occurring in proximity to each other. For example, noxious industries were kept away from single-family neighborhoods. The unintended consequence of this principle, however, has been the separation of virtually all differing kinds of land uses from each other, requiring the use of the automobile to travel between home, work, shopping, and school.

Many communities are now working to undo decades worth of segregating land uses. One way is by encouraging mixed-use developments. There is no reason why residential, school, retail, and employment-related uses cannot peacefully coexist, if designed properly. Similarly, mixed uses can be designed to encourage pedestrian access or to take advantage of mass transit facilities. Quality mixed use is a basic objective of the "new urbanists" who urge a return to historic mixed land use patterns that predate the automobile era. *For more on this, see Philip Langdon's "New Development, Traditional Patterns," in PCJ #36 (Fall 1999).*

Similarly, land use "density" plays an important role. For many years, lower density zoning has been equated with promoting higher quality development. According to some, the larger the lot, the better the neighborhood. However, this need not be the case. Attractive neighborhoods can be developed at higher densities. There are countless examples of excellent single-family detached housing at eight to ten dwelling units per acre. Through good standards and plan review procedures, higher density can occur in a quality manner.

Summing Up:

Over time, many zoning codes have become institutionalized and rigid. Changes in the law often lag behind changes in society. Planning commissioners have an important and challenging job in seeking to ensure that their community's zoning regulations are consistent with the changing needs of residents and businesses. There is nothing more frustrating than trying to explain to people that some obsolete or counterproductive zoning code provision must be followed because no one has taken the time to update it. ◆

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Michael Chandler is Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Chandler also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops.

What's So Bad About Zoning?

by Edward McMahon

"Whatever you do, don't use the 'Z' word." I sometimes get this advice before speaking to groups in small towns and rural areas throughout America. I typically follow the advice, but it's worth asking – *what's so bad about zoning?*

By some estimates over 9,000 cities, towns, and counties, big and small, in every region of the country and representing at least 90 percent of the nation's population have some form of zoning in place.

Zoning is the basic means of land use control employed by local governments in the United States. Zoning has been around since 1916 when New York City enacted the nation's first comprehensive zoning ordinance to protect the health, safety, and welfare of residents packed into crowded urban tenements.

Despite longstanding criticism from some academics and property rights advocates, zoning is here to stay.

Does this mean that every zoning decision made by a local planning commission is a good one or that zoning has produced the beautiful, high quality living and working environments that we all care about? No – zoning has not always lived up to its promise and it is sometimes misused. For example, in some places, zoning is used to exclude low-income families or keep out minorities. In other places, zoning is used to give every landowner and developer exactly what they want, regardless of the cost to the community or the impact on adjacent landowners. Want to build a shopping center in a floodplain or a racetrack next to a residential area? No problem – we'll just rezone the property.

Zoning is merely a tool. It can be used constructively as a positive force for community good or it can be misused. Zoning is what you make of it. It works best when it is based on a vision and closely tied to the comprehensive plan. At its best, zoning can provide landowners and the marketplace with predictability and certainty. It can protect critical resources and it can increase property values. However, conventional zoning, by itself, will almost never create a memorable community.

A COUNTY COMMISSIONER ONCE TOLD ME HOW HE WAS CALLED A COMMUNIST AT A PUBLIC HEARING ON A PROPOSED ZONING ORDINANCE. HE REPLIED THAT WHILE HE WAS A METHODIST, HE WAS CERTAINLY NO COMMUNIST.

This is because conventional zoning is a limited tool. It is good for protecting what's already there and for preventing nuisances. It is not as good for shaping the future or for improving the quality of new development. This is because most zoning codes are proscriptive in nature. They try to prevent bad things from happening without laying out a vision of how things should be.

Successful communities think beyond conventional zoning. They use education, incentives, and voluntary initiatives, not just regulation. They also use design standards, incentive zoning, overlay zoning, density bonuses, and other innovative techniques. They allow for walkable, mixed-use neighborhoods.

Today's communities face complex issues, ranging from dealing with mixed use development to coping with a proliferation of billboards. These issues require solutions going beyond conventional zoning's focus on the regulation of use, bulk, and intensity.

Dealing With the "Z" Word

So what about those folks who think zoning is a dirty word? Why do they get so upset whenever zoning is proposed in a previously unzoned municipality or county, or whenever a community wants to strengthen its zoning ordinance?

In my experience, the most common objection to zoning is a perceived loss of control. Zoning opponents say "if you own a piece of land, you should be able to do what you want with it." Related to this is a pervasive fear that regulation of any kind will reduce property values. Overcoming these objections is not easy, but it can be done, particularly if you separate the facts from the myths.

Myth #1 – Zoning is un-American.

Fact: A county commissioner from a western North Carolina county once told me how he was called a Communist at a public hearing on a proposed zoning ordinance. He replied that while he was a Methodist, he was certainly no Communist.

Zoning disputes often inspire inflated rhetoric. Perhaps this is because zoning does mean that the interests of individual property owners must sometimes yield to the interests of the public. But this is as American as baseball or apple pie. In fact, for more than 150 years our courts have consistently held that the Constitution allows for the public regulation of private land.

To understand this, consider the old principle of law that says "your right to swing your fist ends where my nose begins." This principle applies to real estate as well. It means that with rights come responsibilities. Even political philosopher John Locke held as a basic assumption that "free men would never exercise their rights without recognizing the obligations that the exercise of those rights implied."

MYTH #2 – Sparsely populated rural areas don't need to control uses of land.

Fact: It is true that some places grow much faster than others, but change is inevitable every place in America. Technology, immigration, new roads, the global economy, and many other factors are changing communities whether they are prepared for it or not. There are really only two kinds of change in the world today: managed change and unmanaged change. Land use planning is one way to mitigate and manage change. Rural communities that want to preserve the status quo have no real choice except to plan. The old-timers who most abhor change are often the first to realize that without sensible land use controls, everything they love about a place will ultimately disappear.

MYTH #3 – Land use controls will increase taxes and reduce property values.

Fact: It is sprawl – not zoning – that increases taxes. Haphazard, inefficient land uses require taxpayers to pay more and more for roads, sewers, schools, utilities, and other public infrastructure. As for property values, every day hundreds of decisions are made by public bodies that affect someone's property values; however, these decisions are just as likely to increase the value of property as to diminish it.

Sensible land use controls almost always enhance rather than diminish property values. If you don't believe this, visit any historic district and compare property values in the district to property values outside the district. On the other hand, try selling a home next to an asphalt plant, junk yard, or other noxious use. Nationally known real estate appraiser Don Rypkema says, "sensible land use controls are central to economic competitiveness in the 21st century."

MYTH #4 – Planning is a bad idea.

Fact: The truth is virtually every successful individual, organization, corporation, or community plans for the future. Failing to plan simply means planning to fail. Try imagining a company that didn't have a business plan. They would have a hard time attracting any investors and they would be at a huge disadvantage in the competitive marketplace. The same is true of communities. A comprehensive plan is like a blueprint. It allows a community to define and accomplish its objectives. Even the Bible recognizes the importance of planning. As the book of Proverbs says, "Without vision, the people will perish."

Planning provides the essential bedrock on which zoning should be founded. In fact, communities that engage in zoning in isolation from planning are setting themselves up for failure – as their zoning regulations will often appear arbitrary and without any consistent, or long-range, purpose.

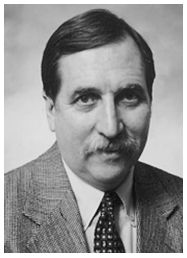
SUMMING UP:

This year marks the 75th anniversary of the landmark United States Supreme Court case *Euclid v. Ambler Realty,* which upheld the basic constitutionality of local zoning. Zoning's original supporters included both progressives and conservatives who shared a belief in the power of planning to improve people's lives. In fact, it was former President Herbert Hoover, who as U.S. Secretary of Commerce, chaired the commission which drafted the first model zoning enabling act. As Hoover noted in a foreword to the model act: "the discovery that it is practical by city zoning to carry out reasonably neighborly agreements as to the use of land has made an almost instant appeal to the American people."

One of the nation's earliest advocates for zoning was then Secretary of Commerce Herbert Hoover.

Perhaps the most important reason why zoning has flourished, despite its imperfections, is that it gives citizens a voice in local government. Without zoning, citizens have no voice when out-of-town corporations or big developers run roughshod over local values and traditions. It also makes land use decisions public. This is important because the more a community understands how decisions are made, the better future decisions will be.

Zoning is really about balance. At its best, zoning can help strike the elusive balance between quality of life and economic vitality. ◆



Edward McMahon is a land use planner, attorney, and Vice-President of The Conservation Fund. He is former president of Scenic America, a national non-profit organization devoted to protecting America's scenic landscapes.

On-Line Comments

"Staff here is still marveling over the correlation between this article and an informational meeting we had Wednesday night concerning proposed zoning amendments. I was asked by a 'tyranny response team' member what gave me (i.e., the government) the right to have zoning. I think he was quite surprised when I discussed many of the points outlined in McMahon's article; especially the fact that the U.S. Dept. of Commerce had been requested by business interests to develop a model zoning enabling act; that the courts have upheld zoning since 1926; and that the corollary of the right to hold property is a duty to not cause harm to the community."

– Marilyn Ryba, AICP, Senior Planner, Town of Queensbury, New York

"The importance of the relationship of zoning to the comprehensive plan and capital improvements cannot be stressed enough. Zoning is simply an implementation tool that cannot be successful without a driving vision. In fact, as any practitioner would agree, taken in isolation it generally does not foster good design or enhance a sense of place.

Linkage of vision and planning to zoning is what enables the creation of a community."

– J. Wayne Oldroyd, AICP, Director, Community Development, City of Maryland Heights, Missouri

25 Taking a "Village Walk"

For small towns developing a zoning ordinance, it *may* seem logical to copy from what's on the books in other communities. After all, how different can one zoning code be from another? Indeed, over the years many towns have done just this, basing their zoning on what they've found in other communities' ordinances.

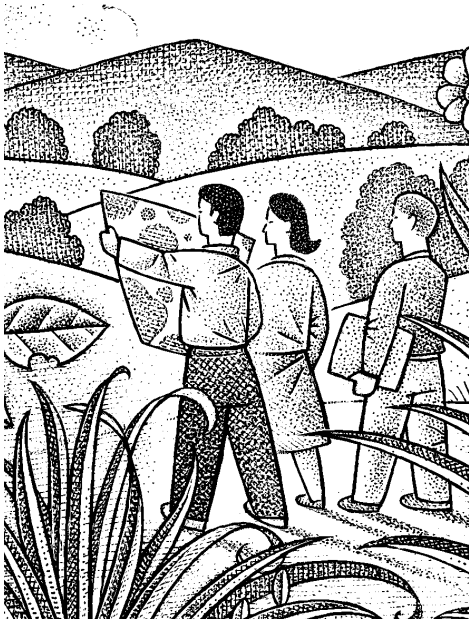
However, that wasn't the approach taken by David Umling, former planning director for the East Alabama Regional Planning & Development Commission (EARPDC), when the town of Cedar Bluff (population 1,500) sought assistance in formulating its first zoning ordinance.

Drawing on Allan Jacob's idea of "urban walks,"[1] Umling suggested that Cedar Bluff's planning commissioners take group walks through several different neighborhoods in the town. He asked them to focus on "areas that have gone bad," as well as "patterns that work and reflect the character of the community."

The idea was to develop a zoning code that would address problem issues, while having standards that promote more of what was already working well. Observations from the field trips were compiled in a summary narrative to help frame discussions on desired zoning standards.

The "village walks" were supplemented by a review of aerial photos and tax maps, to evaluate lot sizes, setbacks, and street widths. EARPDC staff then worked with the planning commission to develop specific dimensional requirements for each proposed zoning district. Other key issues addressed in the ordinance included stormwater management, flood control, and manufactured housing. In addition, the commission sought community feedback on the proposed regulations.

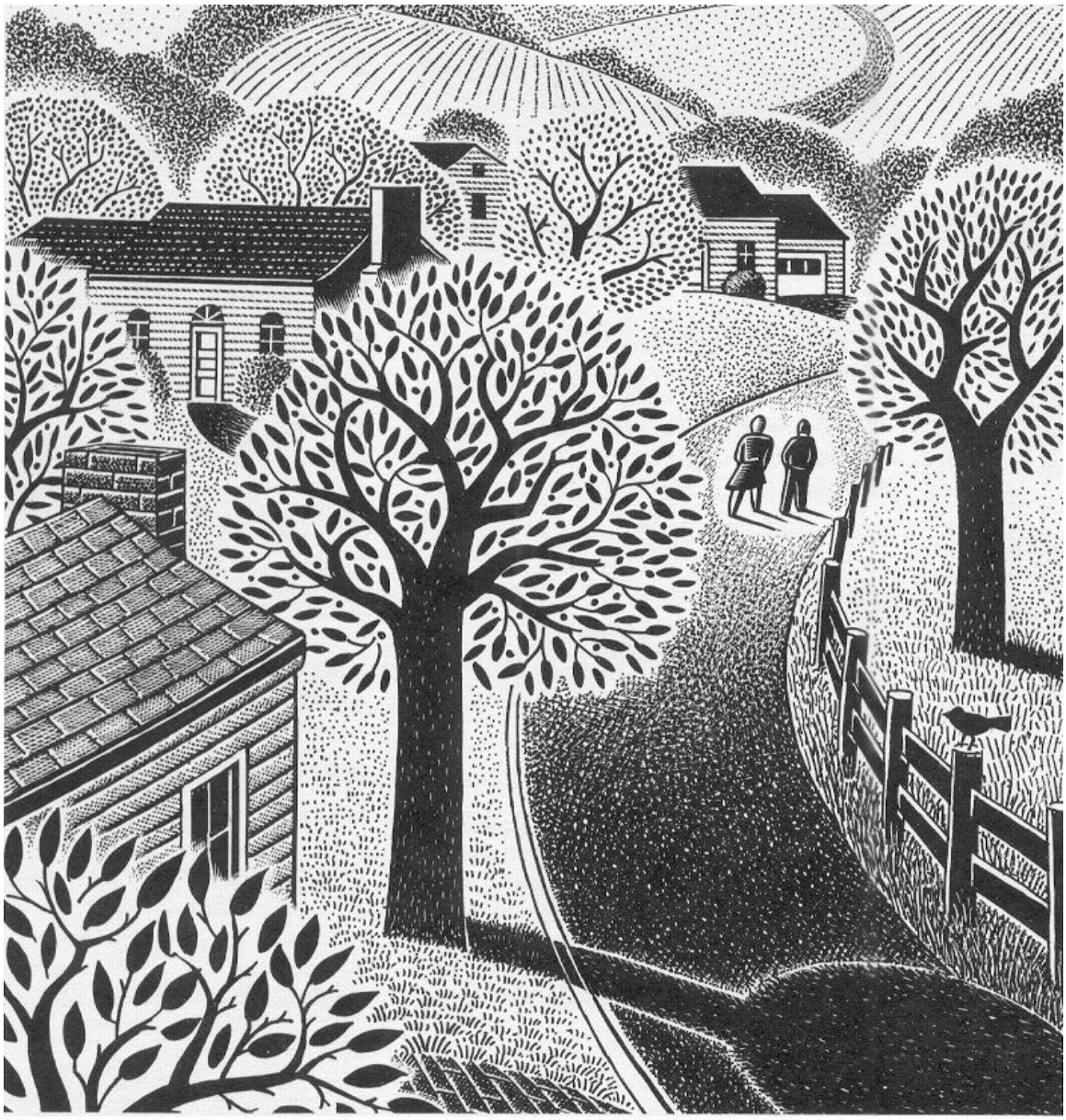
One of the most significant benefits of having the planning commission so involved in developing the zoning ordinance, says Umling, is that "they understood the logic of what went into it, and the zoning standards actually meant something for them." When the ordinance came up for adoption, they were there to explain it, not an outside planning consultant. As Umling recalls, "it was a proud moment for them. They knew it was their ordinance; they had put it together."



Umling feels the process used in Cedar Bluff can also work when revising existing zoning codes, and in larger communities. The key is for planning commissioners (and other citizens) to take ownership of the ordinance and make sure it is actually addressing their own community's needs. And, yes, this sometimes means pulling on your shoes and taking a walk! ◆

For more information, contact David Umling at: UmlingD@charlescounty.org.

1 See Allan Jacobs' *Great Streets* (MIT Press 1995).



Paul Hoffman. Copyright Planning Comm'rs Journal.

An Introduction to Subdivision Regulations

by Martin L. Leitner, Esq., and Elizabeth A. Garvin, Esq.

At first glance, subdivision regulations can appear to be a confusing collection of rules and restrictions designed to confound the developer and planning commissioner alike. Fortunately, the regulations are generally not as inaccessible as they first appear, and in many communities subdivision regulations provide the backbone of a successful planning program. One cautionary note: subdivision regulations do vary from community to community; we have tried to base our comments on the type of provisions we've found to be most typical.

THE APPLICATION AND APPROVAL PROCESS

Generally, subdivisions are divided into "major" or "minor" applications. Minor subdivisions are those that, because of the small number of lots created, or the lack of a need for public streets or other public facilities, can be approved in an expedited manner. Major subdivisions, in contrast, require a more extensive review.

For both types of subdivisions, the first step in the approval process is often the submission of a sketch plat, on which the applicant presents the basic concept of the subdivision. A meeting is typically held between the applicant and the local planning official to determine which procedure the applicant must follow -- major or minor subdivision. Additionally, the sketch plat allows the local planning official to initially determine if the project complies with local, state and federal law, including the jurisdiction's zoning ordinance and comprehensive plan. Projects which comply with all applicable regulations are allowed to proceed to preliminary plat approval. Sketch plats are also frequently circulated to other local and state agencies for review and comment. Fundamentally, the sketch plat serves as an early warning system for both the applicant and the municipality.

Following sketch plat approval, the subdivider may be directed to apply for preliminary plat approval, or bypass that step and apply directly for final plat approval. The preliminary plat is a detailed set of documents and maps, showing: lot and street layout; connections to utilities; the location of natural features and topography; and the location of nearby parks and recreational facilities. The preliminary plat is normally first reviewed by staff for completeness and compliance with the design and development standards contained in the subdivision regulations. Following this, it is referred to the planning commission for evaluation. The planning commission usually holds a public hearing on the preliminary plat before taking action.

PRELIMARY PLAT APPROVAL IS A SIGNIFICANT MILESTONE FOR THE APPLICANT, WHO CAN THEN PROCEED WITH SOME CONFIDENCE THAT THE COMMISSION WILL APPROVE A CONSISTENT PLAT.

Planning commissions often approve preliminary plats, but impose various conditions. For example, a commission may condition approval on dedication of land for public parks; hook-ups to public sewer and water; construction of interior and perimeter streets; or payment of impact fees.

Preliminary plat approval is a significant milestone for the applicant, who can then proceed with some confidence that the commission will approve a consistent final plat. The final plat provides more detailed engineering and design drawings -- it should not, however, contain significant changes in the development's overall layout and design. If required by law, the planning commission holds a second public hearing before taking action on the final plat. After the final plat is approved, the subdivider formally records it.

COMPLETION & MAINTENANCE OF IMPROVEMENTS

The cost of needed improvements to serve the subdivision -- roads, drainage facilities, water and sewer systems, landscaping, utilities, fire protection equipment, and street signs -- is typically borne by the developer. While municipalities could require the actual completion and dedication of all public improvements before final plat approval, this is not often done. Instead, approval is typically conditioned on the developer providing adequate financial guarantees, such as a cash escrow or letter of credit, that the required improvements will be completed.

When the improvements are completed, the municipal engineer will usually inspect them and certify that they are consistent with the approved plat and are acceptable to the municipality. The municipality will then release the security that was required of the developer.

DESIGN AND DEVELOPMENT STANDARDS

Design and development standards are incorporated into subdivision regulations to assure that developers comply with a wide assortment of local requirements, including items such as: lot arrangement and dimensions, fencing, landscaping, soil preservation, road design, road dedication and reservation, drainage and storm sewers, water facilities, fire hydrants, sewerage facilities, sidewalks, utilities, parks,

playgrounds, and preservation of natural features -- to name a few.

The criteria utilized in design standards are intended to reflect community values, goals and objectives; to harmonize the development with surrounding areas; and to implement the local comprehensive plan.

Design and improvement standards vary considerably in their level of specificity to reflect the divergent needs of communities. For example, one local government's subdivision regulations may establish specific criteria for roads, covering grading, topography and arrangement, block size, access between and among road types, road names, design standards, layout of intersections, and dedications and reservations. Another community, however, may choose to set road requirements through a subdivision improvement agreement with the developer.

Landscaping requirements are another area of subdivision regulation which frequently expose an entire spectrum of views. Some communities, not leaving anything to chance, specify the exact type of tree or shrub which will be required on a given site or project, often providing lists of native plants and acceptable vegetation. Other communities take more of a wait-and-see approach; they require some type of landscaping or buffer, but wait until the developer presents a site plan to deal with the specifics.

Differences in subdivision design requirements do not always reflect just the needs of the community; on occasion, they mirror the response of an entire region to a problem. Example of this are energy conservation standards (which are most common in the Northeast), water supply and drainage requirements (common in the West and Southwest), and the timing of construction of public facilities (often found in states having experienced rapid growth, such as Florida and California). See Sidebar "Timing & Phasing" (next page).

PUBLIC FACILITY / "IMPACT FEES"

In addition to necessary "on-site" facilities, a proposed subdivision may trigger a need for "off-site" facilities, such as an arterial road to accommodate traffic anticipated to be generated by the development, or the extension of a sewer interceptor line to the property proposed for subdivision. Many municipalities now require as a condition of subdivision approval that new development pay its pro rata share of the cost of the new off-site capital improvements necessitated by the development. Public facility -- or impact -- fees should rely upon a capital improvements plan which details the necessary public improvements; the drawing of appropriate service areas; and the calculation of impact fees based on the number of dwelling units or square feet in the proposed development. See Sidebar, "Impact Fees" (next page)

Impact fee revenues collected from developers must be "earmarked" or placed in segregated fund accounts and expended only in the benefit area from which they were collected. The fees may then be used to fund the construction, engineering and land acquisition costs of public facilities needed to serve the new development -- they cannot be used to correct existing deficiencies in facilities or to pay for operating costs. Finally, impact fees are refundable if not spent within a reasonable period of time.

ANTIQUATED SUBDIVISIONS

In many communities throughout the United States, land was platted before local governments adopted subdivision controls. While this practice benefited developers -- who were able to divide their property and sell lots without incurring any capital improvement costs -- the result has often been disastrous for local governments, which later found themselves with thousands of developed, partially developed, or undeveloped lots in separate ownership in subdivisions that did not meet even minimal regulatory standards.

Local governments then have the unenviable choice of either limiting development rights in the subdivision -- certain to be anathema to individual landowners who intended to retire in homes on these lots -- or allowing development pursuant to the subdivision plan and providing all of the necessary internal subdivision facilities and services at public expense.

Some modern subdivision regulations employ techniques to minimize this problem in the future. One method used is to require that developers reapply for subdivision approval whenever they request any material changes to their approved plats. This helps ensure that the subdivisions comply with current regulations. A second technique available to local governments is "plat vacation." This is a process by which the governing body approves the elimination of a plat, in whole or in part. When the entire subdivision is still in single ownership, plat vacation may be initiated by either the property owner or the governing body; however, when the lots are owned by individual property owners, the vacation must be initiated privately, and must have the consent of all of the owners -- a solution that, in practice, is quite difficult to achieve.

SUMMING UP:

Modern subdivision regulations can deal with a wide range of land development issues tailored to specific local policies, goals and needs. Combined with a comprehensive plan and zoning regulations, subdivision regulations are an extremely useful planning tool to guide growth and development. ♦

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Improving the Subdivision Review Process

by Randall Arendt

Ever wonder why the vast majority of subdivisions look so much alike, despite the fact that they are built in such varied landscapes (forest, meadow, field) and on different terrain (flat, rolling, steep)? The simple answer is that most of them are designed generically, in "cookie-cutter" style, with very little regard to the special natural or cultural features that give many properties their distinctive character.

In most municipalities, subdivision design regulations have never evolved beyond the basic stage where code requirements focus on a few mundane but important points: soil suitability, wetlands, floodplains, street paving, stormwater management; and on a few mundane but rather unimportant points: street frontage, lot-line setbacks, lot area.

The sad reality is that most localities do not require subdivisions to consist of anything more than house lots, streets, and drains. As a result, subdivisions are approved as long as plans show house lots with the minimum required size and frontage, and avoid areas that are inherently unfit for building, such as wetlands and floodplains. When community standards are set so very low, developers often respond with the least imaginative subdivision designs.

As I will argue shortly, it does not have to be this way. In fact, with only a modest amount of additional effort, even smaller communities can implement a much more effective subdivision review process – a process which will result in better designed and sited residential developments. But first, let me briefly identify four common flaws in the typical subdivision review process.

> IT IS IMPOSSIBLE TO COMPLETELY UNDERSTAND A SITE ONLY BY EXAMINING A TWO-DIMENSIONAL PAPER DOCUMENT INSIDE A MEETING ROOM

Four Common Flaws in Subdivision Review

The first flaw is that most local ordinances fail to require that applicants submit detailed surveys or inventories of their site's features, beyond those few features which would render property unbuildable (i.e., wetlands, floodplains, steep slopes). Similarly, most ordinances do not require maps depicting the subject parcel's surrounding context.

Second, most municipalities do not require planning board members to walk the land. Yet a group site visit, which also invites abuttors and others interested in the development, is essential to an understanding of any property.

Third, many local subdivision regulations require highly detailed design drawings at the so-called *Preliminary Plan* stage. This means that developers may have spent tens of thousands of dollars in preparing their the very first submission. Understandably, developers are not inclined to discard such plans, even if better ways to design the development are pointed out to them by planning staff, planning board members, or others.[1]

Fourth, subdivision layouts are often prepared by people trained in recording site data and in street and drainage issues (surveyors and engineers), but who have little or no expertise in the field of landscape architecture or neighborhood design.

Developing a Better Subdivision Review Process

Three sequential steps can be taken that will dramatically improve the subdivision review process:

1. Require the applicant to prepare a *Context Map* of the immediate area and a detailed *Existing Resources and Site Analysis Map* of the property;
2. Conduct a site walk with the applicant, planning staff, planning board members, and abuttors very early in the process; and
3. Require the applicant to submit an inexpensive conceptual *Sketch Plan* as the first layout document, before preparing detailed layout and design drawings.

These straightforward and fairly simple steps can yield major benefits by allowing all parties to understand what is important about the property, and to engage in a process that is collaborative and consensual, instead of adversarial and combative.[2]

1. Mapping the Property.

Good maps are essential tools in many aspects of planning, but perhaps

1 One of the mysteries many planning commissioners encounter is the so-called "Preliminary Plan." In many communities, commissioners are surprised to discover that the preliminary subdivision plan is actually closer to a final document in its level of detail, and the time and cost that the applicant has expended on preparing it. As I have noted, this makes applicants more resistant to changes suggested by commissioners or others. A much greater emphasis needs to be placed on the preparation of an existing resources/site analysis map, site walks, and sketch plans. These should be required by local ordinance before the preliminary plan submission.

nowhere more so than in the review of residential subdivisions.

Context Map. While many subdivision regulations do call for a location map, such maps must have the scope and content that will enable staff, planning board members, and others to acquaint themselves with the resources and development patterns near the development site. This kind of understanding is critical to planning for improved buffers and open space connections, and lessening developmental impacts in the neighborhood.

A good Context Map can be based on data from already published sources such as aerial photographs, USGS topo sheets, FEMA floodplain maps, tax maps, and U.S. Fish & Wildlife Service wetlands maps. This will also minimize the developer's cost in preparing such a map. The Context Map should then be reproduced by the applicant's engineer to the same scale (1 inch = 400 feet), showing reviewing officials the location of natural features and development patterns on properties within one-half mile of the development site.

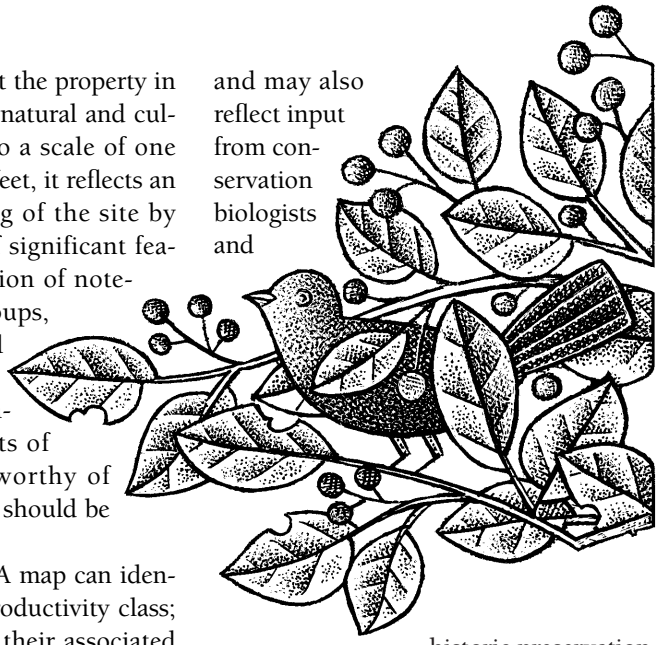
Existing Resources/Site Analysis ("ER/SA") Map. Just as it is critical to see the broader context of a proposed subdivision, it is necessary to have a clear understanding of the characteristics of the site itself. Again, good maps – prepared at the outset of the process – are essential. What we term an Existing Resources/Site Analysis Map provides a greater amount of essential information than is typically required in most subdivision regulations, and should document the location of a large variety of site features. In my experience, the ER/SA map is the single most important document in the subdivision design process, as it provides the factual foundation upon which all design decisions are based.

The ER/SA Map tells reviewers what they need to know about the property in terms of its noteworthy natural and cultural features. Drawn to a scale of one inch equals 100 or 200 feet, it reflects an in-depth understanding of the site by mapping out a range of significant features, such as the location of noteworthy trees or tree groups, and unusual geological formations. In this way reviewers can, for example, identify those parts of woods that are most worthy of conservation and which should be "designed around."

In addition, an ER/SA map can identify farmland soils by productivity class; locate vernal pools and their associated upland habitat areas (essential in the lifecycle of salamanders and other woodland amphibians); map out significant view corridors into the property from public roads or highways; and, in the absence of sewers, show soil suitability for septic sewage disposal.[3]

The use of GPS (Global Positioning Systems) technology has made the documentation of this type of information relatively easy and inexpensive. In fact, a growing number of communities already routinely require that plans, for example, show the location of every tree greater than a given diameter, and that these trees be identified by species on the drawing.[4] In this way, reviewers can identify those parts of woods that are more worthy of conservation and "designing around" (which trees to hug and which to let go). However, I would not require this information for trees growing in areas that would not be disturbed because of their location within proposed conservation areas.

An ER/SA Map is typically prepared by a landscape architect for the developer, and may also reflect input from conservation biologists and historic preservation specialists. Such information, provided early in the process, enables the site designer, the developer, and municipal officials to make better-informed decisions.[5]



If officials agree that these items are necessary and should be submitted at some point during the subdivision application process anyway, it doesn't increase the applicant's costs for them to be required up front where the important information they provide can be of the greatest use (helping to avoid wasting money on plans that do not take these features fully into account).

2. Site Walks.

Because it is impossible to completely understand a site only by examining a two-dimensional paper document inside a meeting room, it is essential that – with the ER/SA Map in hand – planning board members, conservation commission members, and staff walk the property with the applicant and any interested

continued on next page

2 Based on the work I have done at the Natural Lands Trust over the last decade in the Growing Greener program (supported by Pennsylvania's Dept. of Conservation & Natural Resources and Dept. of Commerce & Economic Development), the reforms which I recommend often begin with updating local subdivision regulations to include the above-mentioned items.

3 Septic systems need the deepest, best-drained soil that can be provided, and those areas must be "designed around" just as carefully — and from the very beginning — as any of the "Primary Conservation Areas," so they may be reserved for sewage treatment and effluent disposal and not be carelessly covered by foundations, driveways, or streets. To maximize the amount of open space, it is often best to locate septic drainfields (either shared or individual ones) off-lot, in easements under conservation meadows, neighborhood greens, and ballfields.

4 With respect to the diameter at which a tree becomes noteworthy, I recommend girths related to specific species, such as 4 inches for holly or flowering dogwood, 6 inches for a sassafras or water beech, 10 inches for a wild cherry, 14 inches for a red or white oak, 16 inches for a tulip poplar, 18 inches for a sycamore, etc.

5 For more details about the ER/SA map, as well as model ordinance language related to such a map, see Randall Arendt, *Growing Greener, Putting Conservation into Local Plans and Ordinances* (Island Press, 1999).

Sketch Plan Preparation

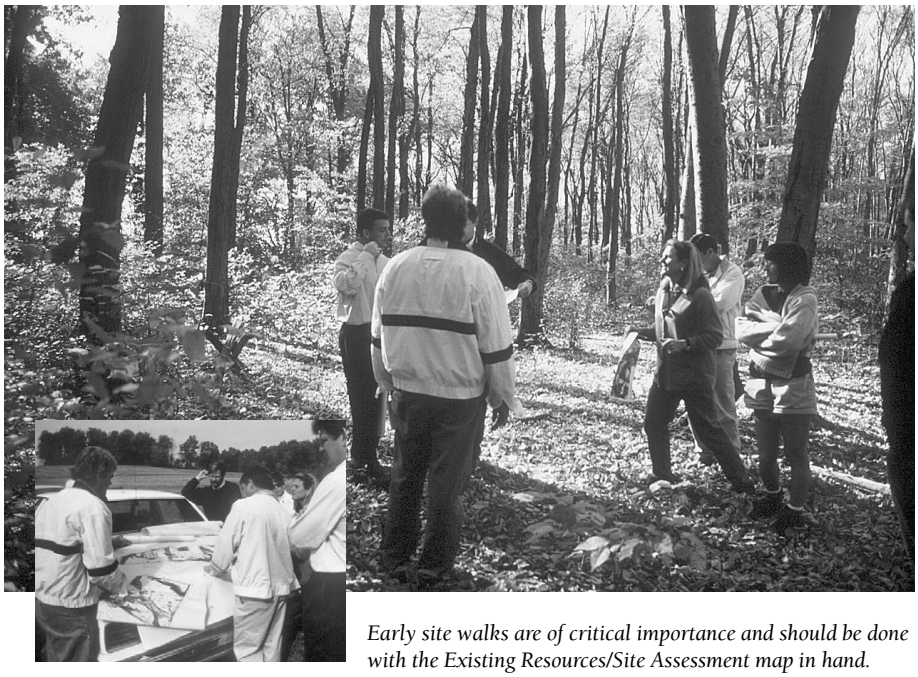
I recommend that local regulations require Sketch Plans be prepared by a landscape architect or physical planner working with a civil engineer. Under this approach, surveyors and engineers would continue to perform all of the usual surveying and engineering. However, the conceptual design and layout is best handled by a landscape architect or physical planner. Some municipalities further enhance this process by increasing the applicant's fee to hire the physical planner or landscape architect to walk the site, conduct the site analysis, and produce a Sketch Plan, thereby launching the developer in the right direction. Developers with whom I have worked are often skeptical of the value of this approach until they try it once.

Mapping Potential Conservation Lands

A community-wide map of potential conservation areas is a quite useful tool that planning departments should consider preparing. It identifies those parts of undeveloped properties where the municipality has preliminarily determined the importance of designing new development around certain land and water features in such a way that an interconnected network of conservation land can be protected. Such areas may include lands along stream valleys, blocks of mature woodland, as well as prime farming soil, and historic or cultural features important to the community.

Besides informing local officials of the nature and extent of particular kinds of resources on any property proposed for subdivision development, the map also supplies the contextual view so that all parties will be able to see and appreciate how designing around certain features can preserve an interconnected network of open space running across numerous parcels.

For more details on conservation mapping, see Randall Arendt, *Growing Greener: Putting Conservation into Local Plans and Ordinances* (Island Press, 1999).



Early site walks are of critical importance and should be done with the Existing Resources/Site Assessment map in hand.

Improving the Subdivision Review Process...

continued from previous page

neighbors. This will allow everyone to take the full measure of the proposed development site, and help determine which site features are most worthy of "designing around." We have found that nearby property owners greatly appreciate being included, and are much less inclined to fight a process which has involved them from the outset.

Without the benefit of experiencing the property in a three-dimensional manner at a very early stage in the process, it is extremely difficult for staff and officials to offer informed suggestions as to the preferred locations of conservation areas and development areas, and to evaluate proposed layouts. Site walks should be "standard operating procedure," and part of the job description for all planning board members (except those with physical disabilities). Local officials who take their first site walk with a detailed site analysis map in hand, meeting the applicant, the applicant's site designer, and abuttors in a casual and informal way, tell me they wouldn't think of missing this critical part of the process ever again.

Regarding timing, I suggest conducting the site walk even before the applicant prepares a *Sketch Plan* (discussed shortly). I also usually end the site walk with an informal design session, where the significant natural and cultural features (from the *ER/SA Map*) are identified, and possible ways of designing around them discussed.

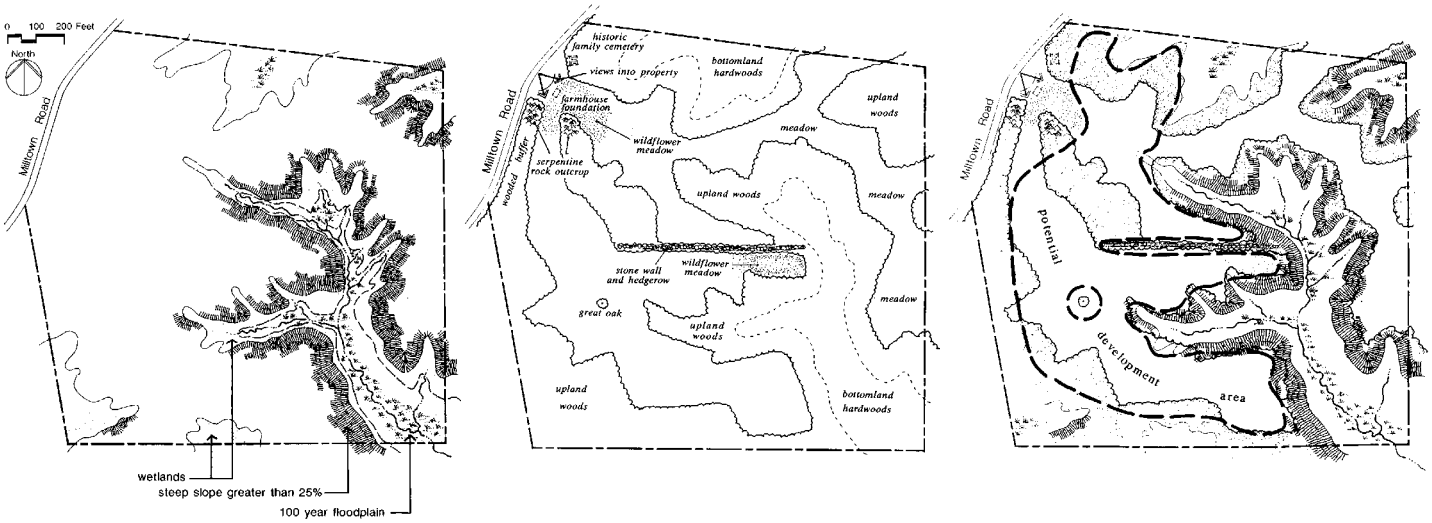
Of course, site walks must be advertised as public meetings, although they are essentially informal meetings during which no decisions will be reached. *Editor's Note: For more on the conduct of site visits, see Greg Dale's "Site Visits: Necessary But Tricky," in PCJ #39 (Summer 2000).*

3. The Sketch Plan.

The Sketch Plan is the next key document in the subdivision process, and second in importance only to the Existing Resources/Site Analysis Map. The Sketch Plan sets out the overall concept for the subdivision, showing areas of proposed development and areas of proposed conservation.

The Sketch Plan is most useful when drawn to scale on white tracing paper as an "overlay sheet" to be lain on top of the ER/SA Map so that everyone can clearly see how well – or how poorly – the proposed layout avoids areas of the site prioritized for conservation. Ideally the proposed development "footprint" on the Sketch Plan should dovetail with the protection of resources documented on the ER/SA Map.

Primary conservation areas *Secondary conservation areas* *Potential development areas*



Planning for subdivisions should start by identifying primary conservation areas (such as wetlands, steep slopes, and floodplains) and secondary conservation areas (including woodlands, meadows, and significant cultural features within the site). Once conservation areas are identified, the core areas for potential development can more easily be mapped out.

Sketch Plan review is an essential step, and should occur before the applicant spends the large sums typically required for the more detailed and engineer-prepared "Preliminary Plan" drawings. Only after agreement is reached at the Sketch Plan stage should the applicant move on to prepare the Preliminary Plan. This will give the applicant the full benefit of the site analysis, site visit, and sketch plan review – and a greater assurance of ultimate approval – before spending money on preparing the Preliminary Plan.

Four-Steps to Better Subdivision Design

The most effective method for producing subdivision layouts that are responsive to their site, and which preserve value-adding features, is to first focus on areas of the site to be conserved, not on areas to be developed. If this is done (and if local regulations also require that a significant proportion of subdivisions be designated as open space), it is nearly impossible to produce an environmentally unsound subdivision. This is particularly the case if that open space to be conserved is closely related to a "Community-Wide Map of Potential Conservation Lands" set out in the local Comprehensive Plan. *Mapping Potential Conservation Lands.*

After the open space areas to be preserved are located, the next step is to select house locations, with homes positioned to take maximum advantage of that protected land in neighborhood squares, commons, greens, playing fields, greenways, farmland, or forest preserves. The third step involves "connecting the dots," that is, aligning the streets and trails to serve the new homes. The fourth and final step, drawing in the lot lines, is actually the least significant part of the process.

One of the greatest weaknesses in the subdivision process in many communities is that open space conservation areas are identified last, not first. As a result, the open space is often a collection of whatever bits of land that have proven difficult to develop. The other common failing is the inclusion of deep perimeter buffers around proposed developments, as if they were gravel pits, junkyards, or leper colonies! This practice inadvertently leads to very poor layouts in which a substantial percentage of the total open space is consumed by this excessive separation.

SUMMING UP:

The combined influence of the expanded Context Map, the Existing Resources/Site Analysis Map, the Site Walk, the Sketch Plan overlay sheet, *and* the four-step design approach described above can make a significant difference in the way developers, planning boards, and abutters approach a site's development. The end result is not only better subdivisions, but projects developed in a more cooperative, less contentious, atmosphere. ◆

Randall Arendt is a conservation planner, site designer, author, and lecturer. He is one of the foremost proponents of compact development patterns as a tool for protecting natural and cultural landscapes. His practice, Greener Prospects, is located in Narragansett Pier, Rhode Island. Arendt has written two other articles for the Planning Commissioners Journal: "Growing Greener: Conservation Subdivision Design," in PCJ #33 (Winter 1999), and "Open Space Zoning: What It Is & Why It Works," in PCJ #5 (July/August 1992). He may be contacted via his website: < www.greenerprospects.com >.

Readers interested in learning more about Arendt's approach are referred to his books *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks* (Island Press, 1996) and its sequel *Growing Greener: Putting Conservation into Local Plans and Ordinances* (Island Press, 1999). They may also download an 18-page booklet describing this process, at: <www.natlands.org> (click on "Planning" and then on "Growing Greener").

Comprehensive Planning & Capital Improvement Programs

Commissioners have a long-term impact on their communities by providing a strong planning foundation – and a strategy to pay for it.

Developing the Comprehensive Plan: Part I

by Michael Chandler

Planning commissions have numerous duties and responsibilities. Chief among them is the preparation of a comprehensive plan for the community.

As I have previously noted, the planning process begins once a locality decides to commit the necessary time, energy and money to accomplish the task. It is important to remember, however, that the planning process is governed by state law and local codes. Accordingly, "getting started" with developing (or revising) a comprehensive plan requires, as a necessary first step, a thorough understanding of these legal requirements.

Organizing the Planning Process

Whether we label our plan comprehensive, master or general, we are, in most instances, describing the same thing. For most communities, a comprehensive plan is the physical manifestation of putting down on paper, the hopes, dreams and goals a community holds for itself.

Properly done, a comprehensive plan will describe how, and at what pace, the community desires to develop physically, economically, and socially. The plan functions much like a roadmap; it is a means to an end.

The roadmap analogy is a powerful one, for it captures a plan's predictive nature. However, caution is warranted. Imagine for a moment you are visiting New York City for the first time and you discover that your guide map, though marked New York, is really a map of Boston. No matter what you do, or how hard you try, the map will be of little value as you attempt to negotiate the streets of New York. In like fashion, if your comprehensive plan is "pieced together" with borrowings from other communities' plans, or is missing several key elements or parts, it too will prove to be of little value.

Background Studies

In order to plan for the future, a planning commission needs to understand the community's past and present. The collection and analysis of this background information is an essential early step in the plan development process. Typically, a planning commission will conduct studies or gather information bearing on the community's demographics; natural environment; economic base; housing stock; transportation systems; community facilities; and land use pattern. The planning commission will then be in a position to analyze trends and draw conclusions about the community.

Potentialities: The Role of Goals, Objectives & Strategies

A second important plan development consideration involves the prediction of future conditions in the community. With the findings generated by the background studies as a basis, the plan will begin to reflect a futures orientation. In most cases, this orientation will be represented in the plan's goal statements which, when implemented, will bring the plan to life.

The challenge of articulating a community's future through words should not be trivialized. For example, there might be agreement on the goal of "improving our community," but no agreement on how this will be done. Planning commissioners must ask themselves whether such a goal carries with it any real meaning. I would venture a guess that most commissioners would say "no."

In recognition of the critical role words play in planning, it is important that planning commissioners understand the differences between goals, objectives, and strategies.

- A *goal* is a general statement of a future condition which is considered desirable for the community; it is an end towards which actions are aimed.
- An *objective* is a statement of a measurable activity to be accomplished in pursuit of the goal; it refers to some specific aspiration which is reasonably attainable.
- A *strategy* is a specific proposal to do something that relates directly to accomplishing the objective; it identifies the how, where, and amount to be done.

In the next issue of the *Journal*, I'll continue to discuss key considerations in developing the comprehensive plan, focusing particular attention on the role of citizens in the process and on strategies for getting the plan adopted. ◆

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Developing the Comprehensive Plan: Part II

by Michael Chandler

In my last column, I identified background studies and the formulation of goals, objectives and strategies as key ingredients in the plan development process. In this column I'll continue the plan development theme by first examining the role of citizens in the planning process, and then, briefly, reviewing the contents of a typical plan.

Citizen Participation

The inability to achieve a public consensus about what kind of future a community intends to create for itself is a fundamental reason land use planning fails. To be successful, planning must reflect the wants, needs and desires of the citizens who live in the community. Thus, a primary challenge facing a planning commission involves developing an effective strategy for getting citizen input in the planning process.

A planning commission can choose among a broad range of options when deciding on a citizen participation strategy. For example, citizens can be recruited to serve on ad hoc task forces or citizen advisory committees charged with completing a particular phase or element of the comprehensive plan. This particular strategy has enjoyed broad support because of its simple design and ability to deliver quality citizen input.

Another citizen involvement technique is the community survey. Depending upon the methodology used, a community survey has the potential of reaching a large number of citizens. This, in turn, can yield a tremendous amount of information and opinions on a broad range of land use issues being studied by the planning commission.

Another widely used citizen involvement strategy involves the planning commission working directly with specialized groups or target audiences such as farmers, developers, environmentalists or small business owners. By grouping persons with like interests, a planning commission can capitalize on their accumulated knowledge and perspective. In some cases, this form of citizen participation is essential because of the influential nature of the target audience or special interest group.

> A VISIONING FORUM HAS THE CAPACITY TO PRODUCE A TREMENDOUS AMOUNT OF INFORMATION, AS WELL AS CIVIC ENERGY AND SPIRIT.

Planning commissions are also reaching out to citizens in new and exciting ways. For example, the use of two-way interactive television is gaining in popularity. Air time can often be secured as a public service, with little or no cost to the locality. As many people find it difficult to attend meetings, television may well become the preferred medium for citizen involvement.

The charrette, long a mainstay of design professionals as an idea generator, is also gaining acceptance as a citizen participation strategy. Highly interactive and participatory, a charrette can be designed to present citizens with a real world view of planning and the choices their community must make when deciding about future land use patterns and community development goals.

Another citizen participation strategy finding a niche is "visioning." As a prelude to the traditional community planning process, a growing number of communities are engaging their citizens in a structured visioning process. In most cases the process is designed to provide answers to such key questions as where the community is headed, what values its citizens find most important, and what kind of future they hope to create. As with a charrette, a visioning forum has the capacity to produce a tremendous amount of information, as well as civic energy and spirit.

Plan Content

The background studies referenced in my last column can provide a planning commission with an accurate representation of its community's current position. In many communities, this background information is presented in chapter format. Typically, chapters will be organized around the natural environment, local economy, housing, transportation, commerce and business, community facilities and existing land use.

The goals and objectives guiding the plan, when combined with the vision statement, will provide a clear view of the kind of future the community hopes to achieve. This, in turn, should be reflected in the plan's future land use element – the part of the plan that starts to "put on the ground" the community's preferred future.

In my next column, I'll first discuss strategies for ensuring that your governing body adopts the proposed comprehensive plan, and then focus on ways in which plans get implemented.

Michael Chandler is an Associate Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Mike also regularly conducts planning commissioner training programs. His column appears in each issue of the Planning Commissioners Journal. For more on visioning, see Walter Cudnohufsky's article reprinted on p. 41 and "Sharing the Map" in PCJ # 6. A charrette is the focus of "Community Planning that Works," in PCJ # 8.

Developing the Comprehensive Plan: Part III

by Michael Chandler

This final column on developing the comprehensive plan has two parts. The first highlights strategies a planning commission can use to help ensure that the governing body adopts the comprehensive plan once it is completed. The second part reviews the basic ways in which a plan can be implemented.

Plan Adoption

The development of a comprehensive plan presents a planning commission with multiple challenges. Deciding how the planning process will be organized, what role citizens will play in the process, and just what the plan will cover are but a few of the questions a commission will have to answer before and during plan preparation.

All of the planning commission's hard work will go for naught, however, if the governing body fails to enact the commission's recommended plan. In order to minimize this possibility, the planning commission should be dealing with the governing body *well in advance* of when it formally transmits a recommended plan to that body for adoption. The following strategies will help achieve this objective:

1. Commitment to Communication.

Plans are rejected by governing bodies for many reasons. Unfortunately, the lack of communication between the planning commission and the governing body, especially while the plan is being developed, is a primary reason plans are ignored or set aside by local legislatures. The planning commission can avoid this by reaching out to the governing body and opening lines of communication.

Early on, the commission needs to provide members of the governing body with an opportunity to share their perspective and vision relative to the plan development process. The commission also needs to share with the governing body how the plan will be developed, what its contents will include, and why it will be of value to the community. Expending time educating the governing body about the planning process will yield dividends during plan adoption.

DESIGNING A STRATEGY THAT PLACES A PREMIUM ON COMMUNICATING WITH THE GOVERNING BODY WILL SUBSTANTIALLY ENHANCE THE LIKELIHOOD THAT THE PLAN WILL BE ADOPTED

2. Develop a Timeline.

The planning commission should develop a timeline that will guide the plan development process. The timeline, with targeted milestones or completion dates, should be shared with the governing body. This action will provide elected officials with a clear picture of how the comprehensive plan will actually be assembled and by what time. No one should be in a position to complain later on that the proposed plan has taken them by "surprise."

3. Involve and Inform the Governing Body.

The planning commission should seek to involve the governing body at various stages of the plan development process. For example, the elected body might be asked to participate in the development of the plan's goals and objectives. If the commission intends to involve the general public in the planning process through community meetings or public forums, members of the governing body should be invited to such events. As milestones are reached, written and oral status reports should be given to the governing body. Such efforts will help build the lines of communication between the commission and the governing body.

4. Schedule Joint Work Sessions.

During the plan development process, the planning commission and the governing body might consider meeting in formal work sessions. Through discussion of the various elements and phases of the plan development process, the planning commission can both inform and learn from the governing body.

5. Hold Joint Public Hearings.

A final strategy (if lawful in your community) might involve joint planning commission / governing body public hearings on the draft plan held *before* the commission takes formal action on it. The premise behind this strategy is that public support for the plan may be easier to secure if both bodies are willing to engage the public together.

The key word to bear in mind when considering any plan adoption strategy is *communication*. Designing a strategy that places a premium on communicating with the governing body will substantially enhance the likelihood that the plan will be adopted.

Implementing the Plan

A comprehensive plan cannot by itself effect change. Despite the fact that a plan may describe in both words and pictures what the community wants, the plan itself can only recommend actions to accomplish those desires. A plan relies on separate, legally defined methods for bringing about desired changes. Fortunately, all communities have a set of basic tools and techniques that can be used to implement the comprehensive plan and make it a living document for the

community. The balance of this column will provide an overview of the principal tools of plan implementation.

1. Zoning

Zoning is the process by which local governments divide the land area in their jurisdictions into districts or zones to regulate the activities allowed and the height, bulk and density of development in those zones.

It is important to bear in mind the distinction between a comprehensive plan and a zoning ordinance. Fundamentally, the comprehensive plan functions as a guide – it articulates the aspirations and dreams a community holds for itself. Zoning, in contrast, is the primary tool a locality will use to implement the land use element of the comprehensive plan. For example, while the land use plan may recommend that an area be used for residential activity, it is the zoning ordinance that legally establishes residential districts and maps out their location (through zoning maps which are ordinarily incorporated by reference into the zoning ordinance).

Note that if your zoning ordinance is inconsistent in any way with your comprehensive plan's recommendations, the zoning ordinance will prevail (due to its legal status as an ordinance of law). Accordingly, when communities revise their comprehensive plans they should also carefully review their zoning ordinances to ensure that the zoning provisions remain consistent with the comprehensive plan's recommendations.

As communities have become more active in planning for their future, zoning has grown in both scope and complexity. Innovations include agricultural zoning, historic district zoning, mixed use zoning, performance zoning, and density bonus zoning, to cite but a few.

2. Subdivision Regulations

Subdivision regulations are local ordinances that govern the conversion of raw land into buildable lots and parcels. Subdivision regulations are an important plan implementation tool because they establish requirements for public improvements, specify standards for land developments, and outline procedures for submittal, review and approval of subdivision plats.

The subdivision review process generally has two stages: (1) the submittal of a preliminary plat showing the layout of lots, roads, open space areas, utility and drainage facilities, and approximate dimensions including preliminary plans and profiles; and (2) the submittal of a final plat presenting the subdivision layout and other elements contained in the preliminary plat in greater detail, and incorporating those changes required by the planning commission and/or staff at the time of preliminary plat approval. *[Editor's Note: For more on this process, see "An Introduction to Subdivision Regulations, Issue 5 and 6, reprinted on p. 29].*

In recent years, many communities have expanded their subdivision regulations (if authorized by state enabling law) to address matters such as erosion and sediment control, the preservation of open space, regional stormwater management, and the placement of utilities underground. In communities that have no zoning, subdivision regulations usually represent the only local control over the land development process.

3. Capital Improvements Program

It is quite likely your comprehensive plan has a chapter devoted to public facilities such as schools, parks, libraries, streets, water lines, sidewalks and the like. In many instances, the plan will provide an inventory of existing community facilities, as well as a projection of needed community facilities. Some communities never realize their projected community facilities or public improvements, while others regularly bring their projected improvements to life. The difference, in many instances, can be explained by the use of a capital improvements program ("CIP").

The CIP is a management and fiscal planning tool that identifies and prioritizes needed public improvements and facilities. Properly designed, a CIP will enable a community to identify its capital needs, rank them by priority, coordinate their scheduling, and determine the best way to pay for them within the community's fiscal capacity.

Organizationally, the CIP is a straightforward document. Most feature three sections: (1) an overview of how the CIP process works; (2) a review of the community's fiscal condition; and (3) a descriptive listing of those capital projects recommended for funding during the CIP period (in addition to describing each project, this section typically includes the justification for the project's inclusion in the CIP, and information on how the project will be financed).

Most CIPs have a six year timeline – but are updated annually. The CIP is generally prepared by the planning commission and adopted by the governing body.

SUMMING UP:

While there are a variety of other planning tools – ranging from impact fees to economic incentive programs – zoning, subdivision regulations, and capital improvement programs remain the three principal mechanisms for implementing a comprehensive plan. The key to remember is that these tools should be used to further the community's vision as detailed in the comprehensive plan's policies and recommendations – no one wins if zoning, subdivision regulations, or capital improvement programs are enacted in isolation from and without reference to the community's adopted plan.

Michael Chandler is an Associate Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Mike also regularly conducts planning commissioner training programs. His column appears in each issue of the PCJ.

The 21st Century Comprehensive Plan

by Michael Chandler

The last issue of the *Planning Commissioners Journal* featured an excellent article by planning historian Larry Gerckens reviewing ten key events that helped shape the growth of cities and towns into the 20th Century.

After reading Gerckens' article, I started thinking about the future and what form planning and plans might take in the coming century. Although many factors will undoubtedly shape planning, I want to focus on five ways in which local plans are already starting to change as we near the new century.

1. **Vision Driven.** Comprehensive planning experienced a boom following World War II. In fact, most communities developed their initial land use plans during the 1950s. A look back at those plans reveals, in general, a problem driven approach. Problems and issues were identified, and solutions proposed.

The problem driven model continues to the present day, but with a new twist. Instead of beginning the planning process with a listing of issues and concerns, communities, through the use of a visioning exercise, craft a picture or image of what the locality intends to make of itself, what it wishes to achieve or become.

Once developed and adopted, the preferred vision becomes the rallying point or goal to be achieved. The resulting planning process outlines the sequence of events and actions the community will need to take if the preferred vision is to be realized. *[Editor's Note: For more on visioning, see Mike Chandler's two-part series, "Putting Vision in Our Plan," in PCJ #21 and 22 (Winter, Spring 1996).]*

2. **Thematic Based.** Traditions in planning change slowly. For example, consider your comprehensive plan and its content. I would venture a guess that your plan features chapters or elements devoted to housing, transportation, community facilities, and the like. As a result of this style of organization, the reader, as well as the community, sometimes assumes each chapter or element is independent of the other.

> FOR MUCH OF THIS CENTURY, COMMUNITY LAND USE PLANS WERE DEVELOPED WITH LITTLE CONSIDERATION SHOWN FOR SURROUNDING LOCALITIES.

To overcome this mindset, plans are beginning to reflect a thematic style. Instead of having discrete chapters addressing single topics, plans focus on broader themes such as balanced growth, the preservation of rural character, enhanced economic vitality, and so on. This style of integrated planning helps the reader better understand the interdependencies that are present in the community.

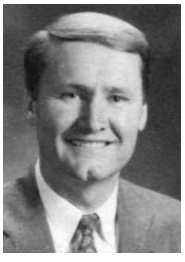
3. **Collaborative Effort.** For planning to be meaningful, citizens must be involved in the process. Planners, regardless of their personal talents and capabilities, working in isolation and apart from the clients of planning, will not be able to craft plans communities will embrace. A collaborative planning process provides a more open, inclusive, and interactive way of involving citizens and other "stakeholders."

4. **Regional Focus.** For much of this century, community land use plans were developed with little consideration shown for surrounding localities. Over the past decade, however, changes in technology, in business and economic systems, and in federal and state policies that bear on land use, have made clear that localities are interdependent. As such, localities are increasingly aware that they must work together to solve common problems. Inclusion of a regional assessment or impact strategy section in local plans — as well as broader efforts to ensure that neighboring communities' plans are consistent with each other — will undoubtedly become a more common practice in coming years.

5. **Beyond Paper.** Twenty-first century plans will also reflect the information age. In recent years, many communities have made use of local access television to introduce community planning issues to the broader public. Similarly, a number of communities are starting to use the Internet to post draft sections of their plans, as well as the final product. In the future, virtual reality images and computer simulations of land use changes will become commonplace, allowing people to actually "see" how the physical nature of their town or city might change in response to differing policies.

The next century promises to be an exciting time. It will be our challenge to make sure our plans remain dynamic and relevant. ◆

We hope to publish reactions to Mike Chandler's column in our next issue. *What direction do you see comprehensive plans (and planning) taking in the years ahead? Has your community shifted away from the "traditional comprehensive plan" in ways Chandler describes, or in other ways?* Please mail or fax us your thoughts.



Michael Chandler is a Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Chandler also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops. His column appears in each issue of the PCJ.

Editor's Note: *In our last issue, Mike Chandler outlined five trends in comprehensive planning as we near the new century. Mike spoke to plans becoming more: vision driven; thematic based; collaborative in nature; regionally focused; and reflective of information technologies, such as computer simulations. Some of the responses we received are set out below.*

Responses to "The 21st Century Comprehensive Plan"

"Just a thought on the plans of the new information age. As more and more plans are taking advantage of this new technology — posting on the web, use of digital mapping, seeking input electronically — this provides planners and planning commission members [with the ability] to generate so much more, and immediate, citizen input. As two income households are all so busy… the ability to electronically review and comment on emerging plans is exciting.

Also, this process may well reduce the time frame of our plans. With the increased ability to update and produce plans electronically, we may well enter into an age of being able to produce plans more often with shorter planning horizons. Such plans may be able to have periodic updates on the implementation efforts of the goals, policies and objectives contained therein. We don't want to lose the long range view which is an important guidepost to keep; but, this can allow us to have fresh plans with the latest information, and with the most recent citizen input. All this is exciting stuff for planners and those who believe in citizen planning."

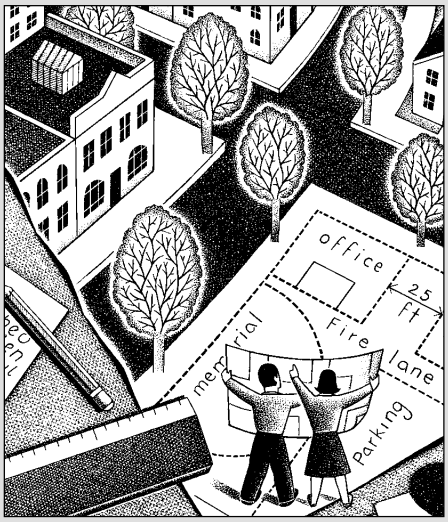
— Mike O'Leary, Enfield, Connecticut

"Mike's article on the 'look' of 21st century comprehensive plans was quite interesting and brought to mind several thoughts…

Each individual in the community should (like their right to vote) consider their role in the planning process to be an investment in theirs as well as their childrens' future. What could be worse than to sit at home watching the tube or surfing the net while your neighbors are down the block planning 'your' future. We are a democracy for a good reason, let's never forget what many people have given to assure our rights to participate in our government and our shared 'vision'. Get involved and welcome that involvement.

We planners should all consider that our plans are not read by the public as much as they should be, because in part we do not write them for popular reading. We are too technical, we use too much planning lingo, and we droll on about stuff that does not interest most Americans. I'm not advocating plans written like daytime soaps or romance novels, but we could write comprehensive plans that weave an interesting vision of the community's future using descriptive language and graphics that portray a place where people would like to live, work, raise families, recreate, and yes, pass away. Along the way, these plans could address the array of problems that need to be solved to reach this life."

— Gus Drum, Barboursville, West Virginia



"One way comprehensive plans are changing is that they are becoming more directly tied to the resulting zoning and regulations that are applied to specific parcels of land. Consistency requirements in many states have made the connection between the comprehensive plan and zoning ordinance a more direct link than in the past. This point is further reinforced by the fact that neighborhood groups are becoming more sophisticated when addressing planning issues. They have successfully brought litigation against local governments when zoning actions which were inconsistent with the comprehensive plan were taken."

— Bryan Stumpf, Indianapolis, Indiana

"Our experience is that while citizen involvement is the only way to do effective community planning, you must be prepared for this to lengthen the process. Citizens must feel that they are truly a part of the process, and that means let them help lead it and work at their own pace. The plan will be completed when the citizens are ready to complete it, not because it is the end of the fiscal year."

— Jim Yarbrough, Winston-Salem, North Carolina

"I rather think there is a potential for more dramatic change in planning practice… driven partly by emerging technology, and largely by changes in the development industry.

For instance, I think that our cherished Euclidean zoning based on land use will diminish in importance, possibly to become simply a measuring system for economic studies of urban development. The technology is available now to capture actual land use by location and to estimate the 'fit' of proposed changes in land use into a community's plan, and the reality is that collaborative planning will drive the market for new development toward sites that provide accessibility to existing communities.

I think also that planning will become less preoccupied with regulation and more involved in developing the capacity of place-based communities to envision their own future. Mike's hits on collaborative and thematic planning err only by not going far enough. It's at the intersection of these trends that the exciting stuff is going to happen.

— Jerald Powell, Portland, Oregon

"While I agree that many hi-tech strategies (electronic plans, cd-rom, and so on) will become more commonplace, let's not forget that there are and will remain many 'low-tech' ways to be helpful and achieve goals. It doesn't always take lots of money or computer horsepower. For example: consistent with the 'vision based' approach to creating plans, I believe that plans will become more visual in nature. Rather than ever-more lengthy text that only creates fodder for arguments and legal wrangling, many of us are using and will improve our use of drawings to illustrate desired outcomes. Drawings are human, and easily understood, and work better than words at creating a common base of understanding. This works well on paper, whether by cut and paste or scanning into documents; it may also work on a cd, or on a holographic image."

— Lee A. Krohn, Manchester, Vermont

Capital Improvement Programs — Part I

by Michael Chandler

As you know, the comprehensive plan establishes policies for current and future land use throughout a community. However, we often forget that the plan, although an important instrument of public policy, cannot by itself produce change.

Zoning and subdivision regulations are the most familiar "tools" used to implement the plan. Another important implementation tool is the capital improvement program, usually referred to as the CIP.

This column will provide an introduction to the CIP. In the next issue of the *PCJ*, we will examine the steps in the CIP process with particular emphasis on the role of financial analysis and project review.

Defining the CIP

The CIP is a management and fiscal planning tool communities can use for financing and constructing needed public improvements. Properly designed, a CIP enables a community to identify its capital needs, rank them by priority, coordinate their scheduling, and determine the best method of paying for them within the community's fiscal capacity.

In most states, localities have the discretion to determine whether they want to prepare a CIP. Usually, the planning commission annually prepares a recommended CIP, and then forwards it to the local governing body for adoption.

Baseline requirements include that the CIP be based on the comprehensive plan and that it schedule capital improvements over a specific number of years (commonly three, five, or six).

Organizationally, CIPs are fairly straightforward documents. Most feature three sections:

The first provides the reader with an overview of the CIP process, and a listing of the benefits a community will derive from the capital improvements.

The second section presents financial data. It usually includes charts outlining historical revenue and expenditure data, along with projected revenue, expenditure, and debt service.

The third section identifies and describes those projects recommended for funding in the CIP period. It also includes a justification for a project's inclusion in the CIP (usually noting the project's relationship to the comprehensive plan) and how the project is to be financed.

Capital versus Operating Expenditures

CIPs only deal with a community's capital expenditures — not its operating expenditures. Cost and frequency are the primary criteria used to classify whether a project is capital or operating in nature. Both criteria should be determined locally and applied simultaneously to determine if an item is a capital project.

Cost. The dollar limit that separates capital from operating projects depends largely on the size of the local budget and on what is considered a "major" expenditure. A commonly used threshold for smaller communities is $2,500. Expenditures above this amount are considered "capital," and those below it "operating." Some larger localities use $10,000, or even higher dollar amounts, as the breakpoint.

Frequency. A capital project should be non-recurring; that is, it should not occur every year. The Government Finance Officers Association recommends that a capital project should occur no more often than once every three years.

Capital projects that typically fit the cost/frequency criteria cited above include fire engines, bulldozers, landfills, libraries, schools, government buildings, treatment plants, water and sewer lines, and street construction or reconstruction. Architectural and engineering fees, feasibility studies, land appraisal and acquisition costs, and furnishings are included as capital items. "Gray area" projects often involve vehicle and small equipment purchases, as well as repair and remodeling projects.

CIP Benefits

By requiring a community to balance its capital needs with available financing, a CIP helps foster a sound and stable financing program over a multi-year period.

In addition, using a capital improvement program provides the benefit of :

- Implementing the comprehensive plan's policies by assuring the provision of new facilities and infrastructure improvements that meet the goals and needs of the community.
- Affording the public an opportunity to provide input in the process (and helping to increase public support for the proposed capital improvements).
- Enabling private businesses and citizens to have some assurance as to when public improvements will be undertaken so they can plan more efficiently and effectively.
- Eliminating poorly planned or unnecessary public improvements.
- Helping a community decide what financing techniques and options are needed to pay for capital projects. ◆

Michael Chandler is an Associate Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Mike also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops. His column appears in each issue of the PCJ.

Capital Improvement Programs – Part II

by Michael Chandler

A capital improvement program (CIP) can be prepared in any number of ways, take varying amounts of time, and involve a range of participants. As I noted in my last column, state law and local custom will influence the process. In larger localities, the CIP can easily be a year round function. In smaller communities, the CIP may take only one or two months to complete. For most localities, however, a time frame of four to six months will be required.

This column will highlight 10 basic steps in the preparation of a CIP.

1. Designing the Process. Before starting work on a CIP, decisions on how the process will be organized should be made. Most communities set up a CIP committee (with representatives from the planning, public works, finance, and administrative departments) to design and coordinate the process.

To help you better understand what a capital improvement program looks like, portions of the Blacksburg, Virginia, CIP are excerpted on pages 26 and 27.

2. Establish CIP Procedures. This step is key. Decisions relative to CIP paperwork, schedules, project request forms, and the like are made at this time. If a CIP committee has been appointed, it will coordinate these decisions.

3. Establish Criteria for Capital Expenditures. A definition of capital expenditures should be made at the beginning of the CIP process. Keep in mind the cost and frequency criteria I discussed in the last issue of the *PCJ*.

4. Inventory Existing Capital Facilities. A capital facilities inventory lists the fixed (capital) assets owned or leased by the community. Requests for capital projects will also include replacement, expansion, or repair of existing facilities and equipment. Accordingly, the inventory should include the age, condition, and original acquisition cost of each capital item. Sources of inventory information include the comprehensive plan, insurance policies, fixed asset schedules of audit reports, and various public works and housing studies.

5. Determine Status of Previously Approved Capital Projects. Information should be gathered on projects completed, as well as on-going projects and projects to be canceled. This information

continued on page 26

Typical Capital Improvement Program Schedule

JULY	CIP instructions and forms sent to all Department and Agency Heads
EARLY SEPTEMBER	CIP submissions due
MID/LATE SEPTEMBER	CIP submissions reviewed
EARLY OCTOBER	Meetings with Department and Agency Heads to clarify project submissions
MID/LATE OCTOBER	Chief Administrative Officer formulates proposed CIP *(note: in some communities the Planning Dept. is responsible for this).*
EARLY NOVEMBER	Proposed CIP forwarded to Planning Commission *(note: in some communities the CIP also goes to the Governing Body at the same time)*
LATE NOVEMBER	Planning Commission and Governing Body work session on proposed CIP
EARLY DECEMBER	Planning Commission holds public hearing on proposed CIP, and forwards CIP to Governing Body with its recommendations
EARLY JANUARY	Governing Body holds public hearing on proposed CIP
LATE JANUARY	Governing Body adopts CIP

aids in monitoring the CIP and capital budget; it also helps in updating the CIP and preparing the new capital budget.

6. Prepare Project Requests. Project requests should be based upon a set of guidelines, and be submitted by the various municipal (or county) departments on a standard project request form. The engineering, financial, or planning staff is usually responsible for providing assistance to the other municipal departments in completing project request forms.

7. Perform the Financial Analysis. The purpose of the financial analysis is to estimate how much money is needed for general operations over the life of the CIP, and how much is available to fund approved capital projects. To do this, revenues and expenditures for the preceding five years are analyzed and patterns identified. In like fashion, revenue projections for the next five years are made. Net cash flow (the amount of money remaining after operating expenditures are subtracted from operating revenues) is estimated and, in turn, used to finance capital projects.

8. Review the Proposed CIP. Project requests are examined to see that they are complete, accurate, and in conformance with the CIP guidelines. This review also assesses proposed projects as to their feasibility, pricing, and consistency with the comprehensive plan.

9. Adopt the CIP. Before adopting the CIP, the planning commission and governing body will hold public hearings.

10. Monitor the CIP. Once adopted, the planning commission and/or governing body should monitor the CIP — at least on a quarterly basis — relative to individual project status and performance.

In the Summer issue of the *PCJ*, I will conclude this series on the basics of capital improvement programs with a closer look at the role of financial analysis and review. ◆

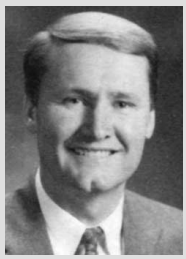
SUBMITTED AND RECOMMENDED

CAPITAL IMPROVEMENT PROGRAM

Fiscal Years 1997/98 - 2001/2002

(TABLE 15)

Project	FY 1997/98		FY 1998/99		FY 1999/00		FY 2000/01		FY 2001/02	
	Submitted	Recommended	Submitted	Recommended	Submitted	Recommended	Submitted	Recommended	Submitted	Recommended
Fire/Rescue Equipment			$735,000		$215,000		$40,000		$150,000	$279,572
South Main Street Fire Station									$1,280,000	
Traffic Light Priority System	$135,000									
Subtotal	$265,000	$130,000	$735,000	$0	$215,000	$0	$40,000	$0	$1,430,000	
Infrastructure Maintenance & Replacement										
Bridge Replacement	$32,000	$32,000			$13,580	$31,564			$19,929	$19,929
Curb, Gutter, & Sidewalk Replacement	$24,560	$24,560	$17,984		$31,390		$31,390		$31,390	
Groundwater Quality Monitoring	$31,390		$31,390		$20,000		$232,900	$148,794	$227,989	
Storm Drain Construction	$80,500	$80,500	$20,000			$295,000	$295,000	$295,000	$295,000	$295,000
Street Repaving	$295,000	$295,000	$295,000	$284,304	$70,000	$70,000	$70,000		$70,000	
Tree Trimming/Right-of-Ways	$70,000	$70,000	$70,000							
Subtotal	$533,450	$502,060	$434,374		$429,970	$396,564	$690,651	$443,794	$644,308	$314,929
Parks and Recreation										
Bicentennial Celebration	$10,000									
[illegible] Park Development		$50,000	$30,000		$35,000					
Lyric Theatre Renovation		$25,000								
[illegible]		$25,000								
Roller Hockey Rink	$40,000									
Van Conversion	$12,000									
Subtotal	$842,000	$110,000	$30,000	$0	$35,000	$0	$0	$0	$0	$0
Property Services										
Annual Holding Area	$15,111									$95,813
Armory Parking Deck	$32,574		$327,538							
Data Center Renovation	$15,000				$12,150		$12,150		$12,150	
Document Imaging	$12,150		$12,150							
Facility Management Automation	$11,828									
Fire Alarm Systems	$18,000									
Fleet Management Automation	$10,000		$10,000		$22,435		$20,083	$42,428	$18,928	$18,928
[illegible] Implementation		$21,150	$18,265		$10,000		$10,000		$10,000	
Greenway System Construction		$32,500	$38,694		$35,170		$54,450		$90,577	
Major Equipment [illegible]		$18,000								
Network/Internet Integration	$30,000									
Power Conditioning and Protection	$16,000				$10,000		$10,000		$10,000	
Public Works Facility Land Acquisition	$10,000		$10,000							
Roof Replacements	$59,607	$59,607	$24,840	$24,840						
Sign Automation	$12,000									
South Main Street Slope Retention	$92,068				$105,034		$35,87[illegible]		$208,518	
Stormwater Management Ponds	$33,600	$33,600			$5,356		$5,544		$12[illegible]	
Street Lighting	$9,781	$9,781	$5,175		$11,442		$12,090			
Urban Forest Renovation	$10,579		$11,002							
Subtotal	$499,948	$214,638	$467,664	$24,840	$261,587	$0	$160,136	$78,247	$368,484	$[illegible]



Michael Chandler is an Associate Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. Chandler also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops. His column appears in each issue of the Planning Commissioners Journal.

BLACKSBURG CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL SHEET

Department: Town Manager's Office
Project Title: Lyric Theatre Renovation
Project Location: College Avenue
Project Status: New
Project Accomplished with:
% Town Forces 100 % Private Contract

Relationship to Mission and Values: The effort to "Bring Back the Lyric" reflects the partnership that the Town has with the community. This effort also reflects the value of "An open, accessible government where citizen involvement, individually and collectively, is vital".

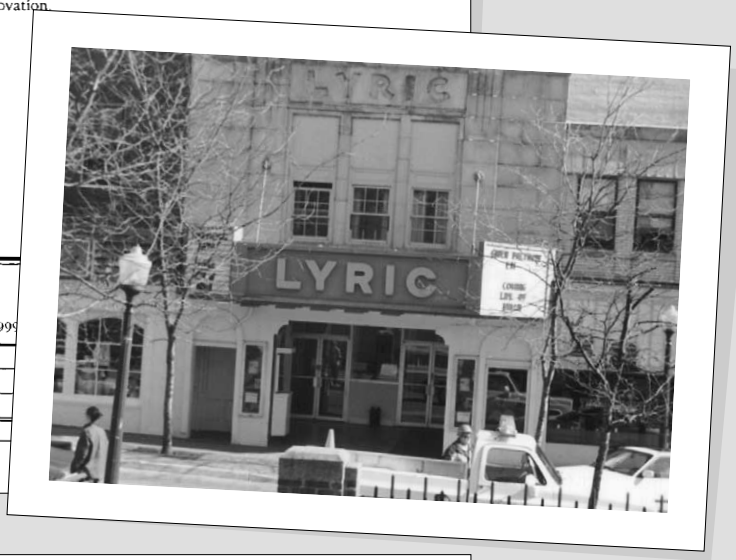
Relationship to Town Council Strategic Goals: This project relates to the Strategic Goals of Retail Business Retention and Development. Attendance at Lyric events brings significant traffic to Downtown, adding to retail and restaurant business. In addition, renovation efforts for the Lyric are planned to be completed in concert with the Bicentennial Celebration, another Town Council Strategic Goal.

Relationship to *Comprehensive Plan* Five-Year Action Strategy: Supports Programs Action Strategy 2 "Continue Town-business liaison efforts to encourage retention and vitality of existing business" (Economic Development Objective A).

Description and Justification: The Lyric Council is a private, non-profit, tax-exempt Corporation, is the leader in the collaborative community effort to Bring Back the Lyric. The Lyric Council seeks to promote and encourage the use and development of the Lyric Theatre, and to enhance community awareness and appreciation of the arts through programs, entertainment, and/or education produced at the Lyric.

To best serve the community and enhance retail development in Blacksburg, the Lyric Council is initiating a $500,000 fundraising campaign for renovations of the theatre. Major renovation is planned for the summer of 1997.

Funds and donated materials and labor are being sought from the community for the renovation.



Planned Financing of Project:

Source of Funds	Total Project Estimate	Prior Allocation	1997/98	1998/99	1999
General Fund	$25,000		$25,000		
Total	$25,000		$25,000		

BLACKSBURG CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL SHEET

Department: Planning and Engineering
Project Title: Greenway System Construction
Project Location: Townwide
Project Status: In Progress
Project Accomplished with:
% Town Forces **% Private Contract**

Relationship to Mission and Values: This project supports the Values of: "Promoting a superior quality of life", and "A community renowned for its beauty and cleanliness".

Relationship to Town Council Strategic Goals: Not related to Town Council Strategic Goals.

Relationship to *Comprehensive Plan* Five-Year Action Strategy: Supports Projects Action Strategies 34 "Establish the greenway system in a manner which minimizes the potential impacts of flooding and erosion. Establish and follow construction standards for the greenway system" (Natural Environment Obj. D, E), 55 "Construct the Huckleberry Trail extension from the Library to the Community Center as a greenway demonstration project for the Town Bicentennial in 1998" (Greenways Obj. A), and #31 "Coordinate development of the greenway system with area stormwater management as part of a regional stormwater management program" (Natural Environment Obj. D).

Description and Justification: This project involves the gradual construction of the Townwide Greenway System. The Greenway System will serve as recreational facilities and provide scenic viewing areas. The Greenway priorities include: 1) Bicentennial Greenway - from terminus of Huckleberry Trail at Library through downtown to campus; 2) End of Bicentennial Greenway to Community Center (in conjunction with stormwater management pond); 3) South Main Street, 4) Tom's Creek Greenway, and 5) Stroubles Creek/Hethwood Greenway. In addition, bike racks for locations Downtown will be purchased as a part of the Bicentennial Greenway project.

Planned Financing of Project:

Source of Funds	Total Project Estimate	Prior Allocation	1997/98	1998/99	199			
General Fund	$207,956		$32,500					
DCR Grant	$91,576		$48,141					
Town's In-Kind Services	$204,131		$145,152					
Total	$503,663		$225,793				$225,793	

Capital Improvement Programs – Part III

by Michael Chandler

In my last column, I outlined ten steps in the preparation of a capital improvement program (CIP). Although each step in the process is important, special consideration must be given to step seven (financial analysis) and step eight (CIP review process), for they constitute the very heart of the process.

Financial Analysis

The major fiscal consideration in developing a CIP is deciding how to pay for proposed projects. In most localities the fiscal analysis will cover revenues and expenditures over an eleven year period including: the current budget year; the five preceding fiscal years; and five fiscal years into the future. The analysis will typically include the following steps:

1. Organize the Data. Pertinent financial data for the years to be analyzed must be gathered. Audit reports, past budgets, and the current budget will provide essential information.

2. Analyze the Data. Data about the past five years of revenue collection and expenditures is analyzed to obtain trends in revenue collections and expenditures.

3. Make the Five Year Projections. The trends identified in the preceding step, combined with reasonable expectations about future events, are used to make the five-year revenue and expenditure projections. Assumptions used in making the projections should be explicitly stated. As a rule, projections tend to be conservative and do not rely on possible changes in tax rates.

4. Determine "Net Cash Flow." This is done by subtracting operating expenditures from operating revenues.

5. Determine "Net New Capital Financing Required." This is done by subtracting the estimated cost of proposed capital projects from the projected "net cash flow" to determine the amount of "net new money" needed to finance the CIP.

6. Analyze Alternative Financing Services. If the capital project costs exceed the "net cash flow" available, alternative funding sources must be identified. These may include:

- Bonded Indebtedness. Typically money raised either from revenue bonds (which are financed by user charges) or general obligation bonds (which are amortized by local tax revenues, such as property tax assessments).
- Tax Rates. Money obtained by raising taxes.
- Unappropriated or Unreserved Fund Balance. Money from operations that accumulates when revenues exceed expenditures.
- Capital Reserves. Money specifically set aside for future capital projects.
- User Fees and Charges. Fees charged for specific services or commodities (such as admission fees for use of a municipal swimming pool or garbage collection fees).
- State or Federal Grants. Often used to match some portion of specific capital projects.

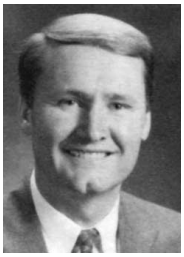
CIP Review Process

The review and evaluation of proposed CIP projects should be structured and thorough. In most communities, the CIP program committee or coordinator will review each project to determine its scope, purpose, feasibility, and relationship to the criteria and guidelines outlined in the project request form (see step six in the CIP process, discussed in my last column).

During this phase of the review process, each project should be reviewed individually and not be judged relative to other proposals. Projects can fail this initial screening because some important piece of information about the project is missing. Typically, the person or department who prepared the project request is then asked to resubmit the request with additional information.

It is important to note that projects passing this initial review will not necessarily be included in the proposed CIP. Factors such as need, funding limitations, and compatibility with the comprehensive plan will influence the final selection process. In many smaller communities, a simple three-tier evaluation system that ranks each project as *urgent, necessary,* or *desirable* has proven effective in determining fiscal priorities. Larger communities often use more complex scoring or rating criteria. Projects not scheduled for funding by the CIP are known as deferrals, and are usually listed in the CIP under such a heading.

Management expert Peter Drucker has observed that the measure of a plan's value is a function of the financial support it receives. The CIP, by providing a structured look at the community's needs and its financial resources, can provide citizens and decision-makers with a tool to help ensure that the actions the community wants to accomplish — as identified in the comprehensive plan — receive the funding they need. ◆



Michael Chandler is an Associate Professor and Community Planning Extension Specialist at Virginia Tech in Blacksburg, Virginia. He also conducts planning commissioner training programs across the country, and is a frequent speaker at workshops. *This concludes his three-part series on capital improvement programs. In the next issue of the PCJ, Chandler will discuss developing a community "planning academy."*

Don't Stop, Thinking About Tomorrow[1]

What if your community were on the cover of *Time* magazine as the best place to live in the U.S.? Can you picture it? How did it happen?

That's the very question put to a diverse group of Sussex County, Delaware, citizens (including developers, farmers, bankers, environmentalists, planners, and elected officials) this past September during a three-day workshop about the future of their county.

The question was designed to elicit a sort of "reverse engineering." As Michael DiPaolo, Executive Director of The Lewes Historical Society (a 1,000 member nonprofit that served as the local sponsor of the workshop) explains, by envisioning what would make Sussex County worthy of *Time* magazine honors, interesting and productive discussions ensued on what it might take to get to there.

Sussex County makes up the southern third of the state of Delaware. According to DiPaolo, the county is experiencing "tremendous growth and tremendous pressure on its infrastructure, including its transportation system." The Lewes Historical Society, which has long focused on preservation issues, recognized that the point had come where a shared vision for the county's future was essential. That led to contacts with the national Your Town Citizens' Institute on Rural Design, which works with four rural communities or regions each year, helping organize workshops and providing design assistance.[2]

A mapping exercise during the Sussex County, Delaware, workshop.

As Shelley Mastran, co-director of Your Town notes, the program looks for places facing especially challenging issues. "We try to come in at a time when it can make a difference to the community." Sussex County was in that situation. The Your Town workshop was designed to bring together key community leaders and "stakeholders" to help them get a better handle on how to manage growth, while preserving the area's environmental amenities and natural beauty.

National experts spoke the first day, providing their insights on growth and development. This was followed by a series of group exercises. By the third day, to the surprise of many (given the diverse viewpoints of those attending), consensus had begun to emerge on several key points, including the need for the county seat of Georgetown to play a major role as the region's transportation hub.

A steering committee was formed to ensure follow-up.

One of the keys to success over the three days, DiPaolo recounts, is the fact that the sessions "never became 'us against them' … everyone was always looking for common ground." Also vital was the fact that the program was well-organized and well-run. Having a highly respected organization such as The Lewes Historical Society as the lead local sponsor gave the workshops the credibility needed to help convince 33 busy people it was worth their time to attend. ◆

For more information, contact Michael DiPaolo at: mike@historiclewes.org; Shelley Mastran at: shellmast@Comcast.net. More information about the Your Town program can be found at: <www.nationaltrust.org/your_town/>.

1 Some "baby boomer" readers may recognize this from Fleetwood Mac's popular 1977 song written by Christine McVie.

2 The Your Town program is funded by the National Endowment for the Arts and was developed by the National Trust for Historic Preservation and the Faculty of Landscape Architecture at SUNY Syracuse. Since 1991, Your Town has sponsored workshops in 43 rural communities.

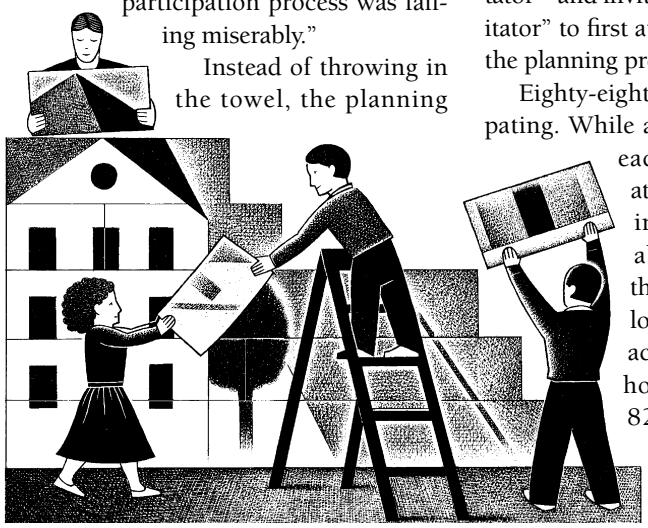
Basic Tools of the Planning Trade

Understand the language of developers, and review techniques and strategies for engaging the public and potential grantors.

14 "We Want Public Participation"

That's the message the Montgomery County, Virginia, board of supervisors conveyed to the planning commission. "And that's what we gave them," says Meghan Dorsett, the county's comprehensive planner. However, as Dorsett recounts, the process for revising the county's long-range plan didn't quite start out that way.

Montgomery County, which covers 360 square miles in rural southwestern Virginia, has a population of 86,000. Yet as the process for updating the plan got underway, it was "the same ten or twenty people who were showing up at our public meetings." As Dorsett admits, "the public participation process was failing miserably."



Instead of throwing in the towel, the planning commission embarked on what Dorsett terms "evangelical planning." They decided to pull out all the stops and go out and get as many county residents as possible involved in the planning process.

The first step, as Dorsett relates, was to make sure "every possible group or organization heard about the planning process." That meant contacting not just neighborhood organizations, but service clubs, churches, African-American organizations, women's groups, public schools, and even bowling leagues.

Second, each group was asked if they'd be willing to distribute a survey, and discuss community issues, at one of their organization's own meetings.

But to make the process work, one more key step was taken. Dorsett asked each group to designate one of their own members to serve as their meeting's facilitator – and invited each "community facilitator" to first attend a training session on the planning process.

Eighty-eight groups ended up participating. While a volunteer facilitator ran each meeting, Dorsett also attended many of the meetings, making herself available to reply to questions that came up. "This meant a lot of work and travel," she acknowledges. The results, however, were remarkable: 826 adults (and 516 students) completed the planning survey form.[1]

The tabulated results – which included a priority ranking of issues facing the county – turned into the framework for the comprehensive plan. For example, Dorsett notes, one chapter of the plan is on health and human services, "because so many comments raised hospital and health care issues."

As the plan was being developed, many of the facilitators continued to actively participate by serving on one of the eight workgroups set up to draft the plan. A planning commissioner or board of zoning appeals member chaired each of the workgroups.

The Board of Supervisors adopted the new plan in October 2004. As Dorsett looks back, she sees an enormous long-term benefit to the county in having involved people "from all economic strata and ethnic and racial groups." A citizens advisory group is being formed to monitor the plan's implementation. One last fringe benefit: three newly appointed planning commissioners got their first taste of planning as community facilitators. ◆

For more information contact Meghan Dorsett at: mcplan@naxs.net. The Montgomery County Comprehensive Plan is available at: <www.montva.com/departments/plan/cpfiles/compplan.php>.

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1 Meghan Dorsett reports that while planners had just intended for the survey to be distributed to high school students, the superintendent's office distributed the surveys to all schools. Among the intriguing suggestions, move Scooby Doo to Montgomery County (from second graders) and build Quiddich fields (from fourth graders under the influence of Harry Potter).

Citizen Surveys: Taking Your Community's Pulse

by Thomas I. Miller, Ph.D.

No planning department worth its salt creates or significantly alters a master plan, design guidelines, or zoning without input from the community. Numerous opportunities for input are often provided: forums held in every neighborhood; well-publicized community-wide meetings; call-in radio or cable shows; newspaper clip-outs.

In many communities,however, it is not uncommon to find the same relatively small group of people attending each of the forums, traveling from place to place like a progressive dinner feeding on the soup of local politics. A town meeting about a re-zoning that finds 100 in attendance out of 100,000 in the community nevertheless makes everyone feel terrific because "there was such enthusiasm shown by participants" or "the vision of residents was clearly expressed in fifteen breakout groups" or "a wide cross-section of our community came to listen and speak."

Despite the public back patting for having done so well in the citizen input arena, many elected officials and board members are nagged by self-doubt about the real success of their "citizen involvement" efforts. Although they have cast their net widely, providing genuine and sincere opportunities for citizen participation, they know that the citizens who are most often snagged into participating are those with the greatest passion, the most time, the least reserve, and the most at stake. They wonder if the viewpoints of families with children; wage-earners steeped in the daily pressures of making ends meet; and sick or handicapped residents were adequately considered.

The Merits of Citizen Surveys

A growing number of communities are augmenting traditional meetings and forums with citizen surveys. Surveys are far more successful in capturing the typical community resident and making that resident's opinion part of the community calculus.

A scientifically conducted survey of residents brings in the voice of the public like no forum, newspaper straw poll, or focused discussion. Whether conducted by phone or mail, a good citizen survey will provide the perspective of residents who are not the "usual suspects." Our research demonstrates that 80 to 85 percent of survey respondents report not having attended any community meeting or watched a council meeting on television in the prior twelve months.

THE CITIZEN SURVEY, CONDUCTED BY THOSE SAVVY ENOUGH TO DO IT RIGHT, PROVIDES AN UNCOMMONLY HIGH RESOLUTION CLOSE-UP OF THE FACE OF THE COMMUNITY.

Citizen surveys can be simple one-shot assessments of resident policy preferences. More valuable, however, is a citizen survey program — with periodic public surveys designed to track changing community demographics; evaluate quality of life and quality of community services; and measure the extent to which various community facilities and programs are being used. A recent survey conducted for the International City/County Management Association estimated that almost two-thirds of all jurisdictions with over 25,000 population had conducted a citizen survey in the six year period between 1993 and 1998 and close to forty percent had conducted at least two.

The citizen survey, conducted by those savvy enough to do it right, provides elected officials and planning board members an uncommonly high resolution close-up of the face of the community.

Citizen Surveys in Support of Planning

Many different types of surveys can be used to assist in community planning. From general to specific, surveys can address topics such as quality of life; attitudes toward growth; transportation habits; park and recreation preferences; and economic development.

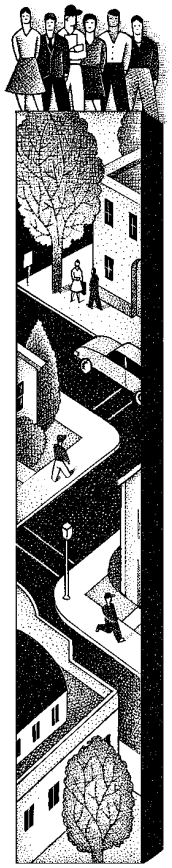
Quality of Life

In support of comprehensive plan updates, citizen surveys often include a set of general questions about the quality of life in the community and in neighborhoods. Questions may deal with residents' perceptions about the community as a place to raise children or as a place to retire, and opportunities for shopping, dining, volunteering, adult education, and entertainment. Other general quality of life questions may ask about residents' feelings of safety in the community or their opinions about racial harmony.

These kinds of questions can help create a baseline of information to be monitored as land use decisions are made over the years. Furthermore, if done correctly, the survey can provide results for different parts of the community so that better facility and policy targeting can occur.

Growth Management

Many communities can benefit from understanding how residents feel about the kind and amount of growth they desire, and what type of growth management tools (if any) they would support.



...Citizen Surveys.
continued

Questions about the rate of residential, retail, and job growth can help distinguish residents' perceptions about these different kinds of growth. Furthermore, residents may be more concerned about some negative impacts of growth than others. Surveys can pinpoint this, and tell policymakers, for example, the degree to which residents are concerned about air pollution, traffic congestion, increased housing costs, decreased community diversity, degradation of streams, increased noise, or the "look" of sprawl.

Transit Planning

Many communities are authoring transportation master plans or creating plans to enhance the use of travel modes other than the single-occupancy vehicle. As part of this planning effort, staff and boards need to understand the current mix of travel choices and the kinds of incentives and disincentives likely to motivate residents to choose different modes of travel.

Transit planning surveys often require that household members be recruited to maintain diaries of their travel behavior and complete a survey about the key circumstances that motivated their selection of travel mode. Sometimes on-the-spot surveys (called intercepts) are conducted among downtown pedestrians, motorists, or bus riders to determine why they decided to walk, drive, or take the bus.

Park and Recreation Planning

Park and recreation planning often requires assessment of current facilities and programs, as well as determination of the desirability of various park and recreation enhancements. Sometimes residents are asked if they would be willing to pay for specified services (through taxes or fees) and what amounts they would consider reasonable. Often residents are asked how frequently they have visited or used various recreational amenities.

Economic Development

A citizen survey can address one of the central concerns in economic development — the extent to which residents shop or commute to jobs outside the city. By determining where residents shop for various consumer items, it is possible to craft a strategy to attract potential retailers in categories where retail sales tax "leakage" is especially pronounced. By asking residents where they work, it is possible to track the changing strength of a community's employment base.

"Rules" for Completing a Citizen Survey

Successfully completing a citizen survey is actually not as difficult as it might first seem. The key is to follow a logical series of steps:

1. **Identify why a survey is needed and what it is intended to do.**
2. **Determine how much your community is willing (able) to spend on the survey.**
3. **Put a team in place to analyze the results when they come back.**
4. **Identify the target population and sample.**
5. **Determine how many people should be surveyed, and how to reach them.**
6. **Ask the right questions in the right way.**
7. **Ask the right person.**
8. **Test the survey and adjust if necessary.**
9. **Conduct the survey, check for bias, and interpret the results.**

1. Identify Why A Survey is Needed and What It is Intended to Do

One of the first things a community must do before it conducts a survey is to agree on the answer to the question: "What do we want to learn?" By developing a statement that clearly explains why the survey is being undertaken, the community will have a much easier time planning the survey, analyzing responses, and disseminating the results.

Part of being able to answer "What do we want to learn" is having an idea of how the results of the survey will be used. Generally speaking, citizens will respond energetically to surveys that will be used to guide the development of projects, evaluate programs, and prioritize expenditures. When the results of a survey indicate overwhelming public support for a particular course of action, the sponsoring agency or governmental body should be prepared to take steps to implement that course of action.

2. Determine How Much Your Community Can Spend

If money ran from the tap like water, there would be no need to select a sample of residents to participate in your survey. Instead, you would conduct a census, tracking down the opinion of each and every qualified resident. Surveys always represent a compromise between precision and possibility. Budgets generally exclude the value of staff or volunteer time but, if you can, it is wise to know the complete cost of doing a survey. These days a scientific survey tends to cost between $8,000 and $15,000 for the basics. *Hiring a Consultant: Factors to Consider.*

3. Put a Team in Place to Analyze the Results

It may seem too early in the process to be worrying about what to do when the survey is complete, especially when you haven't even constructed the data collection instrument yet. Nevertheless, the weak link in survey research is almost invariably the use to which results are put.

Identify a panel of staff and citizens who are charged with making recommendations to the planning director, city manager, or city council about the meaning and use of the results. Let the panel members know that they will be expected

to determine if the results merit nothing more than "watchful waiting" or if action is required. While the panel will be advisory in nature, members will need to be prepared to justify their recommendations by reference to the survey results and, perhaps, other sources.

Meaning Comes from Comparison, p.48

4. Identify the Target Population and Sample

Opinion surveys are attractive planning tools because, when properly done, they provide an efficient way to collect information about a community. This is because surveys generally focus on small, but representative, samples of the entire community. In fact, the most crucial issue related to survey samples is how well they represent the overall population or community of interest — the "target population."

A representative sample identifies potential respondents in a way that does not systematically exclude any group from the community. For example, if Latinos comprise ten percent of your community's population, they should also make up about ten percent of your survey respondents. A representative sample is drawn from a "sampling frame," which is a complete list or representation of everyone in a target population who could be surveyed. (A voter registration list is the sampling frame for a survey of registered voters; a list of phone numbers generated at random is the sampling frame for a survey of everyone in the community with a telephone).

Constructing a sampling frame can be relatively straightforward, or it can be difficult, depending on the target population. The sampling frame for a target population of parents of children in public recreation programs could most likely be

continued on page 48

Hiring a Consultant: Factors to Consider

The decision to conduct a survey should not be taken lightly. Questions to consider when making this decision include the following: Who will oversee the development and administration of the survey? Do the people who might work on the survey have the right expertise? Do they have enough time available? And, finally, have funds been budgeted to obtain outside expertise where needed?

The "ownership"of the survey is also important. The more those who may be affected by the survey results feel "connected" to the survey during its design, the more likely they will accept recommendations based on the survey's results.

Not every community will want to conduct a survey on its own, or feel capable of doing so. These communities can get help from private consultants, universities, and/or organizations such as regional planning agencies. Most communities use consultants to conduct their surveys.

Once the decision to hire a consultant has been made, the next issue is "which consultant?"

Your consultant should be:

1. Someone who understands you — and whom you understand.
2. Someone who can work with diverse groups and who can explain the benefits and limitations of various survey research methods.

Observation: "We have had the experience of very professional, creditable polls being dismissed by public policy makers because they were funded by business groups strongly aligned with one side of a major controversy. Even though the surveys themselves were totally ethical and technically unbiased, the results were disregarded simply because of who picked up the tab."

– Wayne Lemmon, Silver Spring, Maryland [Lemmon is a real estate economist, and also serves on the Planning Commissioners Journal's editorial advisory board].

3. A good writer and a clear speaker.
4. Someone who can explain the 95 percent confidence interval.
5. Someone who will challenge the usefulness of questions.
6. Someone who can tell you how to check and control for non-response bias.
7. Someone who can accomplish statistical re-weighting of the sample.
8. Someone who won't insist on highlighting all statistically significant differences if they don't matter.
9. Someone who can get the right descriptive statistics out of a computer.
10. Someone who knows the difference between a pretty graph and a clear graph.
11. Someone who is willing to document meticulously all survey research methods.
12. Someone who is willing to take pieces of the project, if you are planning to handle some of it in-house. —*T.I.M.*

Margins of Error

The larger the size of your survey sample, the greater the likelihood it will match the target population. However, once the sample size reaches 400 to 500, the increases in precision and accuracy are marginal. Unless statistically significant results from a specific subgroup of the population are needed, sample sizes in this range will suffice for most purposes because the margin of error (i.e., confidence interval) remains at about + or – 5 percentage points around any percent. *See also Sidebar, Who to Include in the Sample, p.49*

Confidence Intervals by Size of Sample

Percentage of a sample answering yes/no

Sample Size	Yes/No 5/95	Yes/No 10/90	Yes/No 20/80	Yes/No 30/70	Yes/No 50/50
35	7	10	14	15	17
50	6	8	11	13	14
75	5	7	9	11	12
100	4	6	8	9	10
200	3	4	6	6	7
300	3	3	5	5	6
400	2	3	4	4	5
500	2	3	4	4	4
1000	1	2	3	3	3
1500	1	2	2	2	2

Source: Thomas I. Miller and Michelle A. Miller, *Citizen Surveys: How to Do Them, How to Use Them, What They Mean,* Washington, DC: International City/County Management Association, 1991, p.38 (Adapted from Fowler)

Meaning Comes from Comparison

We don't know what is tall or what is small without comparing. As you determine residents' perceptions of your community's quality of life and quality of services, you need to know, "how good is good enough?" Evidence is clear that residents tend to give favorable ratings of community service delivery, in fact ratings more favorable than most local government officials anticipate.[1] Given how easy it is to find ratings of 60 or higher on a scale where 0 = very bad and 100 = very good, it is essential to understand what typical ratings are for various aspects of community life.

The approach our firm takes to address this issue is by providing "peer city" comparisons — comparing a community's survey results to those from other similarly sized places. This form of comparison may show, for example, that while your city's street cleaning services rating of 70 (on the 100 point scale) was in the "good" range, that rating was, nevertheless, among the lowest given in comparably-sized cities (where ratings between 75 and 90 for street cleaning services were the norm). This kind of comparison is also fairer than comparing ratings within your city of various departmental services. Results from peer cities provide the kind of interpretive richness that comes from no other source and will help you and staff to understand if you ought to celebrate or regroup. —*T.I.M.*

1 Melkers J. and Thomas J.C. "What do administrators think citizens think? Administrator predictions as an adjunct to citizen surveys." *Public Administration Review.* July/August, 1998, 58(4), 327-334.

...Citizen Surveys.
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developed using recreation department program registration records. A sampling frame for members of the community who are over 60 years old, on the other hand, might have to be compiled using telephone directories, property tax records, utility records, commercial mailing lists, and motor vehicle registration. For reasons of practicality, it is not uncommon to define sampling frames by the information that is available.

5. Determine the Size of the Survey Sample— and How Best to Reach those in the Sample

The primary purpose of a sampling frame is to identify individuals who actually could be surveyed, since well constructed samples allow us to survey a relative few from the target population. Those individuals who are selected to be surveyed are part of the survey sample. People in a sample serve, essentially, as tokens representing a larger number of people. By using random selection to identify those in the survey sample, it is possible to generalize survey results and apply them to a target population as a whole.

Drawing a sample from a sampling frame is usually done after considering the margin of error and the budget. The margin of error (also referred to as a "confidence interval" by statisticians) tells how closely a sample is likely to reflect a target population. Most communities demand that it be no larger than five percentage points around any percentage estimate. *Margins of Error, p. 47*

Before deciding on a specific method for conducting a survey, communities should consider the cost, speed, and accuracy of a range of alternatives. Standard options for conducting surveys include using mail out—mail back questionnaires, telephone interviews, and in-person interviews. Other options include publishing surveys in newspapers, distributing them as inserts with utility bills, and "doorknob drops."

While inserting a survey in a newspaper or utility bill may be relatively simple to do, the results will generally be less reliable and accurate than if a more targeted mail or telephone survey (or conducting in-person interviews) were used. As accuracy is the "touchstone" of survey sampling excellence, it is preferable to use methods where the surveyor has more control over who is surveyed and is in a position to obtain a higher response rate. Indeed, the bias introduced by lack of response can easily overwhelm bias introduced by all other factors combined, and must be minimized as much as possible.

So which method should communities use? The highest rates of response are typically achieved by in-person interviews. However, due to the high cost of this method, most surveyors today choose to use telephone or mail based methods. Our recent research shows that rates of response for mailed surveys (when done properly) have higher response rates than the typical phone survey. A mailed survey (including a pre-survey notification post card and two mailings of the survey) can net upwards of a 50 percent response rate, compared to about a 30 to 40 percent response rate from most phone surveys.

6. Ask the Right Questions in the Right Way

The heart of every survey is, of course, the questions it contains. That being the case, it really isn't possible to overstress the importance of careful question selection and wording. Developing a solid questionnaire (sometimes called a survey "instrument") is not a torturous task, however. All it takes is the application of a little common sense and attention to the principles of *consistency, clarity, simplicity,* and *fairness.*

In applying the principle of *consistency,* a surveyor needs to consider

whether questions included in a survey will produce similar (consistent) responses from people who feel the same way about an issue and different responses from people who feel differently. Perhaps the easiest way to observe this principle is through the use of "forced choice" questions, which limit answers to a predetermined list or series. The principle of consistency is not being applied well if differences in survey responses are the result of different interpretations of what the questions mean. Unless they are worded very carefully, open ended questions — which do not require a choice from among a series of alternatives — can produce inconsistent (or at the very least hard to categorize) answers.

The principle of *clarity* can be respected by developing questions that do not contain vague wording, compound concepts (which combine multiple and possibly conflicting ideas into a single question), misleading assumptions (which assume circumstances that may not be true), and overlapping categories. Common words with vague meanings can be communication sinkholes. Terms like "income," "frequently," "transit," "last year," or "unemployed" do not mean the same thing to different people. When constructing a survey, a surveyor should replace them with more precise terms.

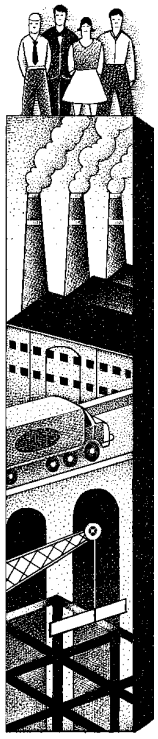
To achieve *simplicity,* a surveyor should develop questions that are specific, short, and logical. Specific questions give more reliable answers. Long questions decrease response rates. The overall number of questions that can be asked without driving away respondents depends on the survey method and topic. Generally, ten pages is considered a maximum for written questionnaires, while thirty minutes is the absolute limit for telephone surveys.

Fairness and neutrality are also important factors in survey design. Questions asked in a survey must be presented in a way that does not make any particular response appear most correct or obvious. Questions should have "option symmetry," that is, when respondents are asked to rate performance or behavior, they should be presented with as many positive choices as negative ones, and individual options should mirror each other (e.g., very good / good / bad / very bad).

7. Ask the Right Person

A good survey instrument is of little practical benefit if it is used to obtain answers from respondents who do not fairly reflect the sampling frame. Once a surveyor has decided how residents will be contacted (e.g., by mail, phone, or in-person), he or she can then "draw" a sample. For a mailed survey, address lists may be purchased from commercial address listing services. Before making a major purchase, it is usually a good idea to test a sample of the addresses supplied by the service to make sure they are accurate and include all units in multi-family dwellings. *Who to Include in the Sample?*

Those creating a sample for a telephone survey can reasonably assume that the proportion of prefixes — the first three digits of a seven digit number — in a telephone book reflects their actual number among all telephones (whether listed or not). Thus, the phone book can be used to generate the sample of numbers by using "plus one dialing," which involves adding one to the last digit of each phone number (changing 555-1234 to 555-1235, for example). This way, surveyors can ensure that unlisted phone numbers are as likely to be sampled as listed numbers.



Asking the "right" person also means finding the right member of a household to interview. If the choice of respondent is left up to the people in the household, the resulting

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Who to Include in the Sample?

A sample should be large enough to represent the total community and any subgroups of interest in the community. At this point, stratification may make sense. Stratification means placing members of the population into groups. When membership in a group makes a difference in how members of that group will respond to survey questions (home owners versus renters, for example), then stratification can increase the precision of sample results.

When you want to be certain to have enough response from segments of the population that may not have many members in your sample, you will want to sample a disproportionately large number from that stratum. For example, if you survey 400 residents in a community with ten percent non-white population, and want to be sure you have enough response from non-whites, you need to "oversample" non-whites, assuring that 100 non-whites respond where only 40 would have been expected to respond by chance alone. Later, when you report the results for the entire community, they will need to be statistically re-weighted to give non-whites the appropriate ten percent weight (i.e., reflecting their proportion of the population). —*T.I.M.*

Note from PCJ Assistant Editor, Dean Pierce: Our thanks to Planning Commissioners Journal readers who shared their experiences on conducting surveys with us. Some of the feedback we received is set out here.

Grand Traverse County, Michigan

Grand Traverse County retained a professional firm to conduct a survey of residents' planning goals prior to the adoption of a new county master plan. The county planning commission had previously conducted a series of "town meetings" and a visioning process to develop a vision for the future of the county. But the planning commission wasn't certain that those who had participated represented a cross-section of the community.

The firm hired by the county developed a questionnaire based on what the planning commission wanted to know, conducted a random survey, and tabulated the results. The planning commission learned that its citizens wanted to protect the environment, reduce sprawl, protect agriculture and forestry, and provide for a sustainable community.

According to Planning Director Roger Williams, the results of the scientific survey paralleled the results of the more informal town meetings. But that doesn't mean he believes the survey was, in hindsight, unnecessary. Notes Williams: "We found survey results to be excellent and feel that using a firm that specializes in this is a good way to get credible results. It is very difficult for a community to write its own survey. I would highly recommend a community figure out what they want to know and then let a survey firm compose the right questions, conduct the survey, and tabulate the results."

For more information, contact Roger Williams, AICP, Director of Planning for Grand Traverse County, at 616-922-4676; email: rwilliam@co.grand-traverse.mi.us.

Hunterdon County, New Jersey

A scientifically-administered public opinion survey was an important part of the outreach process used to prepare a new master plan for Hunterdon County. The public opinion survey was a follow-up to an earlier County survey that had been distributed to municipal planning boards, environmental commissions, environmental organizations, and business associations. That survey had revealed many common concerns among municipalities in the County regarding the loss of community character, traffic increases, and loss of open space and farmland. However, it had not attempted to measure the opinions of the general public as a whole.

Before embarking on its public survey, County Planning Board staff consulted with polling professionals, particularly with regard to the phrasing of questions and selection of a mailing list. The survey was mailed out to 5,000 households. Names and addresses were drawn from a list of the County's registered voters, because it was the best available database that included renters as well as homeowners. Households were randomly selected using a computer program.

A total of 2,251 surveys — a response rate of 45 percent — were returned. Planning Board Staff notes that the high response rate was likely due to a combination of the postage paid return envelope included with the survey and the public's strong interest in the survey questions.

According to Linda Weber, Principal Planner for the Planning Board, "the public opinion survey added credibility to the County's planning process. It sent a clear message that the County was seriously interested in hearing from the public. The survey also provided concrete, indisputable results that continue to be referred to in many of the County's planning projects."

For more information contact Linda Weber, AICP, Chief Planner, Hunterdon County Planning Board, at: 908-788-1490; e-mail: lweber@co.hunterdon.nj.us.

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sample might be unrepresentative. Regardless of how a survey is conducted, respondent selection in households should be controlled. To achieve this with a mailed or phone survey, the surveyor can include language in the instrument asking for the adult who most recently had a birthday to complete the survey.

8. Test the Survey and Adjust if Necessary

Testing a survey instrument is critical if a surveyor is to determine whether the instrument contains questions that are clear and easily understood. It can also be used with some open-ended questions to help the surveyor develop meaningful forced choice questions and to test various wordings for policy questions.

A sample of twenty "pretest" respondents can identify questions that may not be explicit enough or that seem to suggest an answer. It is best to choose the pretest respondents from your sampling frame, but local government staff, committee members who have participated in drafting the questionnaire, and friends can help provide useful feedback. In any pretests, surveyors may wish to include questions about the questions themselves. In pretests for a phone survey, interviewers can ask about any confusion as it arises.

9. Conduct the Survey, Check for Bias, and Interpret the Results

For the results of a survey to be valid, the

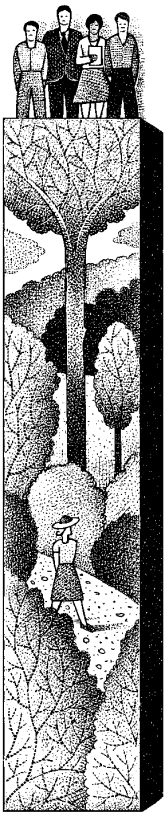
responses on which they are based must reflect the target population. Consequently, before interpreting the results of a survey, a surveyor must calculate the rate of response for the survey, and check and correct for any non-response bias. To calculate the response rate for a telephone or in-person survey, a surveyor needs to track the number of attempts — usually a minimum of three with phone surveys and two with mail surveys — that are made to contact each person in the survey sample.

After quantifying the rate of response, the surveyor must attempt to discern any differences between those who responded to the survey and those who chose not to or could not be reached. If comparison with Census data suggests that there are significant differences between these two groups (for example, if demographic characteristics such as income, education levels, or race are dissimilar), it will be necessary to correct for the non-response. In some cases, such adjustments can be made by "re-weighting" (using statistics to increase or decrease the representation of various groups).

While it is true that much can be learned from mathematically intensive evaluation of survey results, most citizen surveys do not require fancy statistics. Results can usually be calculated by using widely available software programs that are designed to calculate medians, ranges, percentages, frequency distributions, and other measures. These programs will typically prepare extensive tables, as well as attractive charts and graphs.

Most of the software programs also present cross-tabulations of different responses and indicate which differences are statistically significant. Remember, though, that finding statistically significantly differences in the responses to a question doesn't necessarily mean the differences are important. For example, with a large enough sample you may find that 82 percent of older residents want a flood plain ordinance but only 78 percent of younger residents do. This difference may be statistically significant, but without any policy relevance whatsoever.

When the survey results are in, it's time to call back into action your advisory panel to analyze the results.



Summing Up:

More and more communities are using surveys to get a better sense of public opinion on a wide range of planning-related issues. Surveys are effective at reaching residents who do not ordinarily participate in typical "public involvement" events, such as meetings and forums.

For surveys to be of value, however, they need to be carefully prepared and administered. This includes clearly identifying just what the purpose of the survey is; identifying the target population and sample size; asking the right questions in the right way; and conducting the survey in a fair and unbiased manner. ◆

Thomas I. Miller, Ph.D., is the President of National Research Center, Inc., a survey research firm located in Boulder, Colorado. An expert in research and evaluation methods, Miller is the co-author of Citizen Surveys: How to Do Them, How to Use Them, What They Mean, *published by the International City/County Management Association in 1991 and scheduled for re-release later this year. His firm, which specializes in surveys that permit communities to compare their results with "peer" communities similar in size, maintains an integrated database of over 250 surveys completed by about a quarter of a million residents in 40 states. Miller would be pleased to respond to readers' questions about the article, and can be reached at: 303-444-7863.*

Tallahassee-Leon County, Florida

The Tallahassee-Leon County Planning Department will be tracking public attitudes about growth, affordable housing, economic development, open space, and other issues through periodic public surveys. Following up on a 1996 survey conducted as part of the comprehensive plan process, the Department has received funding from the governing body to conduct biennial surveys beginning this year.

According to Planning Director Wendy Grey, the city felt it important to "reach folks who don't come out to public hearings, the people who aren't very involved or very vocal." Grey notes that the 1996 survey (on which future opinion surveys will be modeled) brought in useful feedback on questions such as whether people were willing to pay for preserving more open space, and whether the pace of growth in the city was too fast or too slow.

Of special interest to planners, the survey also asked: "Do you know whether or not Tallahassee and Leon County have a Comprehensive Plan that's designed to direct how this area grows and develops?" Just over two out of five local residents answered "yes" to this question (for low-income residents, only one out of five said "yes").

The Planning Department hired a local firm specializing in survey work to conduct the 1996 telephone survey. A citizen panel may be formed to review questions to be asked in future surveys.

For more information contact Wendy Grey, Planning Director, Tallahassee-Leon County, at: 850-891-8633; e-mail: grey@mail.ci.tlh.fl.us

Engaging the Public

by Larry Frey, AICP, CFM

"Public sentiment is everything.
With public sentiment nothing can fail;
without it, nothing can succeed."

– Abraham Lincoln at Ottawa, Illinois, 1858[1]

As planning commissioners, it is vital that you find meaningful ways to engage the public in the planning process. Too often, communities simply go through the motions of advertising in the local paper, posting a notice in a public place, or notifying property owners because state law or local policy requires it. While these requirements do have some value, they may represent little more than soliciting objections rather than constructive engagement.

Faced with a continual barrage of lengthy agendas or highly controversial items, planning boards and staff understandably, but unfortunately, tend to overlook the art of more creatively engaging the community. While engagement strategies can take time and effort, they offer a number of benefits.

- Engagement advances the planning commission's credibility and creates an atmosphere of trust.
- Engagement allows the public to be part of the solution to community issues.
- Engagement creates opportunities for planning boards to deliver improved recommendations.
- Engagement can help establish a more consistent framework for appointed and elected officials to make informed decisions about key issues.
- Engagement fosters enthusiasm and excitement about best planning practices, and involves the public in important policy considerations.
- Engagement allows planning board members and staff to extend their knowledge of the community.

1 First Debate with Stephen A. Douglas at Ottawa, Illinois (August 21, 1858).

The Scope of Engagement

There are no fixed rules on what makes for effective public engagement. But openness and creativity are staple ingredients. According to a National Education Association Foundation report, engagement is more than simply sharing views with others or getting their feedback.[2] Ideally, engagement incorporates ideas into a plan of action and then implements that action.

ENGAGEMENT ADVANCES THE PLANNING COMMISSION'S CREDIBILITY AND CREATES AN ATMOSPHERE OF TRUST.

From a planning standpoint, there are at least three scenarios where engagement is especially important:

- *Community-wide issues such as adopting a comprehensive plan or approving a costly community-initiated project.* We all know about the difficulties of getting good attendance at visioning sessions or meetings on a comprehensive plan update. Engagement strategies can positively influence levels of participation in these planning activities.
- *Neighborhood issues such as a subdivision approval or a variance request.* Planning commissioners often see large crowds attend meetings, usually in opposition, that involve projects that are being proposed in their neighborhoods. Such crowds often air grievances and complain they have not been part of the process. Engagement strategies can reduce the temperature of meetings on hot button issues.

2 *Engaging Public Support for Teacher's Professional Development Overview* (Washington D.C., NEA Foundation for the Improvement of Education, 2000)

- *Advancing the value of planning.* Engaging the community to enhance their understanding of the complexities of land use, planning, and the decisions you make is perhaps the most difficult challenge. Engagement strategies can help the public see the valuable role that planning can play in shaping the community's future.

Approaches to Better Public Engagement

There are many ways of engaging the public. What follows are brief descriptions of several approaches you might consider. Perhaps you're already using some of them.

Neighborhood-Based Planning. One of the best ways to engage citizens in planning is by going out to their neighborhoods. Neighborhood-based planning is an old concept with tremendous power, but it is not used enough. While it may work best in municipalities which tend to have more distinct neighborhoods, rural areas can benefit as well, by identifying activity centers that target organized groups. If no group exists, then ask your staff to help establish one. Meetings should be held in the neighborhood, allowing input to flow more freely and pertinent issues to unfold.

Neighborhood planning can also be linked to U.S. Census boundaries which provide an automatic demographic database from which to measure and evaluate methods and results. It sounds like a lot of extra work, but if done strategically, the dividend is worth the effort. The influence of the neighborhood increases by being incorporated into major planning documents, giving it strength in getting decision-makers to listen.

Developer Assisted Outreach. Before a development plan is submitted, call on the applicant to engage in a reasonable, yet vigorous, public outreach campaign.

Such engagement can lead to significant improvements to the development plan, as the neighborhood becomes part of the design solution. At the same time, the rumor mill will be tamed, and you'll preempt heated public meetings where issues explode only to delay the process or build acrimony.

With this approach to engagement, encourage the developer to provide documentation such as minutes, or even a video recording, of their efforts to engage the public.

Technology and Graphics. Advances in computer software continue to allow real life and virtual what-if scenarios. It has often been said that a picture is worth a thousand words, and this is truer now than ever before.

Audiences seem to be mesmerized by before/after visual presentations, and factual data that shows exciting or alarming trends through charts and graphs. For example, during a presentation an audience can be shown an amazingly clear aerial photo of suburban sprawl versus compact development, that otherwise could not be easily explained. With graphics, audiences tend to become more positively engaged with the presenter and the issue.

Websites. The home page is still underutilized. Many are generic and difficult to navigate. A community's homepage offers one of the fastest growing tools for disseminating information and measuring results. It can be used to link to the latest news, answer questions, and solicit input through interactive surveys about various community issues.

Commissioners and members of the public should also be able to get agendas and staff reports through the web site. An online bulletin board or community chat room can provide feedback to you much better than snippets from the editorial section of the local newspaper.[3]

Pilot Project Planning. Take an idea and put it into action by engaging a group of interested citizens as part of a planning experiment.

For example, work out a deal with residents of a street or neighborhood to agree to a code enforcement sweep to address outstanding violations. After the sweep has been done, and every house has been reviewed, educate each resident about code requirements without issuing any citations. Follow up in about 30 days to monitor their progress. Supplement the progress with financial and technical assistance packages.

If this experiment is successful, expand it to another neighborhood, citing the successes of the pilot neighborhood.

Discovery Sessions. When you discover or hear about interesting trends or activities – such as a newly revitalized row of historic homes or a burgeoning group of antiques businesses – have your staff schedule a discovery session with the movers and shakers behind the trend or activity. At the meeting, staff can discover if there are ways of providing support or serving as a catalyst for further activities. Engagement through discovery can strengthen creative initiatives.

Planners for a Day. In order to get youth interested in what you do, embrace the fun practice of engaging primary and secondary school students in designing their ideal future community.[4]

Have no rules other than providing each "design group" a large sheet of paper with a base map, and some markers. The resulting synergy can be awesome as the students resolve their own planning issues. You end up with some pretty strange stuff, but there is usually a common denominator of how they envision the future and what is important to them.

After the plans are finished, talk about planning and government, and answer their many questions. Invite them to serve as the honorary chair or planning commission member as a reward. Present the results at one of the public meetings and hand out awards. Lots of people will show up, including children, teachers, parents, and friends. And don't forget: children are sometimes a good barometer for community sentiment.

Community Planning Showcase. Hold an annual public celebration, a Community Planning Showcase, that highlights the previous year's planning-related successes. Feed those attending, hold a raffle, and give away souvenirs. These events extol pride and bring people with opposite views together in a positive way. Reinforce the planning commission's customer service commitment by attending, and having staff on hand with displays.

Summing Up:

Engaging the public can be a powerful tool, without being overwhelming. There are many fun and creative methods for engaging your community, limited only by your capacity for initiative and imagination. With a focus on engagement strategies, you will no doubt begin to create a unified community that gets to the heart of the matter – almost every time. ◆

Larry P. Frey, is currently enjoying a sabbatical, which has included historic preservation research and travel to New Orleans, Key West, and the states of Georgia and Indiana. Frey's past work has included serving as Director of Planning and Development for the City of Bradenton, Florida. He has over fifteen years' public/private experience in planning and community development.

Two good online sources of information on engagement strategies are Public Agenda, a nonprofit research group at: <www.publicagenda.org>; and the National Education Association Foundation for the Improvement of Education at <www.neafoundation.org/publications/engaging.htm>.

3 Blacksburg, Virginia, continues to be a model for user-friendly websites at: <www.blacksburg.gov>.

4 In Bradenton elementary students are given free reign on designing their perfect city. Their intuitive planning ideas are amazing. In Royal Palm Beach, Florida, the high school student council provided valuable design feedback for planning the Village's largest public recreation area.

Working With Planning Consultants

PART I

by C. Gregory Dale, AICP

The use of a private planning consultant can be an efficientway of conducting a local planning project. If handled properly, consultants can be a valuable addition to the planning resources of a community. However, like any undertaking, this process has its keys to success as well as potential problem areas. This is the first in a series of articles designed to provide an overview of the "ins and outs" of working with planning consultants. It is admittedly prepared by a planning consultant. Hopefully, however, this private sector perspective will benefit planning commissions and planning staff in the public sector.

The following are what I consider to be ten key elements to successfully getting started on a project that will involve consultants.

1. **Know the Law.** Many communities have local laws or regulations relating to the selection of consultants; there may also be state laws that come into play. If you have any uncertainty, consult with your legal counsel to understand the legal framework within which you operate *before* doing anything else.

2. **Have Clear Definition of Need for Project.** Before you begin a consultant selection process, your department/commission should also be clear about the scope and nature of the project. Too many communities use the consultant selection process as a means to help define a project. Unfortunately, this often leads to widely divergent proposals being submitted, which are quite difficult to compare.

3. **Confirm Leadership Commitment**. Related to the above, some communities use the proposal process as a way to generate local interest and agreement in engaging in a planning process. Unfortunately, this often results in confusing discussions where some decision-makers are focusing more on whether or not a planning project should be pursued rather than on selecting the most suitable consultant for the community. Before you begin a consultant selection process you should have a commitment on the part of the decision-makers that the project should be undertaken.

4. **Learn from Others.** Take advantage of your planning network to learn from other communities. Undoubtedly, there are other communities in your region or state that have gone through a planning process utilizing consultants. It is worth comparing notes to find out what has worked well and what has not worked well for them.

5. **Establish Budget Parameters.** In your research with other communities, you should be able to get a general understanding of the consulting market in your area. This should help you in developing a realistic budget for your project — a budget that should be agreed on before you seek proposals from consultants. Note that budgets can be expressed in either dollar amounts or estimated labor hours.

Too often communities invite consultants, as part of their proposals, to tell the community how much it should spend on the project. The problem with this (similar to my earlier point about the scope of the project) is the likelihood of receiving proposals that will be quite difficult to compare.

6. **Determine the Selection Process.** A decision will need to be made as to how the consultant will ultimately be selected. If you have used a planning consultant before and were happy with their performance, you may wish to explore a "sole source" selection, which means that you would not go through a competitive selection process (but check that this is permissible in your jurisdiction).

If you decide on a competitive process, who will do the screening of

On-Line Comments

"Speaking as a consultant and former chairman of the Summit County Commission, it is difficult to over-emphasize the importance of -'Clear definition of Need for Project.' Very specific tasks and objectives have to be established to assure that a consultant can be effective. ... In all cases, the selection process is critical. The consultant will furnish you with information on their most recent work and should be willing for you to talk with past clients. Checking with references and past clients can help you make certain that your candidate has the skills you are looking for. Quite often there is a human-resources person who can be 'borrowed' pro-bono from a nearby firm to help establish a recruiting/selection process."

— H. Gene Moser, Park City, Utah

"It is easy to create an rfq/rfp/bid process, under the guise of openness or fairness, that takes far too much staff or public processing time. Indeed, it would be possible to spend so much time and resources on the bid process that one could/should have done the project oneself! As with any project, clarity as to the hows, whys and wherefores will benefit all involved."

— Lee A. Krohn, AICP, Planning Director, Town of Manchester, Vermont

consultants, review of qualifications, review of proposals, and interviewing? Typically a selection committee will be established that will act in an advisory capacity and may include representatives of the legislative body, the planning commission, as well as key departments such as planning, engineering, public works, etc. Also, consideration should be given as to whether citizen representatives should be on the selection committee.

7. **Select the Consultant Candidates**. Make a decision early in the process as to whether you will be opening the process up to any consultant who wishes to submit, or whether you will prescreen consultant candidates. Do you want to invite consultants to submit on a local, regional, or national basis? Some communities have a strong preference for local consulting firms. If this is the case, it is not fair to invite national submissions by firms that have no realistic chance of success. On the other hand, some communities determine that they want a national perspective, which has obvious cost implications related to travel.

I suggest that you begin with a request for qualifications and use that as a basis to narrow the number of candidate firms that you will then request full proposals from (I'll discuss the content and process involved in RFQs and RFPs in my next column).

8. **Interviews.** After narrowing the candidates down to a realistic number based upon qualifications (typically this should be no more than five or six firms), you may then want to further narrow it for the purpose of scheduling personal interviews with the consultants. For this process to be manageable the number of firms interviewed should be no more than four, preferably two or three. Scheduling more than four interviews results in a burdensome process for the local selection committee.

Considerations such as the length of the interview, the type of presentation desired, and logistics of the interview room should also be resolved beforehand.

9. **Final Consultant Selection.** How will the final selection be made? Will there be explicit criteria or will the process involve an open consensus building discussion? If criteria are established, what will they involve? To what extent will references, qualifications, understanding of the local community, staff availability, time proposed to be spent on-site, etc. be considered? Again, these are all matters that need to be discussed and resolved in advance.

10. **Contract Negotiations.** After a consultant is selected, the contract and scope of services should be carefully negotiated. Even if the process involved a full proposed scope of services, there is still the opportunity for the community to negotiate the details and content of that scope of services with the consultant. The community may conclude that it favors most of what the consultant proposed, but revisions to the scope are necessary. The cost, method of invoicing, scheduling, definition of work products, and commitment of personnel, should all be addressed in the contract.

Summing Up:

Ultimately the consultant process involves people working with people. The challenge is to find the right mix of qualifications, approach and philosophy, and personality compatibility between the client and consultant. ◆

C. Gregory Dale, AICP, is Director of Planning with the planning and engineering firm of Pflum, Klausmeier & Gehrum, and works in their Cincinnati, Ohio office. Dale is also a past president of the Ohio Chapter of the American Planning Association, and frequent speaker at planning and zoning workshops. His next two columns will focus, respectively, on the request for qualifications / request for proposal process, and on dealing with "management" issues that can come up during the course of a project.

When to Hire a Consultant

Even if your community has a professional staff, there are a number of situations in which it will make good sense to hire a consultant for a specific project:

• *Staff is too busy.* Preparing a comprehensive plan or updating a zoning code is a time-consuming project. The staff that conducts the day-to-day business of the planning department may not have time to undertake such a project without help.

• *Staff needs expert help.* A planning director may be involved in drafting one or two zoning ordinances in his or her entire career. There are consultants who prepare several zoning ordinances every year. Experience does count and the right consultant can bring a lot of experience to your project.

• *Project requires objectivity.* The community may need an objective evaluation of a complex situation that has become an emotional issue for people living in the community.

• *Project requires credibility.* There is some truth to the old adage that a consultant is someone from at least 50 miles away. Sometimes the community just needs the credibility of an outside expert, even if the planning staff and planning commission know what needs to be done.

• *Consulting contract avoids legal obstacles.* Sometimes there are technical and legal reasons for hiring a consultant — for example, when an agency has money available to fund a project but is under a hiring freeze or can get matching grant funding.

All of those are good reasons for hiring the right consultant.

The above is excerpted from Eric Damian Kelly's "The Commission and the Consultant" which ran in PCJ #13.

Working With Planning Consultants Part II

by C. Gregory Dale, AICP

In my previous column *(PCJ #29, Winter 1998)*, I provided an overview of ten key elements to successfully getting started on a planning project involving consultants. One of those elements involves a clear understanding of the Request for Qualifications (RFQ) / Request for Proposal (RFP) process. This column focuses on the benefits of starting your consultant selection process by using an RFQ and then, if necessary, moving on to request proposals from the "short list" of firms you have screened from the responses to your RFQ.

1. Beginning with an RFQ

I suggest that you began the consultant selection process with an RFQ. An RFQ can be fairly simple. You are primarily interested in understanding the background, experience, skills, and capabilities of various firms. Here are several tips:

Make sure you specifically request identification of the project manager and senior level staff to be assigned to the project, as well as any proposed sub-consultants. You will also want to receive a summary of representative projects managed and staffed by that team, along with project references and resumes. You may receive qualifications from a large firm with a very impressive list of projects and clients, but you will not be working with the entire firm — you will be working with a small group of people within that firm.

Also, since you will want a consultant who will recognize the unique problems of your community, you may want to ask for sample plans. This will help you separate the "cookie cutter" firms from those that respond to local needs, conditions, and tastes.

> YOUR OBJECTIVE SHOULD BE TO ACHIEVE A BALANCE PROVIDING CONSULTANTS AN UNDERSTANDING OF YOUR COMMUNITY'S EXPECTATIONS, WHILE ALLOWING THEM FREEDOM TO SUGGEST DIFFERENT APPROACHES.

A mistake that communities sometimes make is to publish what they refer to as an RFQ, but that, in reality, reads like an RFP (i.e., requesting a proposed scope of services, budget, cost estimate, and so on). One difficulty with this is that the community may end up receiving submissions by consultants that vary widely in their scope, making them difficult to compare. In addition, it defeats the very purpose of the RFQ which is to develop a "short list" of qualified consultants and *then* move on to the more detailed part of the selection process.

2. After the RFQ

Once you have a file of potential consultants generated by your RFQ, you will want to review their qualifications in order to develop a short list of firms warranting further consideration — usually three or four of the best qualified firms.

After you have done this, you may choose to request a full proposal from each of the short listed firms or proceed directly to interviews with the short listed firms and make a tentative selection of a preferred consultant based upon the interviews (if you take the latter course, you can request a detailed proposal and negotiate a budget directly with the preferred consultant with the understanding that if negotiations are not successful you will move on to the second ranked consultant).

When you request a proposal, whether from your short list of consultants or from a single preferred consultant, one of the issues you should consider is how much guidance to provide. If you spell out each and every step you expect to be taken in the project, you may never hear potentially valuable ideas the consultants might have based on their experience.

Of course, there's also the other extreme where a community offers virtually no guidance as to what it expects. Your objective should be to achieve a balance providing consultants an understanding of your community's expectations, while allowing them freedom to suggest different approaches.

One of the more difficult issues to deal with involves the project budget. When consultants receive an RFQ or an RFP they will want to know what the project budget is. You will need to make a decision early-on as to whether to share this information with the consultants and whether to ask them to include cost estimates in their proposals. *[Note: As I mentioned in my previous column, there are often local or state laws that govern the consultant selection process; some cover when you can request cost information.]*

There are several things to consider. First, asking consultants to submit a proposal without their knowing the project budget can lead to your receiving a wide range of scope of services, making proposals difficult to compare. Furthermore, if you do not require consultants to

Working With Consultants – Part III

by C. Gregory Dale, AICP

[Editor's Note: This is the final article in a three part series dealing with the hiring and management of planning consultants. The two previous articles focused on getting organized to hire a consultant and the RFQ/RFP process.]

Once your community has selected a consultant, there are certain steps you can take to assure the project runs smoothly. A well defined scope of services, a carefully structured contract, and a clear understanding of how the project will be managed are all important elements to resolve in the beginning.

The following are some tips that should help to make the consultant-assisted planning process as efficient and productive as possible.

1. Clarify the scope and cost. Do not automatically assume that the scope of services included with a consultant's original proposal will be incorporated into the contract. Work with the consultant to make sure you have a scope of services and process that works for your community and establishes a clear understanding of the costs. On the one hand, be as explicit as possible with regard to the work tasks. On the other, build in some flexibility to allow mutually agreeable changes in emphasis as the project unfolds.

2. Clarify roles. Make sure all have a clear understanding of the roles of the consultant, the planning commission, the legislative body, the planning staff, and any citizen-based steering committee. Who will the consultant be expected to answer to? How and when will planning commissioners and elected officials be involved? What will be the composition and role of any steering committee?

3. Identify project manager. Clearly identify your consultant's project manager. Similarly, designate a contact person from the planning department. You will want to have defined lines of communication on both logistical and substantive planning issues.

> WHEN A CONSULTANT IS EXPECTED TO DO SUBSTANTIAL AMOUNTS OF WORK WITHOUT FEEDBACK FROM THE CLIENT, SURPRISES TEND TO OCCUR.

4. Be clear on the products. Make sure there is an identified list of products that the consultant is responsible for producing. Ideally products are delivered by a consultant periodically over the course of a project. This provides tangible signs of progress, and allows for feedback or direction to the consultant if necessary.

5. Be specific on meetings and trips. To the maximum extent possible, specify the number of on-site meetings by the consultant, particularly if the consultant is from out of town. Identify how the cost of any trips beyond the scope of the contract will be apportioned.

6. Address direct costs. Clarify whether direct costs such as reproduction, mailing, long distance calls, and travel, are included within the contract amount. Consider having a separate direct cost budget with a not-to-exceed amount.

7. Communicate regularly. There is no substitute for regular communication between client and consultant. When a consultant is expected to do substantial amounts of work without feedback from the client, surprises tend to occur. And these surprise are not usually pleasant!

8. Stay in touch with constituents. Your planning staff (or steering committee) should be in a better position than the consultant to detect early warning signs of any community concerns or problems related to the project. Early communication of those issues to the consultant is essential to a successful project.

9. Be clear on invoicing procedures. Make sure there is a clear understanding of how the project will be invoiced. For example, will it be invoiced monthly, based on percentage completion? Or will it be invoiced based on the production of products?

10. Provide for a project ending. Some planning projects tend to drag on, without seeming to have any clear concluding point. Avoid this by identifying the final products that are expected from the consultant. Pay particular attention to the issue of the consultant's role and responsibilities in any plan or ordinance adoption process, as these often become unexpectedly time-consuming.

11. Establish trust. While the consultant/client relationship is a business relationship, it should be founded on trust. View the consultant as a team member, not simply an outside expert.

Consultants can be a valuable complement to a community planning process. But remember that a good consultant helps plan *with* the community, not *for* the community. ◆

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Proforma 101

Getting Familiar with a Basic Tool of Real Estate Analysis

by Wayne A. Lemmon

Editor's Note: As a planning commissioner I'm sure you're used to rolling up your sleeves and getting to work when your board meets. I urge you to take the same attitude in working your way through this lengthy, but highly rewarding, article by real estate market economist Wayne Lemmon. Don't be put off by all the numbers and calculations. If you take the time, you'll learn a lot – especially if, like many citizen planners, you're not very familiar with the world of development economics.

Planning commissioners frequently find themselves wishing they knew more about how real estate development really works in terms of dollars and cents. If members of the board had a better appreciation for the push and pull of costs and income, time and risk, and how changing one factor can affect a whole domino chain of other factors, the entire process of real estate development would be more understandable.

To achieve a minimum level of "literacy" about the economics of development requires at least a navigational knowledge of the basic tool of real estate feasibility analysis – the proforma.

A proforma analysis is a set of calculations that projects the financial return that a proposed real estate development is likely to create. It begins by describing the proposed project in quantifiable terms. It then estimates revenues that are likely to be obtained, the costs that will have to be incurred, and the net financial return that the developer expects to achieve.

The proforma is the basic "go / no-go" analysis that developers use to decide on going forward with a project. There are few "absolutes" as to how such analyses can be constructed, but there are common practices and techniques that nearly all proformas attempt to provide in one form or another.

By way of a basic introduction to this subject, I have created a simple case study proforma analysis for a hypothetical residential subdivision. Figure 1 on the next page shows a simplified summary table from this generic case study. We'll use this as a guide as we consider some of the challenges developers face in putting a project together – and how several key variables can affect the overall success of the project.

Part 1: What is being proposed?

The first thing that has to be done is to set out in quantifiable terms just what is being proposed to be built. This might take the form of a table of rentable floor areas for a retail center, office building, or warehouse; the number of rooms by type of room for a hotel; or, as in our example, the number of houses by size and model in a residential subdivision.

Architects refer to this as the project's "program." This tabulation also sets out the non-income producing space for things like parking, lobby areas, mechanical and utility rooms, and other support space. The quantities of floor areas, rooms, or dwelling units in this table are used as the basis for calculating sales or rental income, as well as construction costs.

For our case study, our hypothetical developer will probably have in mind a group of home plans that may have been used in other communities. The builder can't precisely anticipate exactly how many units of each plan will be bought, so simple totals and averages can be used. Let's assume that this project will include a total of 50 homes, and that the home plans are likely to average about 2,200 square feet of finished space, for a total of 110,000 square feet of finished built space project-wide.

Part 2: What revenues will be generated?

To answer this question, the developer will have performed a market analysis that recommends appropriate rents, charges, or sales values. The developer's experience will also come into play, drawing on knowledge of what comparable projects obtained in rents or sales. The developer may answer this question with a highly detailed market study, or simply pencil in the values being used at another nearby project.

Gross Sales:

In the example illustrated here, we are proposing to build a 50-unit housing subdivision. The sale prices will vary with each house plan according to each model's size and features, but in our imaginary market, the homes could be expected to command base prices generally ranging in the high $300,000's. After adding in estimates and allowances for premiums on choice lots, and customer-selected options and upgrades, the homes in our hypothetical project are shown at the top of Fig. 1 as averaging a total price of $400,000 per unit,

generating $20 million in gross sales revenues.

Less Commissions, Fees:

These revenues will be reduced, however, by the costs of selling the homes. Sales commissions will need to be paid to sales agents who may be part of a real estate agency contracted to market the project, or in-house sales staff, or independent realtors who bring customers to the project, or some combination of all of these. Legal fees, closing costs, and other "transactional" costs also have to be deducted from gross revenues. In Fig. 1, we are assuming that commissions and fees could amount to $800,000 leaving Net Project Revenues of $19.2 million.

Part 3: What will it cost to build the project?

Here, as the saying goes, is where the plot thickens.

Land Acquisition:

We can begin with the purchase of the land itself, the price for which is the result of purchase negotiations. In complex joint ventures, the land owner may become a partner in the project and enjoy a share in the project's profits, or take a percentage of sales. On the other hand, a straight sale for a fixed price is a simpler deal and doesn't depend on the developer's performance.

In our case study, the land purchase is a simple cash deal with the land price calculated at $50,000 per home or $2,500,000 total. As with any real estate purchase, there are likely to be broker and legal fees, closing costs, and taxes. For our example, we'll assume these items will add $75,000 to the deal. Under Project Costs in Fig.1, Land Acquisition is shown as costing $2,575,000.

Planning, Design, & Approvals:

There is then the part of the development process that is the most visible to members of planning commissions. This is the planning and approval stage where conceptual plans for the project are initially created, and quite likely refined and revised in greater levels of detail as more becomes known about the site.

During this stage, the developer will engage the services of surveyors, planners, architects, civil engineers, as well as specialists such as environmental and traffic engineers. All of this information must be assembled and used to create a workable and marketable plan for the project, which must then be submitted with supporting documentation to the local planning department.

Figure 1

Pro-Forma Summary : Hypothetical Residential Subdivision

Project Revenues	
Number of Units	50
Average Sale Per Unit	$ 400,000
Gross Sales	$ 20,000,000
Less Commissions, Fees	- $ 800,000
Net Project Revenues	**$ 19,200,000**
Project Costs	
Land Acquisition	$ 2,575,000
Planning, Design & Approvals	$ 600,000
Sitework & Building Construction	$ 12,175,000
Amenities, Off-Site Costs	$ 100,000
Management & Overhead	$ 1,760,500
Total Project Costs	**$ 17,210,500**
Net Cash Flow Before Financing	**$ 1,989,500**
Financing Interest	**$ 1,102,400**
Net Cash Flow to Developer	**$ 887,100**
Cash Investment	$ 1,020,600
Total Cash-On-Cash Return	86.9 %
Annualized Cash-On-Cash Return	**19.9 %**
Internal Rate of Return	**22.4 %**

If additional information or revisions to the plan are called for, the services of these professionals may have to be extended. For larger projects, developers are also likely to employ the services of a lawyer who specializes in land use approval procedures. In addition, there are filing and application fees charged by the local government.

All of these costs can mount up to a significant amount of money. For our case study, we have estimated Planning, Design & Approvals at $600,000, but depending on how the approval procedures unfold, actual costs could easily vary from this estimate.

So far in our project, we have budgeted over three million dollars, and nothing has yet been built. Estimating physical construction costs is the next step.

Sitework & Building Construction:

Physical construction costs associated with the land include rough grading and clearing, constructing roads and utilities, as well as drainage and environmental protection features. Project sitework costs are highly variable, and depend on the unique conditions of each site. These costs are typically estimated with the use of sophisticated computer programs that calculate the volume of earth to be moved, lengths of roads and utility lines to be built, and other site engineering improvements that will be needed. For our case study, we are assuming Sitework costs of $2,850,000.

We next estimate the cost of constructing the buildings. Architects, engineers, and construction managers can base their estimates on detailed histories about what similar projects have cost to build. For larger, more complex projects, a cost estimator (an individual analyst or even a professional estimating service) may be engaged, using specialized computer programs that calculate the precise quantities of wall siding, windows, tons of concrete, lengths of pipe and wiring, numbers of plumbing fixtures, and every other item called for in the project plans.

Developers, however, also have their experience from recent and current projects that can be summarized as a total, inclusive cost per square foot (or cost per unit). They will rely on the sophisticated costing analyses described in the preceding paragraph to verify this cost per square foot number, and to flag anything that might be different about this project.

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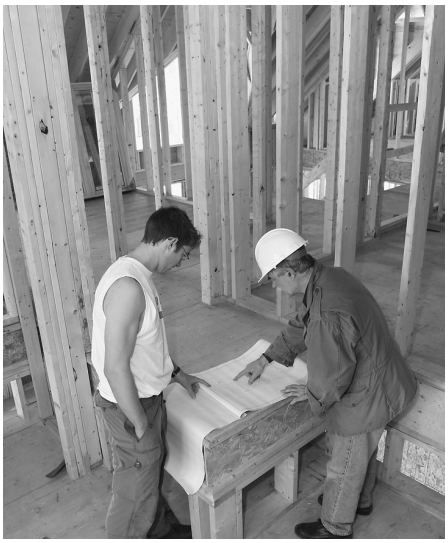

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In our example, we will assume a value of $65.00 per square foot for the base construction cost. After adding in costs for providing homebuyers' upgrades, selections, and options, the total costs for building the homes themselves are estimated as $8.0 million.

There are also indirect costs and finishing costs that are incurred when the home is nearing completion. These costs can include such things as permit and inspection fees, final grading, landscaping, drives and walks, and hooking up water and sewer lines. Like other site costs, these costs are estimated in detail by site engineers, based on the unique characteristics of each site. We are estimating these indirect and finishing costs at $1,325,000.

With all of the above costs combined, the total for Sitework and Building Construction in our case study project is estimated at $12,175,000. See Fig. 1.

A couple of observations are noteworthy before moving on. Earlier, we estimated the costs to actually build the homes to be $8 million. This is to say, the base "bricks and sticks" cost to build the homes in our project is only about two-thirds of the total physical construction costs for this project – and less than half of what we will eventually estimate as the total project costs. If you are not familiar with development economics, you may be surprised to learn that *the costs of building construction are often less than half of what it costs to complete a development project.*

Note also that the combined total of Land Acquisition, Planning Design, & Approvals and Sitework in our project is estimated at just over $6 million. *This indicates that the costs just to acquire, enable, and prepare the site are expected to cost roughly two-thirds what it will cost to construct all the units.*

While the ratios just mentioned can vary widely from project to project and are not meant to be regarded as a standard, they do fall within the range of costs typically encountered in many development projects.

Amenities & Off-Site Costs:

There are still more costs to be estimated. Projects frequently have features that do not directly generate sales or rents, but are needed for the project to be attractive. In commercial projects, these might include plazas, fountains, or other public space amenities. In large residential subdivisions, such facilities might include clubhouses, activity centers, pools, and even golf courses.

Our example project, with only 50 units, will initially budget for more modest amenities including playgrounds and a system of walking trails, for a total cost of $100,000.

For some projects, the developer is asked to pay for improvements that are not actually part of the site. Such improvements might be needed to ease traffic at a nearby intersection, enhance a sewage treatment plant, or enlarge a water main. No such off-site costs are included in our base scenario, but we will look at how costs for amenities and off-site improvements affect profitability later as we look at alternative scenarios.

Management & Overhead:

And the costs keep on coming. At this point, we come to a group of costs that can be categorized as Management & Overhead. A large, multi-project builder will have production managers, site supervisors, sales managers, and sales and clerical staff on the payroll. Many of these people will move from project to project as communities sell out and new ones open. Some supervisory staff may be overseeing more than one project, allocating their time between the different jobs.

There are also additional services and expenses – everything from providing temporary toilets, to relocating and refurbishing sales and construction office trailers, to printing sales brochures and placing advertisements.

Costs of this nature tend to be a combination of: (1) fixed lump sums (i.e. the cost for a site model or sales display), and (2) expenses that continue as long as the project is under development (i.e. utility costs, supervisory staff). *Of partic-*

ular note is that this second category includes items that are time-sensitive. For example, the longer the project takes to complete, the longer on-site staff and services will be needed (and their costs incurred). This can happen if, for example, the market slows down and the development takes longer to sell out.

Another form of Overhead that occurs with larger, multi-project builders is referred to as "corporate overhead." This is the allocation of central corporate costs (administration, office expenses, and central administrative services) among the various projects underway. Every builder deals with the concept of corporate overhead in a unique way that suits its respective administrative and accounting requirements. In our case study, we'll assume that corporate overhead is calculated as a fixed percentage of sales.

In Fig. 1, you'll see that for our project we have estimated Management & Overhead (including corporate overhead) at $1,760,500.

Total Project Costs:

We can now estimate what it will cost to build our proposed project. As seen in Fig. 1, the total of Land Acquisition; Planning Design, & Approvals, Sitework & Building Construction; Amenities & Off-Site Costs; and Management & Overhead, is indicated as Total Project Costs, at $17.2 million

Part 4: How much money will this project make for the developer?

We are now approaching the proverbial "bottom line" of the feasibility analysis. How much money will this project make? To see where we stand, we subtract the Total Project Costs, just estimated above, from our earlier estimate of Net Project Revenues. This yields a value of $1,989,500, indicated in Fig. 1 as Net Cash Flow Before Financing. This is not yet, however, the final bottom line.

Financing Interest:

One remaining cost item is financing interest. A basic aspect for nearly all real estate is that costs are incurred first, and revenues come in second. The costs have to be covered with financing and investment until sales or rents are able to be collected. As this money is advanced, interest charges are added to the costs the project carries. Interest costs can be a major factor in the profitability of a project, particularly if the sales and development period becomes extended.

Project financing is an area for which strategies vary widely, from builder to builder, and from project to project. While there is probably no standard approach, one not uncommon financing scenario would have a land purchase loan cover a large part (but not all) of the land acquisition costs, and short-term project financing cover all other development costs as they are incurred. Both of these loans would be repaid with calculated payment allocations per house as each home sale is closed. Interest charges would be incurred on the outstanding balance of these loans until they are completely paid.

In order to calculate the project's financing needs and the amount of interest that will be charged, we have to anticipate the timing of when costs will be incurred and when revenues will be available to pay the loans back. This requires preparing a *cash flow analysis*.

Although cash flow tables can look

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Author's Note:

Bargaining from Strength of Knowledge

In a prior life, I was a worker-bee in the back room of a national real estate consulting firm. Four years previously, this firm had helped the Town of Bridgewater, New Jersey work through a complex developer solicitation and selection process for a choice tract of land bound by a new interstate and two other major highways. With the developer finally selected, the Town turned contract negotiations over to their in-house counsel, telling the consultant, "Thanks for your help, we'll take it from here." Four years later, it was the Town that was being taken. With still no agreement in place, the selected developer had given the Town a "last and final offer." The consultant was asked by the newly hired outside attorney to come back into the process, evaluate this last offer, and advise the Town as to what to do.

There was a dramatic meeting where the principal of the development company flew in from California, and was surprised to find the consultant back at the table. After regaling the meeting with his vision for the town and why his deal was best for Bridgewater's future, the new attorney responded. Under the consultant's advice, the Town was rejecting the developer's "last and final" offer, but was making a counter-offer, which included a five-fold increase in the sale price for the land. The developer was aghast, exclaiming how he could never take on the project under such terms. He left the meeting and the negotiations in a huff.

Within the week, the attorneys received a new letter from the developer saying that they rejected the Town's latest offer, but were making the following counter-offer – and that was just the beginning. What followed was an intense six-week period of offers and counter-offers. This was before faxes, email or PCs – we were doing this with Quip machines and TI-59 programmable calculators and a brand new delivery service called Federal Express. With each communication, my job was to analyze the developer's latest position, see what profit margin the project was likely to generate, and advise the Town as to where, what, and how far to push back.

In the end, a deal was executed that featured a three-fold increase in land price over what had been the developer's last and final offer, as well as full funding for a community meeting and activity facility, and substantial highway access improvements. The Bridgewater Town Center was created, and that project (which includes a major hotel, office space, and a 900,000 square foot shopping mall) now anchors one of central New Jersey's major employment and commercial corridors.

Through the hired consultant's expertise, the Town of Bridgewater "knew when to hold 'em, and knew when to fold 'em." The Town was able to bargain from strength with knowledge that came from studying the basic tool of real estate feasibility analysis – the proforma.

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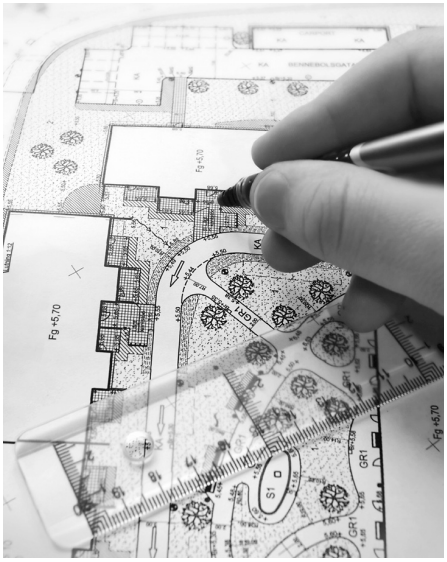

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very complex, they really are nothing more than a schedule of when revenues and expenses are expected to be incurred. Figure 2 *(below)* shows just a portion of the cash flow analysis that is part of our case study proforma, focusing on the end of the project's second year and beginning of the third year. You can see the first house closings occurring in Year 3, Quarter 1, generating the project's first revenues and cash flows.

A cash flow analysis also shows the impact of time on the project's feasibility. A project that takes longer to build or sell will have more exposure to costs that are not yet covered by rent or sales revenues. On-site staffing costs continue to run, interest costs mount up, and there is an increased chance that prices for construction materials and services may increase.

Knowing the expected schedule of when costs will be going out and revenues coming back in, we can now estimate the financing needs for the project. The full cash flow analysis extends beyond what can be shown in this article, but it includes a financing table that calculates the amount of new borrowing that will be needed each quarter, how much interest will be charged on the outstanding loan balance, and how much of that balance is repaid from each home sale.

Adding up all the interest charges from each quarter in the cash flow analysis gives us our financing costs. In our case study example, our cash flow analysis calculates this amount to be $1.1 million, and this is the amount that is then listed in Fig. 1 as Financing Interest.

Of note at this point is adding up the project costs that are *not* being financed by lenders. Again, this is highly variable from project to project. The approach taken in our case study is to assume that lenders will finance 70% of the Land Acquisition costs, which means the developer will be covering the balance. Furthermore, the primary project loan will probably not be funded until six months into the project, by which time the land purchase would be completed and initial project approvals obtained.

Thus, during this initial period, costs in excess or preceding the availability of the loans will be borne by the developer. This is the cash that the developer has at risk for the project and is the basis for calculating the rate of return.

Net Cash Flow to Developer:

The time has come at last to calculate the project's profit. In Fig. 1, we subtract the Financing Interest from the Net Cash Flow Before Financing. The result is indicated as Net Cash Flow to Developer, estimated in Fig. 1 at $887,100.

So, is this a sufficiently attractive

Figure 2

Selected Portion of Summary Cash Flow Table

	Yr 2 Q3	Yr 2 Q4	Yr 3 Q1	Yr 3 Q2
Project Revenues				
Number Units Closed	0	0	9	9
Average Sale Value Per Unit	$400,000	$400,000	$400,000	$400,000
Gross Sales	0$	0$	$3,600,000	$3,600,000
Less Commissions, Fees	$0	$0	($144,000)	($144,000)
Net Project Revenues	$0	$0	$3,456,000	$3,456,000
Project Costs				
Land Acquisition	$0	$0	$0	$0
Planning, Design & Approvals	$0	$0	$0	$0
Sitework & Building Constuction	$631,500	$1,531,500	$1,963,500	$1,963,500
Amenities, Off-Site Costs	$0	$0	$0	$0
Management & Overhead	$77,800	$77,800	$249,200	$247,800
Total Project Costs	$709,300	$1609,300	$2,212,700	$2,211,300
Net Cash Flow Before Financing	($709,300)	($1,609,300)	$1,243,300	$1,244,700

financial return to be worth all the risk and effort?

The developer's initial *Cash Investment* is estimated from the cash flow analysis, and is indicated near the bottom of Fig. 1 as $1,020,600 based on the funding scenario described above. This is what the developer must cover from his own resources until this money is returned to him with the initial disbursements from the project financing. The Net Cash Flow to Developer is what his investment earns.

As seen near the bottom of Fig. 1, comparing the Net Cash Flow to Developer to the Cash Investment yields a *Total Cash-On-Cash Return* rate of 86.9%. This may seem huge at first, but remember that the project will be in its fourth year before this is achieved. This total cash return is actually equivalent to a rate of return of 19.9% on an annualized basis, as indicated at the bottom of Fig. 1.

One final indication of profitability is the Internal Rate of Return (IRR), shown at the bottom of Fig. 1 as 22.4%. The importance of the IRR is that it takes into account the impact of time on an investment and the returns it generates. The IRR incorporates all of the cash flows initially going out (investment) and then coming back in (returns) and the exact timing of each. The IRR then finds the single rate of return that mathematically matches all of these cash flows to the amount of time that has passed, and the final net total of returns received.

Calculating an IRR involves a repetitive trial-and-error process, which is why it is handled as an automatic function in spreadsheet programs. The IRR is a standard indicator of profitability used in financial analyses that is particularly useful for comparing one investment against another.[1]

Rates of return approaching 20% may seem ambitious, and, in fact, may not be achieved. Viable projects can have return rates of 15%, 12%, or even less. But lower levels of return are usually acceptable only when builders perceive a quick turnaround, or a lower level of risk. After all, the feasibility analysis is done before the first spade of earth is turned.

The greatest risk in development is the unforeseen: what is discovered on the site that was not previously known; new regulations or other factors that add unanticipated costs; or turns in the market that result in lower sales values or extended sales periods. Annualized rates of return of, say, 10%, can be achieved with investments that carry far less risk. Allowing for strong rates of return reflects the high level of uncertainty and risk that is inherent with real estate development.

Looking at Alternative Scenarios

We have now seen the basics of a proforma analysis. That's useful for simply understanding the financial nature of a proposed project. But what moves this from useful to insightful is to use a proforma to test other possibilities and "what if" scenarios. A well-constructed proforma spreadsheet can be a powerful tool for such testing.

For our residential subdivision case study, let's use our proforma to see what happens to the project if we adjust a few critical assumptions.

1. Testing Higher Costs

One obvious set of tests is what happens if higher costs are incurred. Increases in costs can come from any part of the project, but for this example, let's illustrate what happens with three types of higher costs. The first test we'll do – and a frequent occurrence in real-world housing development – is to see what happens if the basic bricks and sticks cost of building the homes increases over what was expected. This test is easily done by just increasing the cost per square foot for home construction.

Raising the construction cost from $65 to $68 per square foot results in higher direct costs per unit of $6,600 per house ($3.00 increase times an average of 2,200 square feet per house).

continued on next page

1 If this brief explanation of IRR still leaves you puzzled, take a look at a more detailed (but plain English) explanation posted on the Motley Fool web site: <http://www.fool.com/portfolios/rulemaker/2000/rulemaker001030.htm>

Developers' Financial Information

Developers should not ordinarily be expected to present their confidential financial analyses (including expected profit margins) when they seek approval for their project.

Financial information on a project belongs to the business that produces it. Whether or not a business is going to make a profit, or how *much* profit it stands to make, is not a criterion for granting or denying approvals under local land use and zoning ordinances.[2]

If you are buying a car, the car dealer does not have the right to obtain your bank balance so that he can raise the price to as much as you can possibly afford. In the same way, a planning board is not entitled to know the profitability of a project so that it can run up a list of amenities and community improvements at the expense of the project.

In the development approval process, the situation is further complicated by being conducted in a public forum. This means that anything that a developer submits in response to requests from the board is subject to public inspection, which could very well include the developer's competitors. No developer should have to reveal the project's financial projections. Preserving business secrets is a legitimate interest of any developer. Usually, such proprietary interest is protected by law.

Since such information cannot be obtained directly from the developer, it becomes even more important that planning board members have a base level of sensitivity to the business side of the development process. This includes having current awareness of prices, rent levels, and vacancy rates as found in the local, current market. It also means understanding how changes to one aspect of a project can affect other parts, as well as the project's overall feasibility.

2 Note that this is quite a different situation from what I describe in the Author's Note (on page 11), where the Town was soliciting development proposals for municipally owned land and running its own proforma calculations as part of the negotiations process. And, of course, in cases where a municipality (or other public entity) is the developer or redeveloper, proprietary information concerns would not apply.


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Proforma 101

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Multiplying this amount by 50 units results in an increased cost of $330,000, which after some additional interest and indirect costs, results in a total cost increase of about $344,000. As you can see in the top graph in Figure 3 on the facing page, this reduces the developer's Net Cash Return from $887,100 to $542,700. The annualized rate of return is correspondingly reduced from 19.9% to 13.5%.

That in itself may not be too bad, but let's say that the builder looks at other projects and decides that to be competitive, a small community pool is needed. The pool, with mechanical equipment, deck area, and pool furniture, could cost about $125,000, plus $50,000 for a small bathroom-changing facility. The timing of this facility should be nearer to sales opening so as to serve as a marketing inducement, but can wait until sales are at least started, thus minimizing additional interest costs. Adding the pool reduces the net cash return by another $182,800 to $359,900, with the annualized rate of return now dropping to 9.5%.

At this point, however, let us also assume that the Town determines that the existing water system is operating at capacity, and that any expansion to the system would have to include enhanced pumping capacity, to be paid for by the project that requires the expansion. In our "what-if" scenario, let's say that this improvement would cost another $200,000, and that the Town is requiring adequate water capacity to be in place *before* final approvals are given, adding to the loan amounts and interest costs early in the project's operation.

The developer must now consider whether the project can sustain this additional cost. Of note is that this cost will be spent for improvements that are off-site, and not actually owned by the developer or the new residential community.

Combining the increases in home building costs and costs for additional amenities and off-site improvements results in Total Project Costs increasing by $705,000 – with no compensating cost savings or increases in revenues. The project net cash return is reduced to just under $151,000, representing an annualized rate of return of only 4.3% and an IRR of 4.5%.

This rate of return is now on a par with simple CD and bank note interest, and not worth the risk and effort required for this project to be built. If these changes prevail without compensating savings in other areas or increased revenues, the developer is likely to seek other, more profitable, prospective projects in which to invest.

2. Testing Impacts of Time

Building real estate is a huge gamble. You can spend millions of dollars on acquiring the land and preparing the project, and you can study trends in the market, but you won't know for sure how well a project will rent or sell until you're actually open for business.

Sales pace is very often the way in which a project's reality departs from expectations. We can use the proforma template to look at what happens if the project sells faster – or alternatively, slower – than the original baseline analysis.

Our original baseline analysis assumed an average sales pace of three units per month. What happens if the project is a huge success? Increasing the average sales pace to five sales per month would need to be accompanied by also accelerating some other aspects of the project. For example, the community amenities would have to be completed by the time the project sells out. Under this scenario, there is a savings in costs of $148,600. The Net Cash Return to Developer is enhanced by $199,500, which improves the annualized rate of return to 23.2%. With sales going so well, the builder may also be inclined to raise prices, enhancing the bottom line even further.

On the other hand, what happens if sales are slower than expected? If we adjust the average pace of sales to only two units per month, significant cost increases are incurred. Management and

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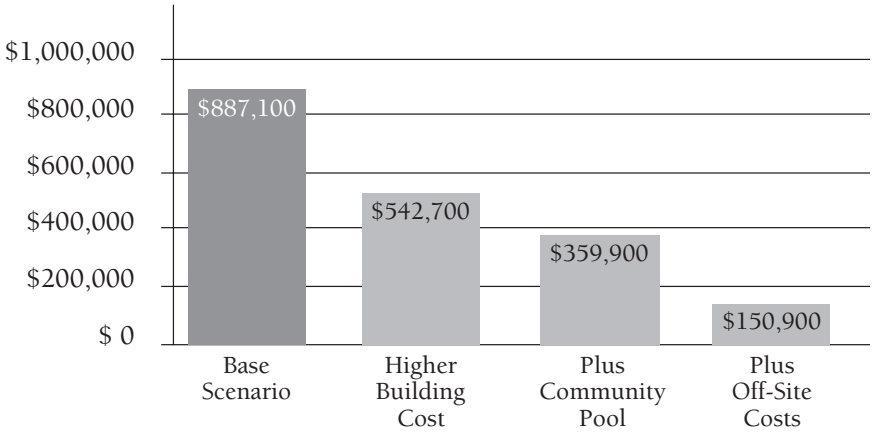
Figure 3

Project Profitability for Alternative Scenarios



Testing Higher Costs

Higher Building Cost

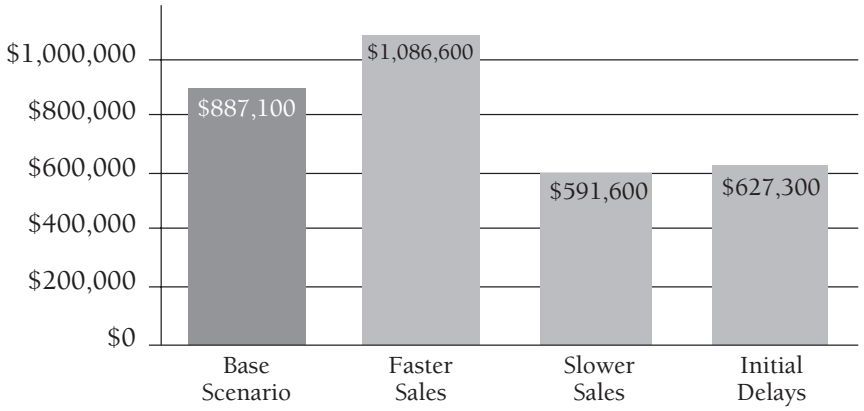
Home construction cost increase from $65 to $68 per sq. ft.

Plus Community Pool

Adds $175,000 additional costs to prior scenario.

Plus Off-Site Costs

Adds $200,000 for utility upgrade to prior scenario.



Testing Impacts of Time

Faster Sales Pace

Sales pace increased from 3 per month (base scenario) to 5 per month.

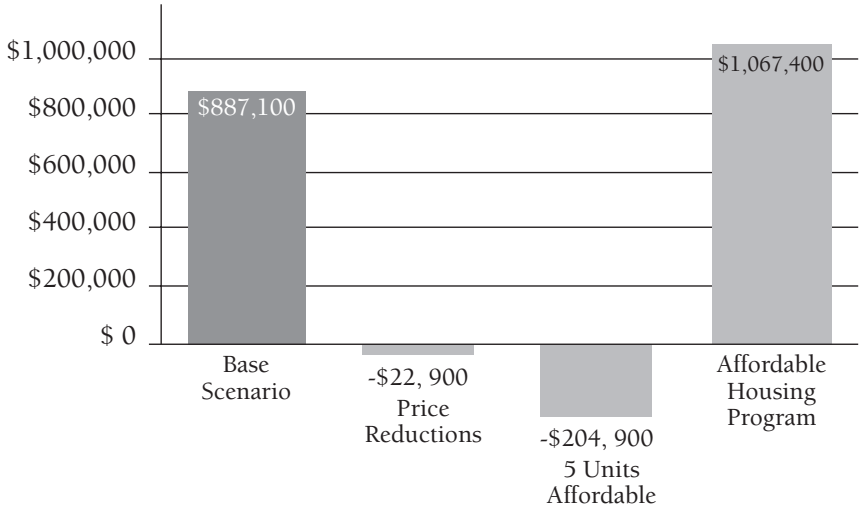
Slower Sales Pace

Sales pace reduced from 3 per month (base scenario) to 2 per month.

Initial Delays

Additional studies to cost $50,000 and result in 12 month delay.

Base sales pace of 3 per month retained.



Testing Home Affordability

Price Reductions

Average home prices reduced by $20,000 per unit.

Designate 5 Units as Affordable

Price 5 units at $160,000.

Affordable Housing Program

Add 6 "affordable" units at $160,000 and 4 market rate units (+10 total).

All market rate unit prices reduced $10,000 each.

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Proforma 101

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Overhead costs keep running for a longer time, the project carries longer, and interest costs mount up. This alternative scenario results in a reduction of net cash return by more than $295,000 below the baseline analysis. The project would still be profitable, but with a reduced annualized rate of return may not be as attractive as an alternative project the builder might consider.

Another, and very typical, time impact would be a delay experienced in the approval process. If additional environmental or engineering studies are needed, there would be the direct cost of these additional services. But deferring the opening of sales significantly would also increase carrying costs at a time when there are no offsetting revenues.

If, in our case study proforma, we add about $50,000 in additional study costs, but also delay the opening of sales by 12 months, financing costs jump by nearly $186,000 (to cover the delay in revenues coming in), and the project's net cash return suffers by nearly $260,000 compared to the base scenario.

Clearly, time delays are the enemy of profits in real estate development.

3. Testing Home Affordability

Let's use the proforma template to explore issues of home affordability. How can homes be brought to market that are more affordable?

In our example, the direct bricks and sticks costs (as well as the approval, permit, overhead, and interest costs) are pretty well established and not easily reduced. Remember that the direct unit construction costs are less than half of total costs, so reducing the direct construction costs by, say, 10% might lead to a savings of perhaps less than 5%.

What would happen if the builder simply slashed his sales prices by $20,000 for all of the units? This scenario is easily run by changing the average sales value. If we implement this change, corporate overhead costs actually come down since those costs are pegged to sales revenues – an estimated savings of about $48,000.

But the $1.0 million drop in total revenues from this price reduction is huge. The total impact to the project is that the net cash return is insufficient to pay all of the financing costs, and the project actually loses money, posting a negative return of nearly $23,000. And while a $20,000 price savings is not insignificant, it is far from a dramatic breakthrough in affordability. Simply cutting prices without commensurate cost reductions isn't supportable by private sector builders.

Another issue for housing affordability is the impact of higher costs, such as those we've tested in the previous scenarios. Increases in costs are not necessarily going to come out of the builder's profits – he's equally likely to reach for the price list.

For example, to restore the original net return of the base scenario after absorbing all the increased costs seen in our first set of tests (see Fig. 3, Testing Higher Costs, Plus Off-Site Costs column), the builder would have to increase the average unit prices by about $16,200.

If the builder feels that such an increase will be accepted by the market, he would prefer to do that rather than diminish his profits. Perhaps the builder will consider a slight reduction in profits with only an $8,000 price increase. But adding costs to a project, including project enhancements or off-site improvements that might be requested by the Town, can very easily show up as increased prices for the homes.

What about more formal affordable housing programs? Let's say that the Town that is reviewing the application for our hypothetical development is considering implementing a new policy that 10% of all new housing be "affordable," with prices set as a multiple of median income for the area.

Using our proforma template, we can see how this might work. Let's first see what happens if we simply set the price of five of the units to an affordable price level established by income formula of $160,000 (compared to the market price of $400,000). The immediate impact on the project is dramatic, resulting in a

reduction in revenues of $1.2 million, and a loss for the developer of nearly $205,000, compared to the baseline scenario. (See Fig. 3, Testing Home Affordability, third chart).

However, if more market-rate units are allowed, the developer can recover the reduction in profits. This could be achieved if, for example, the project's density were increased. Compared to the original baseline scenario of 50 market-rate units, we could add four market-rate units and six affordable units, thus bringing the total unit count up to 60 and achieving the Town's new policy of 10% affordable allocation.

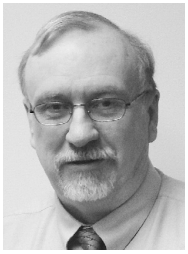
The increased revenues from the additional market rate units would counterbalance the cost impact of the affordable units, as well as cover an increase in the project costs (primarily in building construction costs) resulting from the additional units. Moreover, the developer might even be able to trim the prices of all the market rate units by about $10,000. At the same time, the net cash return actually increases from the baseline scenario by $180,300 (See Fig. 3, Testing Home Affordability, last column).

This is the proverbial win-win solution, made possible by a modest increase in project density. Not only do we end up with a viable project, but we have 6 affordable units (one more than originally called for), and all of the market rate units can potentially be made a little more affordable. Solutions like this can be found with insightful use of the proforma.

Summing Up:

Understanding the basics of the business of development – like understanding the basics of site plans, traffic analysis, and other essential tools used in the field of planning and development – will help you be a better informed and more effective citizen planner.

Knowing how to read a proforma can give you a better understanding of what goes into putting together a project. Through our hypothetical case study, we have seen how changes in several parameters – increased construction costs, the addition of amenities, time delays, and various municipal requirements – can affect a project's bottom line and its viability. ◆



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Profits Go With Risk

A basic tenet in the business universe is that higher profit expectations accompany higher perceptions of risk. High risk investments can only be contemplated when there is a potential for higher reward.

Real estate development is inherently risky. Unpleasant surprises may await the first shovel to hit the dirt. Market trends can change much faster than the time span needed to bring the project to market. A bad hurricane season can suddenly place a premium on plywood prices nationwide. The development process is fraught with unknowable risks that are beyond the control of the risk-taker. Clearly, a real estate developer will be looking for a level of profit that is significantly better than the return on a bank note or a mutual fund. Risk goes hand-in-hand with reward.

This fundamental relationship between risk and reward leads to three important principles in real estate development:

1. Time is Money – *Extended* Time is the Enemy

From our hypothetical case study, we can see that if the production timeline extends, certain production, operating, and financing costs continue to be incurred without any commensurate increase in revenues. The cost meter keeps ticking, but the revenue bell isn't ringing. This is particularly crucial during the pre-construction approval period. All of the carried taxes, interest, and professional services (design, environmental, engineering, legal) continue to mount if the approval process becomes protracted. This accumulated burden will all have to be financed until revenues start coming in, which just compounds the "carry" that project revenues will eventually have to cover.

2. The *Consumer* Often Pays for Amenities or Increased Risk

One point I have hoped to convey in this introduction to real estate proformas is that a developer will try to protect his profit margin to a level that is commensurate with the perceived level of risk. Planners not familiar with the development process might think that increased costs come out of the developer's pocket or the project's profit. That does happen, but another likely response is to increase prices or rents to cover the increased costs.

If a local board requests more community amenities, those costs may very well be passed through to the price sheet (i.e., to the home buyer / consumer). The same may be true if a project becomes riskier or more costly as a result of extended time or uncertainties in the approval process. Whether in the form of higher home prices or, for commercial projects, in the form of higher commercial space rents (which may be passed along as higher merchandise and service prices), it may be the *consumer*, not the developer, who ends up paying for increased amenities or risk.

3. Limiting *Uncertainty* Limits Risk

A developer will perceive a lower level of risk if the approval process has fixed standards, a predictable procedure, and a timeline set by a standard schedule. When the approval process has fixed standards, procedures, and calendar, the perception of risk can be reduced – and so can target profit levels. But, when the approval process becomes open-ended as to the criteria being considered, or incurs a protracted review time, the level of risk climbs exponentially. Developers will correspondingly increase their target profit levels to cover this risk.

Board members can help limit risk by strictly adhering to the existing approval criteria, and holding to the stipulated calendar for hearings, technical reviews, and submission of opposing positions. Keeping risk under control is in everyone's interest.

Preparing Successful Grant Proposals

by Tobin Scipione

Grants, both public and private, play an increasingly important role in planning and community development projects. Funding from grants can advance important community initiatives that might not otherwise be achieved.

To augment limited budgets, a growing number of planning departments are finding themselves seeking grants. In larger communities grant writing may be a formal staff responsibility. Smaller communities may look to planning commissioners and others to assist with grant preparation.

The grant industry is vast and "giving" can take a variety of forms, including monetary funding, land grants, and in-kind donations of equipment or technical expertise.

However, today's funders, whether government agencies, private foundations, or local corporations, receive more requests than ever before. Competition to obtain funding is high, but creating a winning proposal is far from impossible even for the novice grant-writer.

The Grant Process

The grant process begins with identifying and prioritizing a project. Grant proposals should reflect regional or local planning priorities, and support identified planning goals and objectives. Funders want to see this connection in project proposals. Grant proposals are often unsuccessful when they are developed primarily to meet donor interests and requirements (i.e., just because there's a pot of money available).

GRANT PROPOSALS SHOULD REFLECT REGIONAL OR LOCAL PLANNING PRIORITIES, AND SUPPORT IDENTIFIED PLANNING GOALS AND OBJECTIVES. FUNDERS WANT TO SEE THIS CONNECTION IN PROJECT PROPOSALS.

Grant proposals reflecting "partnerships" with citizens groups, non-profit organizations, local businesses, and other agencies should not be underrated. Funders often look for proposals that take a collaborative approach, and show community-wide benefits that can be linked to other efforts. Funders want the most for their money, so emphasis on weaving together concurrent programs or studies, even of other organizations, is strategically important. By making the grant process inclusive, the merits of the proposal will be strengthened.

The (Hidden) Costs of Grants

The decision to pursue a grant should begin with an evaluation of not just the time and effort needed to prepare the proposal, but also what it will take to implement the project, and report back to the funding agency.

Partnership grants may require additional time during the proposal development process. During this process, a designated point-person should facilitate meetings and be in charge of writing and circulating the draft proposal.

It is always important to weigh whether or not the resulting funds, if awarded, are worth the time and energy required. Staff time does not end once the proposal is submitted. If grant funds are awarded, time and resources (beyond the grant award) will often be needed to support project implementation, monitoring, reporting, and evaluation. Poor reporting, often the result of staff time constraints, will likely impact future grant opportunities from that funding agency.

Especially relevant to new projects are the future implications of project funding once the start-up funds provided by the grant are exhausted.

A sampler of the thousands of grants awarded to communities across the country:

- The Northwestern Indiana Regional Planning Commission received a $165,000 grant award from the Joyce Foundation to study the region's future water supply, quality, and usage.
- The small city of Forsyth, Missouri (close to country music mecca, Branson) received $4,500 from the Orton Family Foundation for the production of a community video to help engage citizens in the city's comprehensive planning process.
- The City of Prescott, Arizona, with the help of two nonprofits (Prescott Alternative Transportation and the Open Space Alliance) received $1.2 million in federal Transportation Enhancement grants for bicycle and pedestrian projects.
- New Jersey's Office of Smart Growth has awarded more than $5 million in state planning grants to dozens of municipalities and counties, ranging from $112,000 to Hunterdon County for preparation of a Strategic Growth Management Plan, to $25,000 to Sea Bright Borough for a Vision Plan and Revitalization Study.
- The Miami Valley Regional Planning Commission in Ohio received a $131,000 EPA Watershed Initiative Grant to develop innovative solutions to address regulatory and water resource challenges in the Great Miami River Watershed.

Most grants are designed to provide the "seed money" to help get new projects or initiatives off the ground, rather than to support ongoing local programs.

All these considerations should be evaluated before any substantial time is put into preparing a proposal.

Grant Preparation

The first step to building a strong proposal is to research the target funding agency. Often funders showcase past grantees on their websites, making this a great way to learn about the types of programs and projects that capture the interest of the funder. Reading successful grant proposals will also help newcomers to the grant process become familiar with the lexicon of grants.

The most important aspect of writing a proposal is to remember the "3 C's" – be clear, be concrete, and be creative. Clearly presenting ideas is critical. Avoid long sentences. Also, steer clear of overly technical jargon and superfluous information that may lose the reviewer's attention. Be concrete in your presentation of need, goals, and the strategy to achieve the project's objectives. Finally, don't be afraid to be creative. This means thinking broadly when presenting the importance of both the direct and indirect impacts of your project.

Let the proposal communicate the enthusiasm of your agency and its partners in the project. Passion is contagious. You want the potential funder to share your enthusiasm for the project.

Odds & Ends

As you prepare a proposal, do not hesitate to call the contact person listed at the funding agency if questions arise. Clarifying a question prior to

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Components of a Grant Proposal

What follows is a description of the eight basic components of most grant proposals, followed by corresponding excerpts (in bold type) from an actual "Safe Routes to Schools" grant proposal which was funded by the Virginia Department of Motor Vehicles. While funders may have a required format for their grant application, most applications contain similar components.

1. Project Summary:

The summary should be no longer than two or three paragraphs, presented either as part of a cover letter or at the beginning of the proposal.

It is often easier to write the summary last, after the other proposal components are written. But bear in mind that the summary is the critical first impression grant reviewers will have of your proposal. As a result, this is usually the single most important part of the proposal. Indeed, in situations where many grant proposals have been submitted, the summary may be the only part that is carefully read before a reviewer makes a determination on whether to read through the rest of the proposal.

The project summary should include all key points of the project, and communicate objectives and expected outcomes.

In the 2002-2003 school year the Alliance for Community Choice in Transportation (ACCT) will pilot a Safe Routes to School program in the City of Charlottesville increasing the number of children walking and bicycling to school. ACCT will coordinate with educators, students, parents, health professionals, planning staff, neighborhood associations, PTOs and bicycle and pedestrian advocates to initiate a safety and awareness campaign for elementary school students. ACCT will work with students and parents to map safe routes to school, identify route safety improvement needs and produce and distribute educational materials and resources to students and their parents.

ACCT will accompany the distribution of these educational materials and resources with teacher-training, classroom-based educational sessions and school-wide events with emphasis on involving surrounding school neighborhoods. In an effort to ensure the overall success of the program, ACCT has built alliances with key agencies and organizations that will, in various capacities, participate in aspects of the program. The ACCT pilot program is developed from best practices already demonstrated in communities around the country such as Marin County, California and Cambridge, Massachusetts.

2. Introduction of the Applicant Agency:

This is the opportunity to present your agency as a credible applicant. Most proposals require a description of the agency including its mission, current programs, and past successes. Include brief biographies of board / commission members and key staff members. If you are writing a partnership grant, identify the lead agency and include information about your partnering agencies.

As a local nonprofit organization, ACCT has pioneered important on-the-ground visible programs to promote transportation choices including producing and distributing the area's first Regional Mobility Map, developing a regional scorecard tool to assist citizens and neighborhoods in evaluating the impact of proposed transportation projects and coordinating an Active Living marketing program.

ACCT has developed partnerships with broad sectors of the Charlottesville/ Albemarle community, including working closely with local elected officials, the state and local health departments, University of Virginia, regional and city planning staff as well as a multitude of grassroots groups and local organizations.

ACCT is proud of the partnerships it has created to bring successful programs to the greater Charlottesville community. With a strong and committed volunteer board and citizen-base ACCT has been able to garner significant momentum to address issues of transportation choice in the region.

3. Needs Statement and Proposal Narrative:

The needs statement should be clear and concise, identifying the purpose for the proposal and the nature of the problem (with supporting evidence). The proposal narrative should note current efforts, if any, addressing the need, and identify who will benefit from the project and how. Emphasis should be on clearly presenting the problem with supporting data.

The number of children walking or bicycling to school has diminished dramatically to a national record low of 17 percent compared to 72 percent thirty years ago (2003, Surface Transportation Policy Project). Locally, in the city of Charlottesville that percentage has fallen even lower to an estimated 11 percent, yet almost half of

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Preparing Successful Grant Proposals...

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submission is critical, and most funding agencies will be happy to answer.

Before you submit the proposal allow sufficient time for a review by several colleagues who (preferably) have not been involved with the proposal. What you want is critical feedback that will further strengthen the proposal. If you are partnering or cooperating with other agencies or groups, also allow time to circulate the proposal for their feedback.

Once the proposal has been sent, follow-up to confirm its receipt. Many funders now have online application processes, which will automatically provide confirmation that the proposal was received. If you are emailing or faxing a proposal remember to also send a hard copy via registered mail.

If Your Grant is Funded

As soon as your proposal has been chosen for a grant award, send a thank you note to the contact person. Building a relationship with the funding agency will help ensure that your project is supported if there is ever a problem with its implementation. A relationship with the funder will also go a long way if a change of course is needed. Finally, having a good relationship will allow for your agency and project to be remembered should you ever reapply for funding.

If Your Grant is NOT Funded

If you submit a proposal that is not funded, do not consider this the end of the road for the project, or with the funding agency. Instead, use the opportunity to contact the funding agency to review the proposal's strengths and weaknesses.

Roxbury, New Jersey, planning board member Lisa Voyce notes how her township turned an unsuccessful grant submission for a smart growth build-out analysis into a successful application the next time around. "We did the right thing when we were not funded. We asked the funding agency why and made the necessary changes to address their concerns while keeping to our needs and agenda in our second submission to them. Talking to them also let them know how serious we were about the project and needing the funding."

Components of a Grant Proposal...

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Charlottesville's school children live within one mile of their neighborhood school (2003 Greenbrier Parent Survey).

Most children have never been exposed to the necessary pedestrian and bicycle safety training that would enable them to walk safely on our streets. Instead, children remain vulnerable on our roads and are now considered by the Virginia Department of Health to be one of the highest at-risk groups for pedestrian and bicycle related injury and death.

4. Project Objectives:

An outline of project objectives as a bulleted list will clearly delineate the proposal's goals. Project objectives are all of the specific activities of the proposed project. The objectives will form the basis of the evaluation process once the project is funded, so make sure they are realistic.

Excerpts from Project Objectives:

- **Objective 1: Initiate take-home parent surveys.**
- **Objective 2: Provide curriculum materials and assistance for in-classroom pedestrian and bicycle educational sessions for students, designed to meet learning standards.**
- **Objective 3: Map Safe Routes to School with students and families, including the distribution of these maps.**

5. Measurable Outcomes:

Identify measurable outcomes for each objective. Outcomes should be presented as performance indicators. Each project objective may have more than one identified outcome.

For Objective 1 (relates to point 4. Project Objectives):

- **Production and distribution of 350 parent surveys based on the NHTSA model: estimated response rate of 35 percent.**
- **Identification of current school commute patterns as well as existing challenges and obstacles to safe bicycle and walking to school.**

For Objective 2:

- **In-classroom lessons to approximately 600 students: increase basic pedestrian and bicycle safety awareness from 50 to 600**
- **Training for 6 physical education teachers educators and staff on bicycle and pedestrian safety units: increase trained PE teachers from 1 to 6.**

For Objective 3:

- **Identification of 50 walk and bike to school routes currently used by students, including evaluation and identification of the safest existing routes.**
- **Production of 600 Safe Routes to School maps to be sent home with all school children**

6. Monitoring and Evaluation:

Presenting a credible and clear approach to monitoring and evaluation is critical.

Project evaluation consists of reporting on how well the project satisfied the desired objectives, and whether or not the proposed outcomes were met.

Process evaluation addresses how the project was conducted in terms of the proposed implementation strategy.

Ongoing monitoring and evaluation throughout the project will ensure that adjustments and changes are made if the project is not satisfying its objectives.

Evaluation measures related to first objective:

- **Collection of school specific data: i.e. location of homes, walkability checklist of neighborhood, demographics, traffic counts, # of walkers, # of bicyclists, # of bused children.**
- **Student surveys (at beginning, middle and end of program).**
- **Parent surveys (at beginning of program).**

Note: the process evaluation measures for this grant consisted of measuring the level of involvement of partners in the project and the organization's ability to maintain those partnerships and bring on new partners to fill existing gaps in areas of service and expertise.

7. Budget:

A budget should clearly present line items and projected costs. A well-prepared budget will be consistent with the proposal narrative and justify all related expenses.

While some grants do not require match funding, your proposal will be enhanced if you can show some matching/community funding, as this is another way of demon-

Summing Up:

Whether you are preparing to write your first or one hundred-and-first proposal, developing a grant can have payoffs that extend far beyond securing money. The process of researching and writing a grant proposal itself can help build long-lasting partnerships within your agency and community.

Preparing a winning proposal is a process that requires the "3 C's": a clear concept, a concrete strategy, and creative goals. Making links between the project and other efforts in your organization and the community is critical to strengthening the grant proposal.

Successful proposal writing takes practice and refinement. In the end, regardless of whether or not a project is funded, completing a proposal you are proud of should be both personally and professionally satisfying. Dream, research, network, organize ideas, believe in your goals – and start writing! ◆

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strating to the funder a high level of support for the project. Depending on the funding agency, match funding can take the form of a monetary match, volunteer hours, or an in-kind donation. The 2004 national volunteer rate is $17.19 / hour, which can be translated into a cumulative dollar figure.[1]

It is also helpful to include information on how the project will be funded long-term beyond the grant period. There are two reasons for including this: (1) to demonstrate to the funder that there is a long-term commitment to the project (this also affirms the importance of the project to the community), and (2) to commit your own agency to ongoing support for the project after the grant funding is exhausted. (This relates to my earlier point about carefully weighing whether the grant is worth pursuing).

Two of the line items from the Safe Routes to School grant:

1. Production, distribution and analysis of parent surveys, student "show-of-hands" surveys and walkability checklists.

$1750 Federal funding,
$1000 Community funding

2. Mapping of existing Safe Routes to School with current walkers, including map production of results.

$3500 Federal funding,
$750 Community funding.

ACCT will utilize its volunteer base for involvement in the Safe Routes to School program and will engage key community agencies and local groups in the program to increase the sustainability of the program beyond the grant period. In addition, ACCT will work with schools to identify potential funding sources for infrastructure improvement needs as identified through the program.

8. Attachments:

Include as attachments several letters of support. Be strategic in the selection of who is solicited for a letter of support. Identify specific individuals, public officials, academic institutions, and community organizations, and determine which would provide the most compelling demonstration of support.

Give individuals plenty of time to write the letter and return it to you. To avoid scrambling at the last minute to collect letters, give them a deadline that is at least a week before your proposal's due date. To ensure that the letters cover necessary areas, it is immensely helpful (and often appreciated) to provide a list of key points to make.

The Safe Routes to School Grant included letters of support from a City Council member; an elementary school principal; a parent; and the two partnering agencies.

1 Statistics on the average dollar value of volunteer time are available at:<www.independentsector.org/programs/research/volunteer_time.html>

Resources

For some planning commissions and city departments, grant writing has become a key staff role. For example, the Department of Development Services in the City of Bradenton, Florida (population 50,000) has a grants coordinator who meets with department representatives to discuss needs and news of upcoming grant opportunities. The coordinator determines which new grants are most relevant to the needs of the city and provides assistance with the applications. Smaller communities may not have staff time to dedicate to grants research and writing. Assistance in developing grant proposals can come from a number of sources, including volunteers and independent consultants.

Don't forget to look right in your own backyard for potential funders! In many places community foundations or local corporations can be important partners in either providing funding for specific planning related activities (such as public education programs) or helping secure grants from other sources. For example, in the small town of Morris, southwest of Chicago, the Morris Community Foundation has supported efforts to define a community vision by sponsoring forums on planning and growth topics, bringing in speakers and panelists.

Specific information on state grant opportunities can be searched through state government home pages online. Local offices of a state agency can also provide helpful advice when submitting a grant to that agency.

Other useful resources on grant opportunities include:

- *The Foundation Directory,* a complete directory of national, state and local private foundations. Can be found in the reference section of most local libraries.
- <www.grants.gov> to search a comprehensive collection of federal grant opportunities.
- <http://fconline.fdncenter.org> to search a comprehensive collection of foundation grant opportunities (this site requires a monthly fee to search funders).