The first section of this chapter traces the historical evolution of land use zoning from its foundations under common law to the development of present-day discretionary techniques. The second section of this chapter describes the movement toward aesthetically defensible zoning. The third section discusses reasonable tests; and the final section is a case study involving aesthetic analysis and its integration with other resource values for land use planning and management (see Fig. 5.1).

TRADITIONAL METHODS OF LAND USE CONTROL

Common Law

Land use zoning in the United States has its foundation in English common law. These zoning laws placed restrictions on a person’s use of land for the benefit of surrounding landowners. The two concepts closely related to land use zoning are trespass and nuisance. Trespass is defined as “wrongful, physical invasion of the property of another.” The act of entering or remaining upon the land in possession of another without authority to do so from the occupant (Gibson, Karp, and Klyman 1992, p. 434). Nuisance is an unreasonable interference by one party with another’s enjoyment of his or her land (Gibson, Karp, and Klyman 1992, p. 433). Nuisance does not require a physical invasion of the complainant’s land. Noise, dust, vibration, and odors are among the many items covered under this law.

These zoning laws gave a private owner some control over an adjoining owner’s land. However, land use control by this method had to be dealt with on a case-by-case basis. In most states, an injunction was granted only after balancing the equities between the parties and determining if the benefit of the injunction outweighs the ensuing detriment to the perpetrator. As a result of the balancing process, injunctions are not readily available to small landholders plagued by nuisances from larger landholders, such as polluting industries and noisy manufacturing facilities (Gibson, Karp, and Klyman 1983, p. 237).

Property Rights and Responsibilities

Almost from the beginning of U.S. history inception, landowners owed no duty to anyone; they had only to refrain from acts on the property that would significantly hinder the use of other landowners. Once the property was purchased, the buyer owed no additional duty to the seller or any other party (Gibson, Karp, and Klyman 1992, pp. 433–34). At the turn of the twentieth century, the traditional concept of unrestricted use of one’s own land came under severe challenge due to the deplorable conditions developing in many cities. Serious health and safety problems began to arise because of unrestricted land development in urban areas. In the first half of the nineteenth century, almost no government action had been taken to combat these horrible housing and living conditions, either through control or redirection of private development. Court injunctions were occasionally issued against specific establishments; however, these were few and far between. Around the turn of the century, the combined mass migration to this country along with weak municipal au-
authorities of new state-centered political systems, and an antiurban bias of an agrarian society, caused American cities to become congested, polluted centers of disease and decay (Arnold 1979, p. 27).

City planners became increasingly aware that public restraint on land development was necessary since common law solutions were inadequate to meet the rapid growth and the problems of American cities (Anderson 1984, p. 14). The first step toward municipal prevention under controlled growth came with the idea of planning for community development. City planning, although hardly a new concept, had been virtually disregarded in U.S. cities after the Founding Fathers had laid out the original patterns of development.

Planning Boards

The first official, local, and permanent town planning board in the United States was created in 1907 by the Connecticut legislature, called the Hartford Commission. Similar boards were created in Milwaukee in 1908 and in Chicago, Detroit, and Baltimore in 1909 (Arnold 1979, p. 32). The early planning boards usually consisted of municipal officials, citizen appointees, businesspeople, bankers, and a large contingent of architects and landscape architects. These boards had little funding, minimal authority, and no clear understanding as to their purpose or direction (Arnold 1979, p. 33). However, they started a trend toward city planning, and by the early 1920s nearly all municipalities engaged in some form of planning for future development (Anderson 1984, p. 13).

Planning could range from a study of the parking needs of a community to an analysis of proposed school sites. However, the most important type of planning came with the concept of the comprehensive or master land use plan.¹ This type of planning laid the foundation for support of land use zoning in the United

¹A comprehensive plan is a document or a series of documents prepared by a planning commission or department setting forth policies for the future of a community. It is normally the result of considerable study and analysis of existing physical, economic, and social conditions, and a projection of future conditions (Meshenberg, 1976 PAS Report no. 322, p.10).
States. The development of the community plan in and of itself did little to correct the conditions of American cities. In fact, the comprehensive plan often conflicted with the self-interest of local landholders. This being the case, it was unrealistic to expect such owners to refrain from developing land use inconsistent with the plan, if such conduct were not prohibited by law.

As stated previously, the concept of nuisance in common law offered little help in restricting overall land use development. Control over development was strictly dependent on private initiative. Restrictions imposed were scattered and unrelated. Consequently, resolutions to land use conflicts often came after the fact through litigation between two adjacent landowners. This form of regulation did little to enforce and direct growth prior to construction, which is best based on a community’s comprehensive plan.

Other techniques for control over land development were also explored. Eminent domain failed as an important control technique because it was time-consuming, expensive, and presented the difficulty of determining fair-market value. Official maps gained some popularity for fixing the location of streets, parks, public buildings, and other essential community facilities. Most municipalities also adopted building codes and subdivision regulations, based on state standards, to protect the community from ill-designed and poorly serviced subdivisions and other large-scale developments. None of these techniques seemed adequate, however, for controlling all land use development in a community. The solution seemed to be in a broader use of the police power.

THE POLICE POWER

The police power was employed successfully to exclude noxious uses from certain neighborhoods with positive results. These results seemed to indicate that a broader use of this power could be made to achieve the goals of an entire development plan for a community (Anderson 1984, p. 15). The use of the police power proved less expensive than eminent domain. The landowner absorbed the loss caused by restrictions placed upon that particular parcel of land in the same manner that all persons are required to absorb losses caused by limitations imposed by proper police regulations.

Early ordinances usually dealt with issues that could be directly linked to health and safety. Building codes are examples of health and safety regulations within the purview of the police power. Fire laws imposed minimum restrictions favoring fire-resistant materials as well as requirements for ingress and egress. In many of the cases upholding these restrictions, the cost to the landowner was high enough to destroy the “highest and best use” interest of the owner (Anderson 1984, p. 16). (This should not be confused with the taking of all possible land uses; see “highest and best use” and “taking” below.)

Early ordinances that excluded certain uses from designated residential or commercial areas were not as

---

^Eminent domain is the legal right of the government to acquire or “take” private property for public use or public purpose upon paying just compensation to the owner. While originally used only when land was to be kept in public ownership, that is, for highways, public buildings, or parks, property has been condemned under eminent domain powers for private use in the public interest, such as for urban renewal (Meshenberg, 1976 PAS Report no. 322, p. 14).

^Official maps are legal documents adopted by the governing body of a community, that pinpoint the location of future streets and sites for other anticipated public facilities. It allows land to be reserved for a limited time, giving the community a chance to acquire the land before it becomes developed. State enabling legislation typically prohibits further private development in areas currently undeveloped but designated on an official map for future use.

^Subdivision regulations are local ordinances that regulate the conversion of raw land into building lots for residential or other purposes. The regulations establish requirements for streets, utilities, site design, and procedures for dedicating land for open space or other public purposes to the local government, or fees in lieu of dedication, and prescribe procedures for plan review and payment of fees (Meshenberg, 1976 PAS Report no. 322, p. 33).

^Highest and best use is the use of a property that will bring its owner the greatest profit if offered for sale. In theory, the economics of the real estate market establishes a maximum value for each parcel of land at any given time. Except in developed areas or along transportation corridors where there is pressure to develop, this “highest and best use” is likely to be residential or agricultural. Zoning, by placing each property in a particular district, may interfere with market operations and raise or lower the property value.

^“Taking” is the appropriation by government of private land for which compensation must be paid. Under the U.S. Constitution, property cannot be condemned through eminent domain for public use or purpose without just compensation. The “taking” issue concerns use of the police power to regulate land through zoning controls. When zoning controls diminish the value of property considerably, then a form of inverse condemnation occurs and a fine line is drawn between regulation and illegal “taking without just compensation.” From Meshenberg 1976 19, pp. 18, 34.
obviously tied to the police power but were still demonstrably within its power. Cases that involved exclusion of land uses within previously established residential or commercial districts were upheld if it could be shown that a land use restriction was reasonably related to public health or safety. These examples indicate that the police power was used as a basis for supporting legislative restrictions of land use before comprehensive zoning came on the scene.

From Police Power in General to Comprehensive Zoning

The most significant contribution of this period toward developing land use controls were the legal precedents set for the use of municipal zoning regulations. Land use zoning developed in West Coast communities, with the first codes legislatively enacted in the 1910s in San Francisco, and also in New York City. However, zoning districts according to land use classifications were seldom used for implementing a community’s entire comprehensive plan because it was not clear where the courts would stand on the degree of restriction involved. Some piecemeal zoning was attempted prior to the first comprehensive zoning regulations; however, these ordinances were often disapproved by the courts due to their discriminatory nature (Anderson 1984, p. 59). The codes restricted some lands; therefore, those owners were unfairly discriminated against relative to all other unregulated landowners within a municipality. This is a violation of the Fourteenth Amendment’s Equal Protection Clause.

These issues began to be resolved in 1915 when zoning met its first test in a case of municipal control over private land in the Supreme Court case Hadacheck v. Sebastian. Up to this time only a few communities had enacted land use control ordinances due to the uncertainty of the law. The greatest obstacle was the fear that the courts might find restrictions on more profitable uses to be an unconstitutional taking of property without just compensation (Anderson 1984, p. 12). In deciding this case, the Court agreed with the California Supreme Court that “regulation was not precluded by the fact . . . the value of investments made . . . prior to any legislative action will be greatly diminished” (Arnold 1979, p. 35).

Municipalities began to prepare land use control programs based on the premise that the decision in Hadacheck v. Sebastian meant the U.S. Supreme Court had given approval to land use zoning. Prior to the Hadacheck case, a New York City commission had created a scheme for the effective control of future urban development of the city (1913). This commission came up with the concept of a comprehensive zoning code to control all types of land use in the city. This code contained land use controls, controls on building heights, and controls of building setbacks and yards in an integrated ordinance. By this time all three of these elements had constitutional approval, explicitly or implied, of the Supreme Court (height control in Welch v. Swasey; building setback control in Euclidian v. City of Richmond; and land use control in Hadacheck v. Sebastian) (Arnold 1979, p. 36). Assuming the Supreme Court would present no hurdle, replicas of the New York City ordinance were rapidly adopted in many other large municipalities across the nation.

During the early 1920s the U.S. Department of Commerce encouraged the spread of this new comprehensive zoning by publishing a model state enabling act. By 1926, when the first zoning ordinance encouraged by the enabling act reached the U.S. Supreme Court, zoning was to be found not only in large cities but also in many small communities (Anderson 1984, p. 36). The New York City zoning code was far from a good model to follow for the development of a zoning code. First, the code tended to freeze current land uses rather than provide for beneficial change. Also, the code was not related to any comprehensive plan for community development. In fact, the code was substituted for the plan causing further confusion over the terms “comprehensive plan” and “comprehensive zoning ordinance.” The code was generally protective of current land interests and was unrelated to any reasonable forecast or projections of future land use demand (Arnold 1979, p. 36). The code was generally a list of allowable land uses keyed to a zoning map whereas a plan included the rationale of why specific uses were allowed or not allowed for specific land areas/zones.

Comprehensive land use zoning was tested in the 1926 case Euclid v. Ambler Realty Company. In this case the U.S. Supreme Court held that “a municipal ordinance which divided the whole territory of the municipality into districts and imposed land use restrictions

---

929 U.S. 394 (1915).
9Arnold 1979, p. 36. It should be noted that this first ordinance was established by entrepreneurial factions in the city with the intent of removing the garment district business from the Fifth Avenue district where rich shoppers did not like having to mingle with swarms of garment workers during lunch hours. (See Fitch, Robert, 1977, in Rodger Alcalay and David Mermelstein, eds., The Fiscal Crisis of American Cities, Vintage, pp. 246–284.)
9The present-day definition of comprehensive zoning is far removed from this early unrestricted and undefined interpretation of what constituted such an ordinance.
9272 U.S. 365 (1926).
on the basis of district classifications was within the police power of the municipal corporation."10 The Supreme Court based its decision on the police power's public health, safety, and welfare language, stating that the regulations would improve fire protection, reduce street congestion, decrease noise, which produces or intensifies nervous disorders, and preserve a more favorable environment for raising children (Anderson 1984, p. 64).

The *Euclid* case established the constitutionality of comprehensive zoning. It determined that the following features were within the police power:

1. The community could be divided into districts.
2. Restrictions upon the use of private land in such districts were acceptable provided such use was consistent for all similarly designated districts.
3. Exclusion of certain industrial, commercial, and nonresidential uses from certain residential districts was within this authority.

Therefore, this case established the basic components of an orthodox zoning ordinance and more importantly swayed judicial support nationally in favor of this kind of land use control. Ultimately, the courts of all the states approved comprehensive zoning (Anderson 1984, p. 64).

In deciding the *Euclid* case, the Supreme Court stated that its holding was confined to the case at hand. The Court specifically acknowledged that an ordinance might be valid on its face but unconstitutional in its specific application to a parcel of land (Anderson 1984, p. 65). The *Euclid* decision therefore set the stage for the case-by-case system of resolving zoning litigation. Constitutional litigation in the field of zoning law since *Euclid* has consisted mainly of two kinds of cases: (1) those that closely examine the ordinance for constitutional defects, and (2) those that challenge the constitutionality of an ordinance as it applies to a particular piece of property (Anderson 1984, p. 65). The *Euclid* case established that zoning is based on local legislative authority and is thus a legislative act, presumed to be constitutional and valid. This presumption places upon anyone challenging a zoning ordinance the burden of proving that the ordinance is unreasonable or arbitrary (Anderson 1984, p. 70).

**Comprehensive Zoning and Comprehensive Planning**

Establishing the constitutionality of zoning ordinances was a major step in the evolution of land use controls. However, it was not until the 1970s that a clearer understanding of the distinction between comprehensive zoning and comprehensive planning and the relationship between the two evolved into a usable form. Since the 1920s courts have rendered opinions on zoning matters without requiring that a city have a plan or that zoning be consistent with a plan, should there be one. This is not totally surprising given the rather static nature of early Euclidian zoning.11

Even though the standard state zoning enabling act, which most municipalities copied in setting up zoning legislation, specifically states that zoning “shall be in accordance with a comprehensive plan,” few mandated such plans (Arnold 1979, p. 170). In the early days of zoning it was assumed that a city would prepare a zoning map that would identify the basic zoning areas, such as residential, commercial, and industrial. Property owners needed only to look at the map and the zoning text to determine what they could and could not do with their property. The zoning map and text became the plan, thus creating the confusion between a comprehensive land use plan and a comprehensive zoning ordinance. This issue was further complicated by the courts. The zoning map and text became the plan and the courts looked no further.

With the advent of flexible zoning techniques12 and growth management programs, the courts have increasingly turned away from accepting the zoning ordinance as evidence of a community’s needs without first referring to the city’s comprehensive plan (Arnold 1979, p. 170).

Flexible zoning codes were established when cities recognized that it was nearly impossible to predict future land use needs. No matter how carefully a zoning ordinance was prepared, something unanticipated would happen to make the code obsolete. Flexible techniques also increased a community’s negotiating power, which often led to the exclusion of land uses unwanted by the community. This system suited the community’s desire to control its own destiny. However, the courts began to question the fundamental fairness of the system. New flexibility in zoning changed its traditional you-can-do-anything-you-want-with-your

---

10Id.
11"Euclidian zoning" is a division of the territory of a municipality into districts and an assignment of particular uses to each district. The term was derived from the zoning ordinance of the Village of Euclid, Ohio, which was reviewed and approved by the U.S. Supreme Court in *Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926).
12Flexible zoning means new techniques such as planned unit development, performance standards, and overlay zoning.
property image to one of indicating a procedure one had
to follow to find out what might be done on one's prop-
erty. This system could be highly abused by local com-
unities, and in fact was (Arnold 1979, p. 170).

Growth management programs added a new twist to
traditional zoning, that of timing. Growth has its nega-
tive consequences and some cities adopted no-growth
policies. Again the courts questioned these techniques
and required additional planning backup documentation
to support local zoning ordinances. The courts indi-
cated that if a city wanted to control the rate of
growth, it would have to show some evidence of a coor-
dinated approach in order to avoid charges of arbitrary
and capricious enforcement. This indicates that the
courts wish to see some form of comprehensive land use
plan (Arnold 1979, p. 170).

AESTHETICS, ZONING, AND LAND USE
CONTROL HISTORY

The earliest problem facing the courts with respect to
aesthetic considerations in zoning was whether the
benefit to the public, traditionally thought of in terms
of need but never luxury, outweighed the damages to in-
dividual use of property. A historical view of some of
the zoning cases follows (a more encompassing and
current overview is found in Chapter 3).

Early Period: Traditional Disregard

The prevailing judicial attitude toward aesthetic con-
siderations in zoning from 1900 to 1930 was basically
twofold:

1. The courts refused to uphold zoning ordinances that
were either solely, primarily, or even partially moti-
vated by aesthetic considerations.
2. Even when aesthetics was a reasonably obvious and
legitimate factor in creating the ordinance, the
court — while simply alluding to or completely igno-
ring the aesthetic viewpoint — would not neces-
sarily invalidate the regulation so long as there was
some other independent grounds to warrant em-
ployment of the police power (Pearlstein 1972).

Guberman (1976) illustrates the court's strong resis-
tance to ordinances motivated largely by aes-
thetic considerations. The New Jersey Supreme
Court, in 1905, suggested that a man may not be de-
prived of his property because his tastes are not
those of his neighbors. The court also stated: "Aes-
thetic considerations are a matter of luxury and in-
dulgence rather than necessity, and it is necessity
alone which justifies the exercise of the police power
to take property without compensation" (Guber-
man 1976).

The primary obstacles to aesthetics considerations
in early zoning cases were:

1. Aesthetic issues were considered a luxury to please a
few rather than a necessity that alone justifies the
exercise of the police power.
2. Aesthetics was also considered subjective in nature,
having no intelligent or consistent standard and
therefore no standing as a factor under the general
welfare (Masotti and Selfon 1969).
3. The potential discriminatory application of aes-
thetics-based ordinance (based on the above) was
considered reason for dismissal by the courts. Be-
cause of vagueness, luxury, and inconsistent stan-
dards, it was feared by the courts and regulators to
lead to widespread abuse (Wilcox 1970).

Aesthetics was therefore recognized as such a per-
sonal and controversial value as to be unlegislatable.
The view was that it would be impossible to draw up a
statute to reflect the desires of everyone. Primarily for
these reasons, early case law reacted negatively to zon-
ing restrictions based on aesthetics, or even to the mere
inclusion of aesthetics in the reasoning.

A New Trend Toward Valid Consideration

A new trend in judicial attitudes toward aesthetic con-
siderations in zoning developed at a time when the
United States was starting to experience the growth of
vast urban communities, with their attendant eco-

donic and social repercussions. Because of the lack of
aesthetic consideration given in early 1900s zoning,
various kinds of developments were intermixed, in-
cluding retail stores and gasoline stations in residential
areas. Ordinances that tried to prevent such inhar-
monious uses within such districts were considered to
satisfy the subjective desires of those individuals af-
fected by the aesthetically offensive use. The resulting
depreciation of property value was viewed merely as a
consequence of a lawful use of one's property.

Increased growth also brought increased earnings
and spending, and values changed correspondingly
from a demand for necessities to a demand for luxuries.
Persons affected by zoning soon realized the value of
not having a factory next door or their view of a lake
blocked by a ten-story building. Communities devel-
oped pride in aesthetic qualities and wished to preserve
their integrity from unsightly development. In the case
of aesthetic zoning, as the public pressure built, the
courts were forced to review approaches addressing in-
dividual interests (Masotti and Selfon 1969). Though
the courts realized the need to reshape land use con-
trols, they also felt the need to move slowly when limit-
ing the common law rights inherent in private property
(Rose and Yim 1962).
Aesthetics as "Auxiliary" Consideration

As judicial attitudes began to change, aesthetic consideration began to take on an auxiliary position in zoning ordinances. As an auxiliary factor, aesthetics had to rely on some other dominant consideration with which it could form a partnership to enhance the "general welfare" term of the police power. Aesthetics, in most cases, was best suited for association with property value (Pearlstein 1972).

In Welch v. Swanson, a case concerning height limitations on buildings to be erected in Boston (Figure 5.2), the court stated:

The inhabitants of a city or town cannot be compelled to give up rights in property, or to pay taxes for purely aesthetic objects; but if the primary and substantive purpose of the legislation is such as justifies the act, considerations of taste and beauty may enter in, as auxiliary.13

This case gave aesthetics the initial push that helped to generate aesthetic objectives in zoning regulation.

Another case at the time in which aesthetics was delegated a minor supportive position involved setback lines. In 1920, the Connecticut Supreme Court acknowledged the importance of aesthetics as an auxiliary factor. In addition to upholding traditional aims of promoting public health and safety, courts also commented that streets of reasonable width add to the value of land and beauty of the neighborhood (Pearlstein 1972).

In 1923, the Louisiana Supreme Court in Civello v. New Orleans (see Figure 5.3) expanded the auxiliary theory by broadening the term "general welfare" to include aesthetic considerations.

If the term "aesthetic considerations" is meant a regard merely for outward appearances, for good taste in the matter of beauty of the neighborhood itself we do not observe any substantial reason for saying such a consideration is not a matter of general welfare. The beauty of a fashionable residence neighborhood in a city is for the comfort and happiness in the neighborhood. It is therefore as much a matter of general welfare as in any other condition that fosters comfort or happiness and consequent values generally of the property in the neighborhood.14

The court also went on to include offensive sights within the more universally recognized nuisances of smell and noise.15

The court, in these cases, reasoned in contrast to earlier cases in which aesthetics was considered personal and inapplicable to a "general or public" interest, but rather the visual character of a neighborhood was a value to be protected and fostered. The courts found it necessary to link aesthetics and property value, because property value was more definitely associated with general welfare (Masotti and Selfon 1969). Agee (1965) suggests as a concept, it is less radical and more easily understood than aesthetics, and has the virtue of more accurate measurement by everyday standards of dollars and cents, not like the irrational value of an eyesore.

As a result of such decisions, as well as the Euclid decision of 1926, the next quarter of a century provided aesthetics as at least a relevant supporting factor status in zoning legislation.

Aesthetics as Economic Well-Being

Aesthetics has received acknowledgement beyond the auxiliary level when, as a proponent of the "general welfare," it is linked with economic well-being (Pearlstein 1972). The argument is that an area of a city or state needs to be aesthetically pleasing for mainte-
nance of economic well-being, since it is an extension of the concept of promoting the general welfare (Minano 1971). Aesthetics in this regard have played an important part in preserving historic sites and fostering tourism in certain states such as Florida, Louisiana, and New York (Masotti and Delfon 1969). The Florida courts have said that certain portions of the state have a particular monetary dependency on its tourist trade. Since tourist trade is enriched by aesthetic appeal (see Figure 5.3), such ordinances can be upheld (Masotti and Selfon 1969).

In one such Florida case, City of Miami Beach v. Ocean & Inland Company, the court sustained a zoning law that permitted only hotel apartment sites on an approach to Miami Beach:

In view of the nature of Miami Beach, it is not important to consider here in indispensability of the restrictions to the health, the safety, the morals of the community but only their necessity to the general welfare... The limitation of the use by the plaintiff of his property seem a fair, just and responsible contribution to the economic good, the prosperity, the welfare of the whole community and not so burdensome that it contravenes the organic inhibition against deprivation without due process.16

Thus the court sustained a zoning law based primarily upon aesthetics because it promoted the general prosperity of the community (Swietlik 1955). Most courts in these jurisdictions, while reluctant to uphold aesthetics solely as a basis for police power employment, did assert that aesthetics, when coupled with aspects of economic prosperity, consequently affect the “general welfare” of the community (Pearlstein 1972).

Aesthetics Within the Term “General Welfare”

In 1954, the Supreme Court case of Berman v. Parker17 helped give aesthetics a more legitimate consideration in legislative actions. The District of Columbia Redevelopment Act, ruled to be constitutional, provided for condemnation of private property to allow for the construction of better quality housing. The Court ruled

16City of Miami Beach v. Ocean & Inland Co., 141 Fla. 480, 3 So.2d. 364 (1941).
Palmer and Zube (1976), the judgments of landscape similarity made by these citizens are aggregated into a conceptual classification of the different landscape types in Dennis. Six distinct types are identified: (1) marsh and wooded landscapes; (2) beach and water landscapes; (3) suburban development; (4) developed open land; (5) commercial and municipal landscapes; and (6) high-density residential landscapes. A diagrammatic summary of perceived similarity among these types is shown in Figure 5.4. A description of the essential characteristics of each landscape type is obtained through a systematic content analysis of the words and phrases that the participants used to characterize their piles of similar landscapes.

Marsh and Wooded Landscapes

These are perceived to be the most “natural” scenes in Dennis. “They are the open spaces we want to protect and keep for birds and men alike.” Evoking a sense of “peacefulness” and “beauty,” this type is closely identified with the “Cape Cod landscape.” As illustrated in Figure 5.5, a wide variety of wetland types is represented, ranging from coastal marshes to shrub swamp. The identifying characteristic as perceived by the participants is the comparatively lush vegetation pattern, which varies from low-lying “marshland” to higher “woodlands.” Those wooded areas in the landscape sample are included in this type.

It is interesting to speculate that the more wooded scenes might have been placed in a class of their own if suitable photographic representations had been available. However, given the Cape’s gently undulating topography, it is nearly impossible to photograph the woods because of the trees in the way.

Beach and Water Landscapes

The interface between “beaches and sand dunes” and “saltwater” is the dominant conceptual characteristic of this type, as exemplified by Figure 5.6. Therefore, a tidal salt marsh is perceived as part of this class when the tide is in and as a marsh landscape when the tide is out.

These scenes are generally “unspoiled” and “void of human habitation”: Appropriate human presence is manifested through such recreational attractions as “swimming and fishing.” The participants in this survey are sensitive to the use of certain areas in this landscape type by “tourists,” while others are “for the year-round resident who wants to get away from the tourists.” These scenes are “attractive” in their more natural state but are beset by the pressures of “capitalistic endeavor,” which invariably creates a sense “that it is not very appealing to the eye.” This degradation through private exploitation becomes more significant because of the important role this landscape type plays in the local perception of the Cape’s regional identity.

Suburban Development

In describing suburban development, the roles played by the natural elements, the presence of water, or aspects of landform are rarely mentioned. These are “low-density residen-
that an exercise of eminent domain by the police power did not violate the Fifth Amendment prohibition against the taking of private property for public use without compensation. The Court said the taking was done in order to promote a more attractive community (Wilcox 1970).

The concept of the public welfare is broad and inclusive. . . . The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as clean. . . . If those who govern the District of Columbia decide that the Nation’s Capitol should be beautiful as well as sanitary, there is nothing in the Fifth Amendment that stands in the way.18

The effect of this case was significant with regard to expanding the scope of what is meant by the term “general welfare.” This case was also considered a strong argument for the value of aesthetics in zoning by specifically including aesthetic consideration in the much broadened concept of general welfare suggested by the court.

Still, state courts were hesitant to place more weight on aesthetics considerations and generally referred back to economic impacts of aesthetics as a detriment to property value rather than aesthetics as an idealistic goal of the community. For example, in Saveland Park Holding Corporation v. Wieland,19 the Wisconsin Supreme Court based their ruling on both aesthetics and a depreciation of property values, but admitted the two are inseparable and even identical. The courts concluded that under the public welfare concept, the consideration of aesthetics as an auxiliary standard was constitutional (Masotti and Selton 1969).

This case was soon followed by others which clearly stated that aesthetics was a proper element of the general welfare. For example, in Best v. Zoning Board,20 the issue involved the validity of an ordinance restricting development to only single family housing. The court stated: “Not only is the preservation of an attractive character of the community a proper element in the general welfare, but also the preservation of property value is a legitimate consideration.”21

Such cases helped settle the theory that aesthetics was within the meaning of the term “general welfare.” However, only a few decisions followed this lead, and it was not until a number of years later that the courts begin to omit the economic factor attached to an aesthetics standard and recognize the latter on its own merit (Minano 1971).

Aesthetics (Alone) Warrants Exercise of the Police Power

It was not until 1963 that the New York Supreme Court supported a theory that zoning for aesthetic considerations is a valid exercise of the police power. The case of People v. Stover22 involved a general ordinance prohibiting clotheslines in the front and side yards abutting a street, with a provision that in the case of unnecessary hardship, a permit could be applied for to circumvent the ordinance (Pearlstein 1972). The plaintiffs protesting the city’s high taxes began to hang old clothes and rags in their front yard. When they applied for a permit to maintain the lines, it was denied. The plaintiffs appealed, alleging the ordinance was unconstitutionally depriving them of their property without due process.

The court first addressed the allegation by arguing that the ordinance had the assigned purpose of providing clear visibility at streetcorners to reduce accidents, thereby promoting the public safety. It went on to further hold that

the ordinance may be sustained as an attempt to preserve the residential appearance of the city and its property value by banning, insofar as practical, unsightly clotheslines from yards abutting a public street. In other words, the statute, though based on what may be termed aesthetic considerations, prescribes conduct which offends sensibilities and tends to debase the community and reduce real estate value.23

The court went further than any previous one and analyzed the problem by restricting the use of land for aesthetics purposes (Pearlstein 1972). After reviewing the trends in aesthetic zoning up to that time, the court held that once aesthetics was considered a valid subject of legislative concern, it was justifiable that reasonable legislation designed to promote an aesthetics purpose was a valid exercise of the police power (Minano 1971).

(See Chapter 4 for an up-to-date state-by-state review of the trend to accept aesthetics alone as a valid basis for land use control through zoning.)

18Id. at 33.
21141 A.2d at 612.
23Id. at 738, 191 N.E.2d at 277.
The environmental or community planner can utilize his or her knowledge of the aesthetic contextual situation, flexibility of means, and planning sophistication to preserve neighborhood character and minimize exclusionary practices of zoning. To illustrate this planning approach, we will describe how a scenic resource inventory was incorporated into the land use planning of Dennis, Massachusetts. However, before presenting this case study, let us review some key concepts from Chapter 2.

AESTHETIC OR SCENIC INVENTORIES AND ANALYSIS

An inventory of scenic resources can be an important component of an overall environmental inventory. The results of a scenic inventory can be used in developing comprehensive plans, land use ordinances, and design guidelines; determining the potential visual impact of proposed development; educating community residents; deciding what properties to acquire or protect through easements; and determining locations of new developments, roads, trails, or utility lines. In this case, we are particularly interested in the application of the scenic inventory to the development of comprehensive plans and local land use control ordinances.

The scenic analysis approach chosen should depend largely on how the information will be used. If a zoning ordinance is going to be based in part on a survey of citizens’ preferences, for example, a statistically sound system of sampling public opinion is necessary. An inventory of scenic features should not be limited to what is “beautiful.” Scrappy hedgerows and a dilapidated store, while not scenic, may be prominent visual features that serve as major points to identify a community and should be preserved because of their cultural and social significance (Lynch 1960).

A good way to introduce the issue of visual quality in a community is to show photographs (both scenic and less so) to residents and ask them to discuss their impressions of the views, their opinions on what constitutes good design, and their feelings about what resources are important to protect (see Wilmott, Smardon, and McNeil 1983).

CITIZEN PREFERENCE SURVEYS

Appraisals using the opinions of citizens have the obvious advantage of reflecting a community’s values and attitudes. However, professional assistance is advisable, particularly if results of the survey will be used as the basis for an ordinance. Community volunteers can undertake much of the work. Discussion of the scenic qualities they appreciate in their community’s landscape gives citizens an opportunity to increase their environmental awareness.

There are many ways to solicit citizens’ opinions (see Smardon, Palmer, and Felleman 1986; Palmer 1983b). One method is for surveyors to take photographs of typical scenes throughout the community and ask citizens to rate the beauty of each scene on, say, a five-point scale or to rank the photographs in order of scenic preference. The results can be mapped. To ensure optimum objectivity, those conducting the survey should attempt to obtain photographs as uniform in quality and lighting conditions as possible. Obviously, how a picture is taken can have a major bearing on how a viewer ranks the quality of the scene it depicts.

Case Study: Dennis, Massachusetts, Visual Survey for Comprehensive Planning24

Introduction

Local citizens are left feeling helpless in the wake of unchecked growth. This sense of helplessness is particularly acute when there are trying to protect the visual resources to which they have intense emotional associations yet find difficult to describe systematically. This case study illustrates how a group of citizens from the town of Dennis on Cape Cod sought to inventory and evaluate their local visual resources. This effort was part of a larger resource analysis conducted by citizens of Dennis with technical assistance from the Massachusetts Natural Resource Planning Program administered by the Soil Conservation Service (Chandler 1976).25

---


25The data used in this case study were collected by members of the Dennis Comprehensive Planning Committee with technical assistance from Geoffrey Chandler as part of the Massachusetts Natural Resource Planning Program. This planning program of the Soil Conservation Service offers the methods and technical assistance for communities systematically to collect, evaluate, and utilize information concerning their natural resources.
The objectives of the visual resource survey were:

1. Involve a large number of people in the planning process and increase their awareness of the community's visual resources.
2. Find the community's special image of its land and preserve this image for future residents.
3. Determine which local landscapes are preferred by local citizens.
4. Provide communities with useful information on landscape quality for practical planning purposes (USDA SCS 1977).

To meet these objectives, two types of information concerning local perceptions of the Dennis landscape were collected. The first type is used to classify landscape views based on their perceived similarity; the second provides a rating of the scenic value of these same landscape views.

Procedure

Preparation for the visual resource inventory began in the spring of 1976 with a committee of concerned citizens. In order to develop a sample of landscape views, each member of the committee indicated, on a local street map, views that he or she considered representative of the range of views in Dennis. Each of these views was photographed in color using a 35-millimeter wide-angle lens. The 3-by-7-inch prints of these scenes were borderless with a matte finish and were mounted on thin cardboard. The committee then selected the 56 photographs that it felt most accurately portrayed the range of landscapes in Dennis.

The cooperation of a random sample of registered voters was then sought to evaluate the visual quality of these 56 landscape views. A total of 96 citizens contributed judgments of landscape quality by sorting the photographs according to one of the different sets of instructions. In the first set the participants were told:

Each of these photographs represents a landscape view found in Dennis. For the purposes of this study, the “landscape” may be thought of as all the various elements that you see in the photograph.

Please sort these photographs into piles containing other landscapes which you feel are similar. We request that each pile you form has three or more landscapes each. You may make as many piles as you like.

In addition, for each pile the participants were asked to “describe in a few words or phrases those characteristics that best represent the similarities of the landscapes in the group.”

The second set of instructions asked the participants to sort the 56 photographs into 7 piles according to the scenic value of the landscape in the photos. In pile #1, place 3 landscapes which you think have the highest scenic value. In pile #7, place 3 landscapes which you think have the lowest scenic value. From the remaining 50 landscapes place the 7 with the highest scenic value in pile #2, and 7 with the lowest scenic value in pile #6. From the remaining 36 landscapes, place the 11 with the highest scenic value in pile #3, and 11 with the lowest scenic value in pile #5. Place the remaining 14 landscapes in pile #4.

Each respondent was then randomly selected to answer one or two additional sets of questions investigating the different factors that contribute to the scenic value of the landscape. In one case they were instructed to:

describe in either a few words or phrases those factors which add the most to the scenic value of pile #1 . . . . Identify those factors which detract the most from the scenic value of pile #7 . . . .

Describe those factors which make the scenic value of pile #4 mediocre.

In the other case respondents were provided with a checklist of 56 factors that were thought to influence scenic value. The respondents were asked to

identify three landscape factors that add to the scenic value of each of the three photographs in pile #1 . . . . Next identify three landscape factors that detract from the scenic value of each of the three landscapes you placed in pile #7 . . . . Now take the first six photographs from pile #4 and for each of these landscapes identify three factors which add and detract from the scenic value of these landscapes.

The participants' recorded responses were later analyzed by a local citizens' committee and a technical assistant.

Results

While the citizens who participated in the visual resource survey were selected randomly from the current list of registered voters, it is not possible to test their representativeness of the total population of Dennis. The town has grown so fast in the last decade that local census data are outdated and current population characteristics are unknown. However, the participants do represent a full range of ages, occupations, sex, residential neighborhoods, and lengths of residence. In addition, there are no significant differences among the groups of participants who performed the three sorting tasks. Possibly the most important test of representativeness is that the townfolk seem to accept the validity of the results and are comfortable with its representation of their point of view.

Conceptual Classification of Landscapes

A total of 27 citizens sorted the landscape views according to their similarity. Using a clustering procedure developed by
Palmer and Zube (1976), the judgments of landscape similarity made by these citizens are aggregated into a conceptual classification of the different landscape types in Dennis. Six distinct types are identified: (1) marsh and wooded landscapes; (2) beach and water landscapes; (3) suburban development; (4) developed open land; (5) commercial and municipal landscapes; and (6) high-density residential landscapes. A diagrammatic summary of perceived similarity among these types is shown in Figure 5.4. A description of the essential characteristics of each landscape type is obtained through a systematic content analysis of the words and phrases that the participants used to characterize their piles of similar landscapes.

Marsh and Wooded Landscapes

These are perceived to be the most "natural" scenes in Dennis. "They are the open spaces we want to protect and keep for birds and men alike." Evoking a sense of "peacefulness" and "beauty," this type is closely identified with the "Cape Cod landscape." As illustrated in Figure 5.5, a wide variety of wetland types is represented, ranging from coastal marshes to shrub swamp. The identifying characteristic as perceived by the participants is the comparatively lush vegetation pattern, which varies from low-lying "marshland" to higher "woodlands." Those wooded areas in the landscape sample are included in this type.

It is interesting to speculate that the more wooded scenes might have been placed in a class of their own if suitable photographic representations had been available. However, given the Cape’s gently undulating topography, it is nearly impossible to photograph the woods because of the trees in the way.

Beach and Water Landscapes

The interface between "beaches and sand dunes" and "salt-water" is the dominant conceptual characteristic of this type, as exemplified by Figure 5.6. Therefore, a tidal salt marsh is perceived as part of this class when the tide is in and as a marsh landscape when the tide is out.

These scenes are generally "unspoiled" and "void of human habitation": Appropriate human presence is manifested through such recreational attractions as "swimming and fishing." The participants in this survey are sensitive to the use of certain areas in this landscape type by "tourists," while others are "for the year-round resident who wants to get away from the tourists." These scenes are "attractive" in their more natural state but are beset by the pressures of "capitalistic endeavor," which invariably creates a sense "that it is not very appealing to the eye." This degradation through private exploitation becomes more significant because of the important role this landscape type plays in the local perception of the Cape’s regional identity.

Suburban Development

In describing suburban development, the roles played by the natural elements, the presence of water, or aspects of landform are rarely mentioned. These are "low-density residen-
tial areas’ and “quiet country lanes” that pass “through the countryside without houses directly on the roads.” This is the “hometown Cape” in which the “locals” live. Participants frequently distinguish the more traditional, older developments from the newer, more modern forms within this type. For instance, in grouping photos one participant separates “single-family dwellings in developments” from “quiet country roads with vintage houses.” Figure 5.7 illustrates a residence and a highway that are both from this landscape type.

Developed Open Land

Developed open land is illustrated in a small group of scenes depicting open land associated with some form of development (Figure 5.8). Included with this group are a cemetery, a power-line right-of-way, a golf course, and a churchyard. Their distinguishing characteristic is that they are perceived as “developed areas that exhibit compatibility with the environment.” Participants commonly associate them with one of the other developed landscape types—sometimes with suburban development because they are “historic” and conceptually part of the “hometown Cape,” and other times with the commercial and municipal landscapes because of their “public service” character.

Commercial and Municipal Landscapes

Different types of nonresidential developed areas are gathered together in this conceptual class, which is illustrated in
Figure 5.8. Among the areas mentioned are a shopping center, school, industrial area, commercial establishment, police station, church, and various other service structures. As a class, descriptions of landform, vegetation, cover types, or water are totally absent. This is Dennis at its worst in the eyes of the local residents. One resident exclaims, "Horrid! They should be forced to restore and start over." However, most respondents seem less belligerent, and many are even resigned to the inevitability and probable growth of this kind of landscape. As one respondent notes, "These are the necessary evils of civilization." This congested and objectionable landscape is definitely not considered part of the regional image of Cape Cod and could be found in Anywhere USA.

High-Density Residential Landscapes

High-density residential landscapes, exemplified in Figure 5.10, are perceived as the places where the "off-Cape" population stays. Interestingly, they are not called "homes" but "rental units," a type of commercial venture. Termined "clap-traps" and "schlock residential" areas, they are a scenic blight in the eyes of the local residents. There is some resignation that they are "necessary," but there is also substantial concern that they are rapidly encroaching upon the most valuable areas of the Cape. One respondent observes acutely: "Here's some near epitome of the gross overpopulation of an area. Everyone wants a piece of beauty and bit by bit the beauty is removed." In this case, the beauty comes from the beach and water landscapes, which have special qualities that are conspicuously absent from the suburban landscapes where the respondents live.

Judgments of Scenic Value

Two groups of citizens, which were part of 95 local citizens, were asked to sort the landscape views according to scenic value: 37 were asked to use their own words or phrases to describe the qualities that added or detracted from the scenes; 32 were given a landscape-factor checklist as a means of providing similar information. The scenic resource value for a particular landscape view is the mean rating it received from the respondents. The scenic resource values for all landscape
views as judged by both groups are compared using t-tests. In only two instances are the judgments significantly different ($p < .05$). Therefore, the scenic resource values used below are calculated from the ratings by all 69 respondents.

A clear pattern emerges from the content analysis of the words and phrases respondents used to describe the factors that contribute to the landscape’s scenic value. The most scenic landscapes are overwhelmingly perceived as “natural” and even “wild” by some. The presence of water and the dominance of “green” vegetation are mentioned only in connection with these highly valued scenes. Respondents seem to favor a pastoral notion of what is scenic, characterizing it as “well kept” and “spacious” with “distant prospects,” the way Cape Cod “should look.” There are no “gross manmade additions,” and where buildings appear in the scene they are “distant” and “fit in on the Cape.” There also seems to be a compositional value seen in the “interplay of land and water, colors and shapes.”

The least scenic landscapes are perceived as “cluttered” and “unimaginative” views dominated by features that do not fit, such as “signs,” “overhead wires,” “broken asphalt,” “supermarkets,” “concrete mixing plant.” These are “lifeless” and “artificial” scenes “without trees and bushes.”

Those scenes that are given moderate ratings are primarily characterized as being “ordinary” and “anywhere”—not unique to Cape Cod. “Misfit” features also characterize this group, but they are less dominant than in the least scenic landscapes.

The Scenic Value of Landscape Types

The usefulness of the visual resource survey in Dennis becomes more apparent when the scenic value for each landscape type is compared with the other types. An analysis of variance ($F = 642.4$, $df = 5$, 3789, 3794, $p < .001$) indicates more significant differences in scenic value among rather than within landscape types. The differences in scenic value between landscape types are investigated further using t-tests, shown in Table 5.1. In most cases, significant differ-

![High-density residential landscapes of high and low scenic value](image)

**TABLE 5.1  T-tests Comparing Mean Scenic Value for Each Landscape Type**

<table>
<thead>
<tr>
<th>Landscape Type</th>
<th>$n^b$</th>
<th>$\bar{x}$</th>
<th>Beach</th>
<th>Marsh</th>
<th>Suburban</th>
<th>Open Land</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach and Water</td>
<td>759</td>
<td>2.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marsh and Wooded</td>
<td>552</td>
<td>2.91</td>
<td>1.10n.s.</td>
<td>8.04*</td>
<td>8.80*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban Development</td>
<td>759</td>
<td>3.47</td>
<td>-5.85*</td>
<td>-6.50*</td>
<td>-5.4n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed Open Land</td>
<td>276</td>
<td>3.52</td>
<td></td>
<td></td>
<td></td>
<td>-40.22*</td>
<td>-20.62*</td>
</tr>
<tr>
<td>Commercial and Municipal</td>
<td>828</td>
<td>5.32</td>
<td>-39.78*</td>
<td>-38.92*</td>
<td>-33.36*</td>
<td>-31.38*</td>
<td>-31.38*</td>
</tr>
<tr>
<td>High-Density Residential</td>
<td>621</td>
<td>5.27</td>
<td>-37.78*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *The t-values reported here are for independent groups with unequal variances; therefore, the values are an approximation.

Significance: n.s. $p > .05$ $p < .001$
ences were found. However, no significance is found between those pairs of landscape types that are shown in Figure 5.4 as being conceptually most similar. For instance, the marsh and wooded landscapes and the beach and water landscapes are perceived as being very similar and thus do not have significantly different scenic values. However, they are both perceived as quite dissimilar from the high-density residential landscapes, which have significantly poorer scenic value.

The results of the landscape-factor checklist, which are summarized in Tables 5.2 and 5.3 according to landscape type, give some indication of what factors influence scenic value for each type. The pattern that emerges from these tables corroborates the prior content analysis of what contributes to scenic value. A romantic notion of the most scenic prevails, while misfit characteristics dominate the least scenic landscapes. This pattern can also be seen by comparing the examples in Figures 5.5 through 5.10 of high and low scenic value for each landscape type.

A more careful examination of Tables 5.2 and 5.3 provides several additional insights. For instance, both beach and water and marsh and wooded landscapes are valued for their “naturalness.” However, the marshes are primarily valued for their emotional association—serenity, vastness, and uniqueness. In contrast, those aspects of a beach that contribute to its scenic quality are physical—the water, sand, and shoreline.

Another interesting implication of these tables is that vegetation and natural materials play an important role in the scenic value of the less densely developed areas. Where roads, overhead lines, and trees are not effectively screened, scenic value drops. In contrast, building characteristics such as materials, design, color, and setback become important in more densely developed landscape types. In these situations, the buildings are so concentrated or massive that they cannot be completely screened. All one expects is the mitigation of a barren appearance through appropriate landscaping.

Summary and Implementation

Sometimes it is awkward to be a landscape planner committed to the development of systematic methods for consideration of the landscape as a visual resource. The public often responds with skepticism. It is a measure of success that the results of this visual survey seem so obvious. Yet few critics would ever give prior support to the possibility that there is substantial agreement regarding the landscape types perceived in an area as well as what contributes to their scenic value.

In Dennis there seems to be a reasonable acceptance of the results of the visual resource survey, probably because of the large degree of local control and participation throughout the entire process. This survey is one of the reasons why Dennis was named All-American City for 1978. When bestowing the award, the National Municipal League of Cities and Towns stated that it was particularly impressed by the example Dennis provided other towns for (1) citizen participation, (2) comprehensive planning, and (3) conservation acquisition and historic preservation. The visual resource survey contributed to each of these areas.

One important ramification of the visual resource survey is its utility as a powerful tool for education. It has brought “visual quality” out of the closet and made it a respectable topic in local planning. It is now clearer to the local decision-makers that there are ways to describe landscape appearances systematically. Even more important, there is much more substantial agreement among town residents than anyone had expected. In addition to being used in town meetings, photographs are being shown to students in the public schools to make them more aware of their local visual resource.

The second ramification of the survey is its influence on the new zoning bylaws for the town of Dennis. While all the changes are founded on some aspect of the Comprehensive Natural Resource Planning Program survey, they also have a visual basis that is recognized by the local citizens. For instance, the study’s results suggest that if the presence of any structure in the foreground of a beach and water or marsh and wooded landscape becomes so dominant, then the pastoral image is destroyed. The possibility of this visual incompatibility is given some credence by one landscape view that did not belong to any landscape type—a scene viewed across a salt marsh toward a densely developed residential area. Other

---

**TABLE 5.2 Landscape Factors That Add to the Scenic Value of Each Landscape Type**

<table>
<thead>
<tr>
<th>Rank*</th>
<th>Beach and Water</th>
<th>Marsh and Wooded</th>
<th>Suburban Development</th>
<th>Developed Open Land</th>
<th>Commercial and Municipal</th>
<th>High-Density Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest:</td>
<td>Naturalness</td>
<td>Serenity</td>
<td>Serenity</td>
<td>Serenity</td>
<td>Building color</td>
<td>Building design</td>
</tr>
<tr>
<td>1.</td>
<td>Water</td>
<td>Vastness</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
<tr>
<td>2.</td>
<td>Shoreline</td>
<td>Naturalness</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
<tr>
<td>3.</td>
<td>Water</td>
<td>Naturalness</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
<tr>
<td>Moderate:</td>
<td>Water</td>
<td>Naturalness</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
<tr>
<td>1.</td>
<td>Depth of view</td>
<td>Natural color</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
<tr>
<td>2.</td>
<td>Natural color</td>
<td>Depth of view</td>
<td>Character</td>
<td>Natural color</td>
<td>Natural color</td>
<td>Natural color</td>
</tr>
</tbody>
</table>

Notes: The landscape factor checklist was completed by 25 respondents.

*Landscapes with the highest scenic value were in pile #1, and those with moderate scenic value were in pile #4.
TABLE 5.3 Landscape Factors that Detract from the Scenic Value of Each Landscape Type

<table>
<thead>
<tr>
<th>Rank*</th>
<th>Beach and Water</th>
<th>Marsh and Wooded</th>
<th>Suburban Development</th>
<th>Developed Open Land</th>
<th>Commercial and Municipal</th>
<th>High-Density Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Overhead wire</td>
<td>Bare earth</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Barrenness</td>
<td>Barrenness</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cars and trucks</td>
<td>Building design</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Overhead wire</td>
<td>Overhead wire</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Building material</td>
<td>Building material</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Building setback</td>
<td>Building setback</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Straight line</td>
<td>Straight line</td>
</tr>
</tbody>
</table>

Notes: The landscape factor checklist was completed by 28 respondents.
*Landscapes with the lowest scenic value were in pile #1, and those with moderate scenic value were in pile #4.

areas where beach cottages composed the foreground were obviously judged high-density residential landscapes. Therefore, future commercial and high-density residential developments will be concentrated in those areas already identified with these landscape types. Through zoning, a serious attempt is being made to halt the sprawl of these landscapes and encourage infilling. An attempt is also being made to protect the integrity of undeveloped natural areas. Those areas near coastal beaches and marshes are rezoned from a minimum lot size of 20,000 square feet to a minimum of 60,000 square feet. These areas have the highest scenic value and are least able to absorb development. The remaining natural landscapes are rezoned to a minimum lot size of 40,000 square feet. All areas that are already considered suburban development remain at the previous minimum lot size of 20,000 square feet.

The third ramification of the survey is the town's commitment to make a public acquisition of those areas that are visually most valuable. In 1979 the citizens of Dennis purchased 25 acres of prime marshland and 200 acres of beachfront. More has been acquired since. These areas are added to the town's already extensive public conservation and recreation areas.

The key phrase here is "shared perceptions." A well-done survey of visual perceptions of a community could be used, as in Dennis, to legislate local ordinances for protecting aesthetic resources. By doing their homework, communities will find that such ordinances will be very defensible from both legal and scientific perspectives.

References


